IMPERIAL SHAKSPERE

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THE WORKS

OF

SHAKSPERE

WITH NOTES

By Charles Knight.

THE GLOBE THEATRE, BANKSIDE, 1593.

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2294/1933

THE WORKS

OF

SHAKSPERE

IMPERIAL EDITION

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EDITED BY CHARLES KNIGHT

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With Illustrations on Steel

FROM PICTURES BY

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C. CLINT, A.R.A.; H. S. MARKS, A.R.A.; W. Q. ORCHARDSON, A.R.A.

AND OTHERS

IN TWO VOLUMES

VOL. II.

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DG□ H' A>' iM□T?LGCF' ?DG O?DD□GN' AF' CA' CF?C A>' FGD' BOOG AD' □H' CFG >AMMAJ□H 'M□HG R

6'V ';GHM99'NH G'LPMKP'G9PPL' NH'HP'8 J□'MG HPi'
HP'A O' 7' iOP'O P6'NHP'IM OPi'LH piW
"p'MGHPG'ip 'K PMNP'Mi NHP'HP +
#'G' Q PM'i'MOI MN i'MG'HP GP97'8
@XHPi'HPM pi'GHM99'KM99'HP'7 1'NH G'K9 JO' 7'OM UipGG
', HM99'GNM 9 UP' GP'MG'Q PM1' i'7MI P'MG'GHP' MG+
iO'G 'GNMiO'7 WWO' -PMKP'L9piNT'9 p'N JNH'NP +
HNM' p P'NHP'GP MiNG'N 'NH G'KH GPi' i7MiN
HM99'NHPi'AP'H G'MiO'9 UP'M' iP'Q 'N 'H 1'8
XHP p p'NHP'A QHN'GJi' 7'HPM pi'GHM99'GH ip
" G'H i J 'MiO'NHP'Q pMNIPGG 7'H G'iM1P+
HM99'AP'MiO'IMUP'ip 'iMN iG' "p'GHM99'79 J GH+
iO'9 UP'M' 1 JiNM i'KPOM ' PMKH'H G'A MiKHPG
'M 'NHP'L9M iG'MA JN'H 1 8 1J'KH 9O pi%G KH 9O pi
HM99'GPP'NH G'MiO'A9PGG'HPM pi+R

#F□ 'K? ? G' JABMN'2KKG?D'CA'LG'NGO□ □PG'? 'CA'CFG' N?CG'A>'CFG'KM?E'
L□'CFG 'HCDANBOC□AH'A>'CFG G'M□HG ' R

YY X HP p p'NHP'A QHN'GJi' 7'HPM pi'GHM99'GH ip+
" G'H i J 'MiO'NHP'Q pMNIPGG 7'H G'iM1P+
HM99'AP'MiO'IMUP'ip 'iMN iG+R

#F?C CFG OAMAH□ ?C□AH' A>' □ ' FGDG' N□ C□HOCM□' ?MBNGN' CA' □ '
J□CFABC' NABLC' #FG' >D C OF?DCGD' J ? D?HCGN'□H' 4744' CFG' OAMAHE'
J ?' K M?HCGN'□H' 47 '□H' J□F□OF' EG?D' #AJ'H' J ?' LB□MC' ?HACFGD'
OF?DCGD' J ? ' □PGH' CA' CFG' OAMAH□ C ' □H' 4 2 ' ?HN' ?' MACCGDE' J ? ' ?M A'
CFGH' D?HCGN' >AD' CFG' GHOABD? G@GHC' A>' CFG' OAMAHE' J□F□OF' J ?'
CDB M□H ' J□CF' DG?C' N□>>□OBMC□G ' #F?C' 0?@G ' CAA(' ?H' G KGO□?M
□HCGDG C □H' CF□ ' □@KADC?HC' GCCMG@GHC' ?HN' H?CBD?MME' GHAB F' J ?'
DGOA H□ GN'? 'CFG' >ABHNGD'A>'=HG J'H?C□AH I'@?E'LG'DG?N□ME'□@? □HGN'
iM□T?LGCF' @?E' HAC'LG' NDAKKGN'GPGH' JF>G'CFA G' □ 'M□HG ' ?DG' BCCGDGN'
H' CFG □H ODK□C□AH'BKAH'CFG' KADCD?□C A>'CFG (□H ' J□F□OF' LGMAH GN' CA'
$ADN' .?0AH ' F□G □' CEMGN'5 ' & ' 7' #F□ ' K?DC A>'
D?H@GD8 'KDAKFGO 8' CFGDG>ADG' JABMN' >□ ' CFG' N?CG' A>' CFG' KM?E' ?>CGD'
CFG' GCCMG@GHC' A>')□D □H□?' .BC' ?' HGJ' N□>>□OBMCE' ?D□ G ' MM' CF?C'
K?DC' A>' CFG' KDAKFGOE' DGM?C□H ' CA' 0?@G ' JF□OF' JG' F?PG' QBACGN' □ '
2

C' @□ FC ?' JGMM' LG' ? B@GN' JG' PGHCBDG' CA' CF□H('CF?C' CFG ='% '

#FG' KAGC' CFGH' ?NN R

6'?1H'P@' ;OMT'G'p p T'I M'GHM99'PMM' i'GM7PMT+
iOP'H G' i' HM7'HP'L9MiNG' MiO'G iQ'
HP'I p T'G iQG' 7'LPM '□N'M99'H G'ip QHA J G R'BK+

DG□ H' A>' iM□T?LGCF' ?DG' O?DD□GN' AF' CA' CF?C A>' FGD' BOOG AD' □H' CFG
>AMMAJ□H 'M□HG R

= #FG G'M□HG 1' ?E'%D'0AFH AH'= CA'CFG □HCGDDBK□AH' LE'CFG '(□H '
GG@' CA' F?PG' LGGH' □H GDCGN' ?C' A@G' DGP□?M A>'CFG KM?E'?>CGD' CFG
?00G □AH' A>' □H '0?@G ' >'CFG' K? ? G' LG' MG>C' ABC'CFG' KGGOF' A>'
D?@@GD' KDAOGGN '□H';?' DG BM?D' CGHABD' A>'KDGN□OC□AH' ?HN' 0AHC□HB□CE' A>'
GHC□@GHC ' LBC' LE' CFG' □HCGDKAM?C□AH' A>' CFG' HGJ'M□HG ' FG' >□D C' OGMG-
LD?CG 'iM□T?LGCF8 ' BOOG AD'9?HN' CFGH' JD FG ' FG' N□N' HAC' (HAJ' FG
J ?' CA' N□G' ' >□D C' DGSA□OG ' ?C' CFG' 0AH GQBGHOG'?HN' CFGH' M?@GHC ' CFG
0?B G I' ' □C A'W' #FG' KDG B@GN' □HC>GDKAM?C□AH' □@@GN□?CGME' >AMMA J '
CFG G'M□HG R

#FG'KAGC'CFGH'?NN R

YY ';GHM99'NH G'LPMKP'G9PPL' NH'HP ' J□'MG HPi'
HP'A O' 7' iOP' % ++++++++++++++++
'GHM99' GHP'9PM P'HP 'A9PGGPOIPGG'N ' ip
@'&'$ '$ '%$ '"'($ '$ %'(') %%*+
XH '7 I'NHP'% ('%$ %' 7'HP'H i J +
HM99'GNM 9 UP' GP+R

', □C CDBG'CFGH'CF?C'FG = >□D C OGMGLD?CG 'iM□T?LGCF8' BOOG AD'?HN'
CFGH J□ FG ' FG' N□N' HAC' (HAJ' FG' J ?' CA' N□G'W'I' >'CFG' GPGHCGGH'
M□HG ' J□F□OF' DGM?CC' CA' 0?@G ' CFG' >□D C' GMGPGH' HGPGD' MA G' □ FC A>'
iM□T?LGCF' GD',LMG GNHG I' FGD'='FAHABD I' FGD'='>?@G I'JGDG' CA'
NG OGHN' CA' FGD'='FG□D I' #FG' 8 ' A>'CFG' NA@□H□AH' A>' iH M?HN'
BHNGD'0?@G R CFG' AHME'K? ? G'□H'J F□OF'= CFG' DG?CHG 'A>'F□ ' H?@GI'
□ ' GK?D?CGN'>DA@'CF?C A>' iM□T?LGCF R AOOBK□G ' CFG' DG@?□H□H ' K?DC A>'
#F?C CFG' OAMAH□ ?C□AH' A>' ' □ ' FGDG' N□ C□HOCME' ?MBNGN' CA' □ '
J□CFABC' NABLC' #FG' >□D C OF?DCGD' J ? D?HCGN'□H' 4744' CFG' OAMAHE'
J ?' K M?HCGN'□H' 47 '□H' J□F□OF' EG?D' #AJ'H' J ?' LB□MC' ?HACFGD'
OF?DCGD' J ? ' □PGH' CA' CFG' OAMAH□ C ' □H' 4 2 ' ?HN' ?' MACCGDE' J ? ' ?M A'
CFGH' D?HCGN' >AD' CFG' GHOABD? G@GHC' A>' CFG' OAMAHE' J□F□OF' J ?'
CDB M□H ' J□CF' DG?C' N□>>□OBMC□G ' #F?C' 0?@G ' CAA(' ?H' G KGO□?M
□HCGDG C □H' CF□ ' □@KADC?HC' GCCMG@GHC' ?HN' H?CBD?MME' GHAB F' J ?'
DGOA H□ GN'? 'CFG' >ABHNGD'A>'=HG J'H?C□AH I'@?E'LG'DG?N□ME'□@? □HGN'
iM□T?LGCF' @?E' HAC'LG' NDAKKGN'GPGH' JF>G'CFA G' □ 'M□HG ' ?DG' BCCGDGN'
H' CFG □H ODK□C□AH'BKAH'CFG' KADCD?□C A>'CFG (□H ' J□F□OF' LGMAH GN' CA'
$ADN' .?0AH ' F□G □' CEMGN'5 ' & ' 7' #F□ ' K?DC A>'
D?H@GD8 'KDAKFGO 8' CFGDG>ADG' JABMN' >□ ' CFG' N?CG' A>' CFG' KM?E' ?>CGD'
CFG' GCCMG@GHC' A>')□D □H□?' .BC' ?' HGJ' N□>>□OBMCE' ?D□ G ' MM' CF?C'
K?DC' A>' CFG' KDAKFGOE' DGM?C□H ' CA' 0?@G ' JF□OF' JG' F?PG' QBACGN' □ '
2

' MK i'#O MiKPIPiN' 7'/PM i iQ+

6' HP'7M PGN'HMiO'?'P p'N JKH%O[1'APMJNT+
99'i '?'ip p'?KiP'NHPP'[R S

Y#iO'AT'NH GP'K9M I'NHP 'Q PMNIPGG'i N'AT'A9 O+%R

#FGAL?MN A@□C ' CA' C?CG' CFG' @A C' ALP□AB ' DG? AH' >AD' F□ ' AK□H□AH'
G' FAMN'CF?C F?(KGDG'□H' CFG' ? G' A>' iM□T?LGCF ' JABMN'HGPGD' F?PG'
J□CCGHR

YY HP'GHM99'AP'N 'NHP'HMLL IPGG' 7'3iQ9MiO
,# '- (%% .

LGGH' CDMM' DG@@G@LGDGN' LE' @?HE' MPDH' KGD AH ' LBC' CFG NG?CF' A?
HHG' .AMGEH' J?' CDMM @ADG'>DG F' H' KBL□'D GOAMMGOC□AH' ?HN' ?' J□ GD
G KGN□GHC' OABMN' HAC' F?PG' LGGH' NGP□ GN' >AD' ? GDC□H 'CFG □HHAOGHOG' A?
i□T?LGCF8' @ACFGD' CF?H' LE' KADCD?E□H ' GHDE(8' □HSB COOG' CAJ?DN'
?@AH C F□' M?CG C ND?@?' 'OAH CDBOCGN' ?H F□ CAD□0?M ND?@?' CA' OA@-
KMGCG' F□ ' DG?C GD□G R AHG' CF?C' J?' ? DGG?LMG' CA' CFG CAHG' A?'F□ ' @□HN'
?>CGD' F□ ' >□>C□GCF' E G?□D R

6' MO'H QH'M!O' 9O!Q'7J99D7'GMMP'M!O' p+R

#FA G' JFA' C?(G CFG AKKA □CG P□G J' FAMN9CF?C CFG OF□G' ALSGOC A?' CFG
KAGC' J?' CA' KDANBOG' A@GCF□H ' J F□OF' @□ FC' LG' ?00GKC?LMG' CA' BGGH
i□T?LGCF' BD' LGM□G' □' CFGXALP□AB ' AHG ' CFG' OAHCD?DE' LGM□G' @?E'
LG' CFG' @ADG' □H GH□AB

(
#FG' @?MG' 0A CB@G' A?'CFG' DG□ H' AZ GHDE') ' F?' 'LGGH' DGHNGDGN'
>?@□M?7D' CA' ABD' PGDE' OF□MNDGH' LE' CFG' □HHB@GD?LMG' KADCD?□C ' A?' =' .MB>>'
□H ' ?M I' KD□HO□K?MME' OAK□GN' >DA@' CFG' K?□HCH ' LE' AMLG□H ' ?HN'
CFG' >G@?MG' 0A CB@G' O?DOGME' MG ' A' LE' CFA G' A?' F□ ' □ ' J□PZ '
GHDE') ' J?' LADH' □H /1 ' ?HN' J?' ' CFGDG>ADG' SB C' CF□DCE'
EG?D ' A?' ? G ?C CFG' KGD□AN' ?C' J□FOF' CFG' KM?E' AKGH ' VCFG' ?DDG C' ?HN'
□@KG?0F@GHC' A?' .BO(□H F?@' F?P□H ' C?(GH' KM?OG' □H 52 ' ?HN'
>ADCE□J□' ?C' CFG' C□@G' □C □ ' BKKA GN' CA' OMA G' #FG' LG C' ?BCFAD-
C□G ' CFGDG>ADG' >AD' CFG' NDG ' A?' CFG' @AH?DOF' ?HN' F□ ' HALMG ' ?C
CFG' OA@@@HOG@GHC' A?' CF□ ' KM?E' JABM' LG' CFG' OBD□AB ' AMN' K?□HC□H '
A?' CFG' @GGC□H 'A?' GHDE' ?HN' D?HO□ ' KDG GDPGN' ?C' "ABGH' #FG'
?HN' CFG' L? DGM□G>' 'DGKDG GHC□H ' CFG' ?@G AOOBDDGHOG' ?C' "ABGH' #FG'
KDA>B □AH' A?' >G?CFGD ' □H' CFG' M?CCGD R?' >? F□AH' A?' CFG' KDGP□AB ' DG□ H'
?HN' C□M' D? □H '□H' 527 R ?NN ' DG?CME'CA' CFG' K□OCBDG QBG' G>>GOC' A?' CFG
GHGD?M' OA CB@G' AD' CFG' M?CGD KGD□AN' CFG' >BMM MGH CF' LE' AMLG□H
GH D?PGN' □H' $AN G8 ' ADCD?□C ' AD' CFG' KD□HC' LE')GDCBG' □H' JF□OF'
GHDE'□ ' GGH' D?HC□H ' ?' O>?CCGD' CA' CFG' L?DLGD BD GAH ' JABM' LG'
KDG>GD?LMG' ;' ?DN□H?M' AM GE' CFGDG □ ' ? >□HG' K?□HC□H ' LE' AML G□H'
?C' FD□ C' FBDOF' >ADN' GH D?PGN' □H' $AN G8 ' JAD(' ?PGHN□ F'
KM?□H' BHNGD C?HN□H '□HOAH □ CGHC' J□CF'CFG□D'CFGADE' @?E'LG'□HCGDKDGCGN'
C□AH ' ?HN' >BDCFGD' F?PG' CA' G KM?□H' FA J' @?HE' CF□H ' J F□OF' ?DG' CA' ?
LE' DG?C□H GHB□CE' CA' LG' OAH □ CGHC' G' LGM□GPGU'CF?C' F?(KGDG

F?L□C A> >□HG O?DMGC AD OD□@ AH ?C□H F□ O?K LG□H A> LM?O(PGMPGC ?HN □H ? & OAKE A> CF?C □HCGDG C□H JAD(>AD@GDME □H CFG KA G □AH O> CFG M?CG D?HO□ %ABOG ! Q ?DG CFDGG PGDE OBD□AB ND?J□H DGKDG GHC□H R □ C #FG O?DN□H?M8 KDA DG AH F□ J?E CA D?HOG J□CF F□ ?DOFGD KG?D@GH ODA K□MM?D ?HN KBD G LG?DGD YO $?HNME #FG O?DN□H?M BDDGHNGD□H CFG DG?C G?M CA CFG %B(G A> AD>AM(?HN B>>AM(?HN 3DNME %D .BCC GHC LE CFG (□H ?HN HHG BMNGH CA CFG □O(O?DN□H?M J□CF CA(GH A> >?PABD #FG GH-CMG@GH □H CFG O?DN□H?M8 CD?□H JADG JG ?DG CAMN LM?O(PGMPGC M□PGDE OA?C CFG @A C K?DC J□CF DG?C OF?□H A> AMN ?LABC CFG□D HGO(?HN ?M F□ EGA@GH >AMMAJ□H JGDG OM?N □H DGHOF C?DH□E M□PGDE OA?C F?P□H G@LDA□NGDGN BKAH CFG L?O(?HN LDG? C A> CFG ?□N OA?C CFG MGCCGD # ?HN BHNGD CFG O?DN□H?M8 F?C

H CFG ?@G LG?BC□>BM JAD(LE $AN G LG>ADG @GHC□AHGN CFG KAD-CD?□C J□MM LG >ABHN A> CFG %B(G A> B>>AM(?HN AD>AM(DA@JGMM □D #FA@? &ADG ?HN □D HCFAHE %GHHE LE AMLG□H ?HN D?H@GD LE M□O(CFG AD□H?M K?□HC□H LG□H □H CFG .D□C□ F &B GB@ M A ? @A C □HCGDG C□H AHG A> CFG ?MM?HC ?HN ?OOA@KM□ FGN G@E !?DM A> BDDGE LE #□C□?H JFA F? DGKDG GHCGN F□@ □H ? @? H□>□OGHC B□C A> ?D@ABD ?HN CFGDGLE □PGH B ? KMGHN□N KGO□@GH A> CFG @□M□C?DE OA CB@G A> CFG KGD□AN H ?NN□C□AH CA CFG □H>AD@?C□AH OAHPGEGN CA CFG GEG LE CF□ OAMMGOC□AH A> ?BCFGHC□O KADCD?□C □C J□MM LG B>>□O□GHC CA QBACG >DA@ CFG B@KCB?DE M?J K? GN □H CFG CJGHCE >ABDCF EG?D A> GHDE8 DG□ H BOF K? ? G ? J□MM NG OD□LG CFG @?CGD□?M A> JF□OF CFG NDG G JGDG @?NG ?HN JF□OF JGDG □HNGGN ?C CF□ C□@G A> CFG @A C OA CME (□HN #FG DAE?M >?@□ME ?MAHG JGDG KGD@□CCGN CA B G CFG >BD A> CFG LM?O(SGHHGC ?HN ?LMG OABMN AHME LG JADH LE HALMG@GH ?LAPG CFG D?H(A> ? P□ OABHC D□@ AH AD LMBG PGMPGC G@LDA□NGDGN ?KK?DGM AD ?D@GHC LADNGDGN = J□CF AMN BH(GH JAD(I JGDG >AD-L□NNGH CA ?HE KGD AH LGHG?CF CFG QB?M□CE A> ? L?DAH AD (H□ FC8 AH AD FG□D ?HN PGMPGC NDG G A> ?HE OAMABD >BD A> @?DCGH OF?□H LD?OGMGC ?HN OAMM?D A> AMN JGDG KDAF□L□CGN CA ?MM KGD AH KA G -□H MG CF?H CJA FBHNDGN @?D(KGD ?HHB@ ?HN CFG JG?D□H A> KM?□CGN F□DC ?D-H□ FGN J□CF AMN □MPGD AD □M(J? KGD@□CCGN CA HAHG LGMAJ CFG D?H(A> (H□ FCFAAN #□DG O□?□D J? OBC DG@?D(?LME OMA G ? KGD-G@KCADE ADNGD F?P□H LGGH □ BGN LE GHDE CA ?MM F□ ?CCGHN?HC ?HN OABDC□GD CA = KAMM CFG□DUFG?N I .G?DN ?HN @AB C?OFG JGDG JADH ?C KMG? BDG

#FG KADCD?□C A> HHG .BMMGH ?HZ BGGH ?CF?D□HG OAHPGE ? B>>□O□GHC □NG? A> CFG OA CB@G A> M?N□G A> D?H(?C CF□ KGD□AN #FG SGJGMMGN O?K ?HN >G?CFGD J□CF JF□OF AMLG□H F? DGKDG GHCGN HHG □H CFG KADCD?□C GH D?PGN □H V ?PGHN□ F8 = $□>G A> AM GEI ?DG G OGGN□H ME K□OCBDG QBG ?HN LGOA@□H #FG ACFGD FG?N NDG JF□OF J? KDAL?LME CFG A>CGH C?M(GN A> = DGHOF FAAN I □ LGCCGD (HAJH HG?DME ?MM GHDE8 JPG LG□H DGKDG GHCGN □H □C #FG AJH J? OBC QB?DG ?C CFG LA A@ ? □H CFG KDGOGN□H DG□ H LBC □H CG?N A> CFG HGO(LG□H L?DG □C J? OAPGDGN ?M@A C CA CFG CFDA?C LE CFG .? ADC A> F?L□C F□DC @BOF M□(G CFG @ANGDH AHG G@LDA□NGDGN J□CF AMN ?HN □M(#FG MGGPG A> CFG AJH JGDG >DGQBGHCME A> ? N□>>GDGHC @?CGD□?M >DA@ CF?C JF□OF OA@KA GN CFG DG C A> CFG NDG ?HN GHGD?MME A> ? D□OFGD CB>> #FG AJH J? AKGH □H >DAHC CA CFG J?□ C FAJ□H CFG (□DCMG AD KGCC□OA?C ?HN J□CF AD J□CFABC ? CD?□H ?OOADN□H CA CFG KDGP?□M□H >? F□AH A> D?HOG AD AMM?HN HHG A> MGPG □ NG OD□LGN ? JG?D□H ? AJH @?NG DABHN J□CFABC ?HE CD?□H ?>CGD CFG %BCOF >? F□AH JF□MG CFG CD?□H A> ?CFGD□HG ?DD □ C?CGN CA F?PG LGGH @ADG CF?H CJA E?DN MAH HHG .BMMGH JF□MG ABHCG A> G@LDA(G N?HOGN ?C ?M?□ J□CF D?HO□ □H ? @? QBG OAH □ C□H A> GPGH M?N□G LG □NG FGD GM> JFA JGDG ?CC□DGN □H @? (□H ?KK?DGM A> CD?H G >? F□AH @?NG A> OMACF A> AMN OA@K? GN J□CF OD□@ AH C□H GM ?C□H >AD@GN J□CF OMACF A> □MPGD ME□H MAA G ?HN (H□C J□CF M?OG A> AMN #FGE JGDG LDAB FC □HCA CFG OF?@LGD J□CF >ABD N?@-GM □H OD□@ AH ?C□H J□CF C?L?DN A> >□HG OEKDG ?PGHN□ F □H F□ = $□>G A> AM GE I ?E = F?PG GGH CFG (□H BNNGHME OA@G CF□CFGD CA CFG O?DN□H?M8 □H ? @? (J□CF ? NATGH ACFGD @? (GD □H ?D@GHC M□(G FGKFGDN @?NG A> >□HG OMACF A> AMN ?HN OD□@ AH ?C□H CFG□D F?□D ?HN LG?DN A> >□HG AMN J□DG AD □MPGD AD A@G A> LM?O(□M(J□CF CGGH CADOFLG?DGD ?HN NDB@ ?MM □H ?C□H I @□HBCG ?OOABHC □ □PGH LE ?MM A> CFG OADAH?C□AH A> BGGH HHG .BMMGH ?HN ?M A LE ?PGHN□ F JFA F? NG OD□LGN CFQ KDAOG □AH ?HN CFG OGDG@AHE G @B C LG O?DG>BM FAJGPGD HAC CA OAH>ABHN CFG KDAOG □AH >DA@ CFG #AJGD CA G C@□H CGD AH CFG N?E KDGP□AB CA CFG OADAH?C□AH JFF CF?C □HCDANBOGN □H CFG KM?E JF□OF □ CFG KDAOG □AH >DA@ CFG ?M?OG CA CFG LLGE H CFG >□D C AOO? □AH FG JADG ? BDOA?C A> JF□CG OMACF A> C□ BG ?HN ? @?HCMG A> CFG ?@G >BDDGN J□CF GD@□HG FGD F?□D F?H □H NAJH >DA@ BHNGD ? OA□> J□CF ? O□DOMGC ?LABC □C >BMM A> D□OF CAHG H CFG GOAHN VCF?C □H CFG KM?E FG JADG ? BDOA?C ?HN DALG A> KBDKMG PGMPGC >BDDGN J□CF GD@□HG CFG OA□> ?HN O□DOMGC ? LG>ADG #FG L?DAH A> CFG □HQBG ADC JFA O?DD□GN CFG O?HAKE APGD FGD JGDG = ?MM □H OD□@ AH J□CF KA□HC A> LMBG ?HN DGN F?H □H AH CFG□D MGGPG I #FG M?N□G = LG□H MADN 8 J□PG I CF?C >AMMAJGN FGD = F?N BDOA?C A> O?DMGC J□CF H?DDAJ MGGPG CFG LDG? C ?MM MGCC□OG V>BD J□CF L?D A> LADNGD = DAJ A> GD@□HG ?OOADN□H CA CFG□D NG DGG ?HN APGD CF?C CFGE F?N @?HCMG A> O?DMGC >BDDGN ?HN GPGDE @?HCMG F?N MGCC□OG ?LABC CFG HGO(M□(G ? HGO(GDOFGD M□(GJ□ G KAJNGDGN VJ□CF GD@□HG A CF?C LE CFG KAJNGD □H CFG□D NG DGG J? (HAJH #FGH >AMMAJGN M?N□G LG□H (H□ FC 8 J□PG □H AJH A> O?DMGC J□CF H?DDAJ MGGPG J□CFABC CD?□H AHME GN GN J□CF MGCC□OG I #FG QBGGH8 GHCMGJA@GH JGDG □@□M?DME ?CC□DGN J□CF CFG M?C #FG MADN OF?HOGMMAD JADG ? DALG A> O?DMGC AKGH LG>ADG ?HN LADNGDGN J□CF MGCC□OG #FG NB(G JGDG □H OD□@ AH PGMPGC >BDDGN J□CF GD@□HG ?HN KAJNGDGN ?OOADN□H CA CFG□D NG DGG #FG %B(G A> B>>AM(8 NABLMGC ?HN S?O(GC JGDG GC J□CF AD□GHC KG?DM F□ AJH A> OD□@ AH PGMPGC D□OFME G@LDA□NGDGN ?HN FG O?DD□GN ? JF□CG DAN □H F□ F?HN LG□H CF?C N?E □ F CGJ?DN A> !H M?HN #FG (H□ FC A> CFG .?CF JADG = P□AMGC AJH J□CF FAAN KBD>MGN J□CF @□H□PGD M□(G NAOCAD I

HP ! A9P GL NG N M I G NHPT O O LP 7 I
PT !O NH JQHN&G K I LMGG& NHMN 7 I P 7MAJ9 JG GN T
P !Q ! GPP! L GG A9P P! JQH Q N K PO N+
HMN P G MG AP9 P %O+
%& ' T J Q 7M +
! # G 2 AP9 !Q N GH L M!O M77PKN
2!H ! J H !PGNT NHP N MKN 7P P TNH !Q
X J9O AT M Q O O GK J GP 9 GP G I P 9 7P+
X H KH MKN !%G GP97 MG N !QJP N +
% ' # 99 MG TM98
NHP O GL G !Q 7 N !MJQHN PAP99%O
1 OP QM P PMKH NH !Q P & NHP 77 KP O O
5 GN !KN9T H G 7J99 7J!KN !+ X H O O QJ OP \
2 I PM! H GPN NHP A OT M!O NHP 9 I AG
17 NH G Q PMN GL N N QPNHP \
! # G T J QJPGG
1!P KP NPG NHMN L I GPG ! P9P I P!N D
2!GJKH M AJG !PGG+
% ' 2 L MT T J H I T 9 O \
! # 99 NH G MG OP %O AT NHP Q O O GK PN !
17 NHP QHN P P P!O KM O !M9 7 4 U+
%& ' HP OP 9 GLPPO H I [! I M!%G L P G 7 PPO
0 I H G M I A N JG 7 !QP + X HMN HMO HP
O ! NHPGP 7 P KP M! N PG \ 2 !OP
HMN GJKH M UPPKHF KM! NH H G P T AJ9U
MUP JL NHP MTG % NHP AP!P7 K M9 GJ!
#!O UPPL N 7 I NHP PM NH+
! J P9T G
HP P%G !H I GNJ77 NHMN LJNG H I N NHPGP P!OG
0 AP !Q ! N L LL%O AT M!KPGN T H GP Q MKP
HM9UG GJKKPGG G NHP MT& ! KM99%O JL !
0 H QH 7PMNG O !P N NHP K !& !P NHP M99 PO
P I !P!N MGG GNM!NG& AJN GL OP 9 UP+
1JN 7H G GP97 O M !Q PA S 1 [Q P JG ! NP[S
HP 7 KP 7H G !I P N I MUPG H G MT
#Q 7N NHMN HPM P!Q PG 7 H I H KH AJTG
#L9MKP !PWN N NHP U !Q+
2 KM!! N NP
X HMN HPM P!HMNH Q P!H I 9PN G I P Q M P PTP
- P KP !N NHMN& AJN 2 KM! GPP H G L OP
-MPL NH JQH PMKH LM 9D 7H I X HP!KP HMG HP NHMN \
27 ! N 7 I HP99 NHP OP 9 G M ! QQM O+
1 HMG Q P!M99 AP7 P M!O HP APQ !G
#!P HP99 !H I GP97+
% ' $ X HT NHP OP 9+
L !NH G O P!KH Q !Q JN N U HP JL !H I+
X NH JN NHP L N'D %NHP U !Q N MLL !N
XH GH J9O MNNP!O !H I D " P I MUPG JL NHP 7 9P
S S

2N G JGJM9 K !N M T N N9 P Q !M9 N Q P N 7 9U NHP GP!NP!KP APQ !! !Q
6'# MG TM9 R'M!O NHP!I MUP JKU !QHM I MGU NHP]JPGN !6 X H O O QJ OP\R
B + HP AM9O I MOP NHP KHM!QP M!O X M AJ N !GMTG N MG I L LP 9T Q P!N
JKU !QHM I 6'7 HP X$M!NPO !7 I MN ! HM !Q UPL H G KHM I AP OJ !Q NHP
G 9P I ! NT+R JN HMN O PG HP K I I J! KMNP\ #7NP NHP P9]JP!N
OPGK LN !'AT 7 9U 7 NHP M JG GH G 7 NHP LMQPM!N HP I MUPG M
"% NHMN 6 OP R I JGN HM P L PG OPO P NHPGP K IL9 KMNPO M M!QP I P!NG
S6'QM P PMKH NH !Q P +R " P N9 P!MGUG 6'X H O O QJ OP \R S H I MOP NHP
A OT M!O NHP 9 I AG U N QPNHP \ 7 9U NHP!M!G P G 6'#G T J QJPGG &R
S@ 9 KH OG HM P APP!N M!G7P PO N JKU !QHM I AT NHP P GP G 7 NHP NPWN
S+MKK O !Q N T J QJPGG O O QJ OP S6'1!P KP NPG R BK+

F ' SK !GN NJP!N]JM9 NT 7 I !O+ HJG !' P97NH QHN @#KN 222+
K+2 + M9 9 GMTG 6' : HM!Q T J GP9 PG M99[T J M P O9P GHM99 NH !QG 2'
M I ! N 7T J ' B

F7 ($ NPP P!G NH !UG NH G NP I HMG M LPK!9 M MLL9 KMN !N X 9GPT MG
NHP G !' 7 M AJNKHP SMG M AMNKHP %G 7P G KM99PO !"P! T 2 + -M N 22+ 6 : OT
PPKH+R JNOM9GNM 7 !NHP O GN -M N G KM99PO AT - !KP "P I T 6 M Q PMGT
NM99 UPPKH+R #'6'UPPKH R G M 9J I L 7 7MN& M!O N MLLPM G N JG NHMN JKU !Q
HM I HP P OP! J!KPG X 9GPT ! N MG M AJNKHP %G !AJN MG M! P Q !A9 MNPO
7M J NP NHMN
6 KM! NH H G P T " ')
MUP JL NHP MTG %NHP AP!P7 K M9 GJ!+R

H G LMGGMQP HMG APP!K JLNPO AT NHP9 I OP !PO N G M!O MG P NH !U
I GJ!OP GN O 2N G O !M 9T L !NPO NHJG S
6 L OP 9 UP
1JN 7H G GP97 O M !Q PA HP %JG ! NP+
HP 7 KP 7H G !I P N I MUPG H G MT8
D #'Q 7N NHMN HPM P!Q PG 7 H I R BK+

6 % S NHP Q !M9 PMO !Q S G !P 7 HMUGLP P%G HMLLT LM P!
NHPGPG N A PMU M 9 !Q GP!NP!KP M!O I PM! !Q !9T)8$ % 2 HP H 9P
GLPPKH G !NP!OPO N P!OP NHP ! KM9 K9 GP P I LHMN K+ X 9GPT G NH JN
M!KPGN T NH JN NHP K PO N 7 Q PMN GP KP NH JN P I !P!N MGG GNM!NG& AJN

17 M99 NHP QP!N T& 7 NHP I GN LM N GJKH
H I MG Q PMN M KHM QP MG 9 NN9P H ! J
"P I PM!N N 9MT JL !F M!O H G !9PNNP
@ HP H ! J MA9P A M O 7K J!K 9 JN
JGN 7PNKH H I !HP LMLP G+F
( )O U!
!G I P!7 I !P NH PP MN NHP 9PJGN NHMN HM P
T NH G G G KUP!%O NHP PGNMNPG NHMN !P P
HPT GHM99 MA J!O MG 7 I P 9T+
%& ' 1 I M!T
"M P A UP NHP AMKUG NH 9MT !Q I M! G !NHP I
O NH G Q PMN E J !PT+ X HMN O O NH G M! NT+
JN I ! GNP K I I J! KMN !7
#I GN L GGJP \
! : P !Q9T 2 NH !U+
HP LPMKP APN PP!NHP O P!KH M!O JG ! N M9JPG
HP K GN NHMN O O K !K9JOP N+
%& ' 3 P T I M!
#7NP NHP H OP JG GN I NHMN 7 99 %O MG
#NH !Q !GL %O& M!O ! N K !GJ9N !Q A UP
2!N M QP!P M9 L LHPKT SD HMN NH G NP I LPGN+
5MGH !Q NHP QM I P!N 7 NH G LPMKP MA OPO
HP GJOOP!A PMKH !%7+
+ $ X H KH G AJOOPO JN8
0 O M!KP HMNH 79M %O NHP 9PMQJP M!O HMNH MNNMKH%O
1J I P KHM!NG%Q OG MN J OPMJW+
#' 2G N NHP P7 P
HP M I AMGGMO G G 9P!K%O*
! M T G%N+
(#L LP N N9P 7 M LPMKP& M!O LJ KHMG%O
#N M GJLP 79J JG MNP[
%& ' X HT M99 NH G AJG !PGG
1J P P P!O KM O !M9 KM PO+
! % / UP N T J Q MKP+
HP GNMNP NMUPG ! N KP 7 NHP L MNP O 77P P!KP
PN WN T J M!O NHP KM O !M9+ 2 MO GP T J
@#!O NMUP N 7 I M HPM N NHMN GHPG N M OG T J
" ! J M!O L9P!NP JG GM7PNT NHMN T J PMO
HP KM O !M9%G I M9 KP M!O H G L NP!KT
QPNHP N K !G OP 7J NHP NHMN
X HMN H G H QH HMN PO J9O P77PKN M!NG ! N
#I ! GNP !H G L P & 4 J U! H G !MNJ P+
HMN HP%G P P!QP7J9& +M!O 2 U! T H G G O
"MNH M GHM L POQP & N%G 9 !Q M!O%N I MT AP GM O+
2N PMKHPG 7M & M!O HP P %N 99 ! N PWNP!O
H NHP HP OM NG N+ G I JL I T K J!GP9
4 J%99 7 !O N H 9PG I P+ / HP P K I PG NHMN KU
HMN 2 MO GP T J GHJ!! !Q+

GL OP 9 UP OP !Q P P TNH !Q 7 I 9 I GP97 NHP 7 KP 7H G !GP97 GJGNM !PO
I P N) %H G MT SH G K J GP HG Q O 7 NJ!P SM Q 7N 7 I HPM P! H KH
AJTG BK+ 27 P P P N PKP P NHP LMGGMQP !NHP GP!GP 7 NHP P GP G 7N P
NPWN P JQHN N PMO 6'H G !IA N I MUPG % MT+R 6'!EMUP MT R !
HMUGLP P G N Q M MT MG ! HP M I !Q 7NHP H P 8S

6 X H 9P 2) 8 2 7 I HP P N GM P I T9 7P+ %

) 8 2# !NHP K 99]J M9 GP!GP 7 $ 8 # G P NH !U M
7 KPO M!O J!MJNH GPO I PM! !Q 7 NHP OG AP7 P J + HMN X 9GPT GH J9O
NHMN HP I MOP H G MT !9T AT H G ! I P N J9O HM P APP!JNNP 9T MN
M M!KP NH NHP GMNNP9T L I L M!O HMJQHN !PGG 7H G M I A N !+
H G G O !M 9T PMO S
6 O NHP I GN LM N GJKH+
H I R BK+

NHP L PL G N ! 7 NHP Q !M9 MLLPM PO N NHP PO N G M POJ!OM!KT APKMJGP
P HM P)2 - JN 7 2 - HMG ! N HP P NHP 7 KP 7 M K I L J!O
P A PWM I L9PG 7 POJ!OM!N L PL G N !G M P I GN K I I ! ! HMUGLP P8 7
PWM I L9P ! 9M!JG S

6 HMN K I I O NT G M K JG L 1B

HP 7PPA9P PWL9PN P NH NG J! I PN KM9 LMJGP MLLPM G N JG M K JLN !+

M HP K !GN JKN ! 7NH G LMGGMQP G O 77 KJ9N8 NHP I PM! !Q G !" 9 !GHPO[S
6 HP LPP G 7NHP PM9 I PKP !Q9PNNP G N L PLM P NHP I GP9 PG N MNNP!O NHP U !Q
!NH G E J !PT M!O ! MLLM P!N !PKPGGM T KMJGP PWL PGGPO HT HP P7 P
GPP I PO N Q JOQP NHMN GJKH M K GN9T E J !PT GH J9O AP NMUP! ! HM!O NH JN
K !GP!N 7 NHP H 9P A M O 7 NHP K J!K 9+R 2!X 9GPT%G 9PNNP NHP 6 A M O 7
K J!K 9 R MG 6' JN S I NNPO8 NHP 9PNNP M9 !P 6' I JGN 7PNKH $ ' I ^ H I = -
- %.S H I HP GPNG O ! ! NHP LMLP + $ P!? !G ! ! H G 6 3!Q9UH
: M I M R Q PG PWM I L9PG 7M G I 9M 6' M!N 7NHP P9MN P R MOO !Q 6'2!: PPU
M!O /MN !NH G M!N P P AM AM JG+R # I 1!QGN NHP !GNM!KPG8 HP HMG NHP
LMGGMQP 7 NHP ! NH -GM9 I S6 NHP GN !P NHP AJ 9OP G P7JGPOR SM LM M99P9 KMGG
NH NHP GP!NP KP AP7 P JG+ $

S. A. HART, R. A. PINXT

W. GREATBACH. SCULPT

THE QUARREL OF WOLSEY AND BUCKINGHAM.

(KING HENRY VIII.)

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0 ! . & "$ "" 1! 2 , , -
- , -- 3 . 4 - 5 ! & (8<
6 "" & (8 ! $ (! .& ! .
" -"

D ! HP OJUP 7 JKU !QHM I %G GJ PT HM \
X HP P%G H G PWM I !MN !' \
2 7 " P P G L9PMGP T J+
8 ! 2G HP !' LP G !' P$MOT \
2 7 #T L9PMGP T J Q MKP+
8 ! X P99 P GHM99 NHP !' U ! I P 8 M ! O JKU !QHM I
HM99 9PGGP !' NH G A Q 9 U+ 9 4 □ "
%& ' H G AJNKHP %G KJ G P ! I I JNH%O M ! O 2
" M P ! N NHP L P N I JCC9P H I 8 NHP P7 P APGN
N MUP H I ! ! H G G9J I AP + # APQQM %G A U
1JN NHG M ! A9P%G A9 O+
! X HMN M P T J KHM7 O \
#GU : O 7 NP I LP M ! KP8 NHMN%G NHP MLL9 M ! KP ! 9T
X H KH T J O GPMGP P] J PG+
%& ' 2 PMO ! H G 9 UG
MNNP MQM ! GN I P 8 M ! O H G PTP P 9%O
P MG H G MAEPKN AEPKN8 MN NH G ! GNM ! N
" P A PGD I P NH G I P N KU8 " P%G Q ! P N NHP U ! Q8
2%99 7 99 M ! O JN GNM P H I +
! NMT I T 9 O+
! O 9PN T J PMG ! NH T J KH 9P] JPGN !
X HMN %N G T J Q MA JN8 K9 I A GNPPL H 99G
&P] J PG G9 LMKP MN 7 GN # ! QP G 9 UP
7J99 H N H GP8 H AP ! Q M99 %O H G MT+
P97 I PNN9P N PG H I + N M I M ! ! ! 3 ! Q9M ! O
M ! MO GP I P 9 UP T J AP N T J 7 P ! O+
#G T J J9O N T J 7 P !O+
%& ' 2%99 N NHP U ! Q 8
# ! O 7 I M I JNH 7 H ! J] J NP K T O !
H G 2LG KH 7P99 %G ! G 9P ! KP8 L K9M I
HP P%G O 77P P ! KP ! ! LP G !G+
! P MO G%O+
" PMN ! N M 7J ! MKP 7 T J 7 P G H N
HMN N O G ! QP T J GP97 X P I MT JN J ! +
T 9P ! N G 7N ! PGG NHMN H KH P J ! MN+
! O 9 GP AT P J ! ! ! Q+ ! T J ! N
HP 7 P NHMN I J ! NG NHP 9] J N 99 N J ! %P +
2 ! GPP I ! Q N MJQ I P ! N N MGNPG N \ P MO G%O
2 GMT MQM ! NHP P G ! 3 ! Q9 GH G J9
P GN ! QP N O PKN T J NHM ! T J GP978
27 NH NHP GML 7 PMG ! T J J9O] JP ! KH
1 AJN M99MT NHP 7 P 7 LMGG !+
%& '
2 M I NHM ! U7J9 N T J M ! O 2%99 Q M9 ! Q
T T J L PGK LN ! SAJN NH G N L L JO 7P99
@X H I 7 I NHP 79 7 QM99 2 ! M I P ! N AJN
O I G ! KP P I N ! G D AT ! NP99 QP ! KP+
! O L 7G MG K9PM MG 7 J ! NG ! ?J9T HP !
X P GPP PMKH Q M ! 7 Q M P9 2 O U !
AP K JLN M ! O N PMG ! JG+
! MT ! N N PMG ! JG+
%& ' NHP U ! Q 2%99 GMT%N 8 M ! O I MUP I T JKH MG
GN ! Q
#G GH P 7 KU+ #NNP ! O+ H G H 9T 7 W
1 I97 A NH @7 HP G P] JM9 M P ! JG
#G HP G GJAN9P 8 M ! O MG L ! P N I GKH P7
#G MA9P N LP 7 I N H G I ! O M ! O L9MKP
2 ! 7PKN ! Q ! P M ! NHP TPM PK L KM99T
1 ! 9T N GH H G L I L MG P99 ! O M ! KP
#G HP P MN H I P GJQQPGNG FNHP U ! Q J I MGNP
NH G 9MGN K GN9T N PMNT NHP ! NP P

3 %S J ! OG NH JGNG+ ! NHP X ! NP %G M9P 8S
6 NHP GH L NHP I ! NH HP I M ! I MGN+R
F %S I LJ9GPG+
4 %%S PWK NPG+

HMN G M99 %O G I JKH N PMGJ P M ! O 9 UP M Q9MGG
5 O A PMU %NHP ! G !Q+D
! %OM NH M ! O G N O O+
%& ' - MT Q P I P 7M J G + H G KJ ! ! !Q KM N
O ! M9
HP M N K9PG %NHP K I A ! MN ! O P
#G H I GP97 L9PMG%O 8 M ! O NHPT P P MN 7 PO+
#G HP K PO+ HJG 9PN AP N MG I JKH P ! O
#G Q P M K JNKH N NHP OPMO JN J K J ! N KM O ! M9
39MG O ! P NH G M ! O %N G P998 7 NHT X 9GPT
X H KM ! ! N P HP O O N+ NH G 7 99 G
@X H KH MG 2 NMUP N G M U ! O 7 LJLLT
NHP 9O OM I N PMG ! S HM 9PG NHP P I LP +
! OP L PNP ! KP N GPP NHP] JPP ! H G MJ ! N
@O %N MG ! OPPO H G K 9 J 8 AJN HP KM I P
H GLP X 9GPT HP P I MUPG G NMN !
" G 7PM G P P NHMN NHP ! NP P APN WN
3 ! Q9M ! O M ! O O M ! KP I QHN NH JQH NHP M I NT+
PPO H I G I P L PEJO KP8 7 7 I NH G 9PMQJP+
-PPL%O HM I G NHMN I P ! MK%O H I " P L 9T
5 PM9G NH J KM O ! M98 M ! O MG 2 N S
X H KH 2 O P998 7 2 M I GJ P NHP P I LP
-M O P P HP L I G%O 8 HP PAT H G GJ N MG Q M ! NPO
3 P N MG MGUPO8 SAJN HP ! NHP MT MG I MOP+
! O LM %O NH Q 9O NHP P I LP NHJG OPG %O+
HMN HP J9O L9PMGP N M9NP NHP U ! Q%G K J GP+
! O A PMU NHP 7 PGM O LPMKP+ / PN NHP U ! Q U !
@#G G ! HP GHM99 AT I P a NHMN NHJG NHP KM O ! M9
5 PG AJT M ! O GP99 H G H ! J MG HP L9PMGPG
! O 7 H G X ! MO M ! NMQP+
! M I G T
HPM NH G 7 H I 8 M ! O K J9O GH HP P P
I PNH ! Q I GNMUP ! F ! %N+
%& ' ! N M GT99MA9P 8
2 O L ! J ! KP H I ! NHMN P T GHMLP
" P GHM99 MLLPM ! L 7+

& 8 P QPM ! N MN # I G (.! $ "" 2 !
! ! . & "

% 4 J 77 KP GP QPM ! N8 PWPKJNP N+
7 3 ,
T 9 O NHP OJUP 7 JKU ! QHM I M ! O PM 9
17 " P P7 O NM77 O M ! O NHM I LN ! 2
PGN NHPP 7 H QH N PMG ! ! NHP ! M I P
17 J I GN G P P Q ! U ! Q+ ;
%& ' / T J I T 9 O+
HP ! PN HMG 7M99P ! JL ! I P 8 9 DHM99 LP GH
! OP OP KP M ! O L MKN KP+F
% 2 M I G T
GPP T J NM%P ! 7 I 9 AP NT N 9 U !
HP AJG ! PGG L PGP ! N % G H G H QH ! PGG%L9PMGJ P+
4 J GHM99 N NHP P +
%& ' 2N 99 HP9L I P ! NH ! Q
L9PMO I ! P ! ! KP ! KP 8 7 NHMN OTP G ! I P+
XH KH I MUPG I T H NPGN LM N A9MKU+ HP 99 7 HPM P !
P O ! P ! NH G M ! O M99 NH ! QG [S2 APT+S
1 I T 9 O # AP QM%! T 7M P T J P99+
% MT HP I JGN APM T J K I LM ! T H P U ! Q
+ !
2G L9PMG%O T J GHM99 N NHP P N 99 T J U !
" HP OPNP I ! PG 7J NHP +
#G NHP OJUP GM O+
HP 99 7 HPM P ! AP O ! P M ! O NHP U ! Q%G L9PMGJ P
T I P APT%O+
% " P P G M M M ! N 7 I

% " 8 ($
F H$ M7P ! S I GMLL PHP ! OPO+
F ((SM N 7 KP+ ! ! 1 NHP99 S
6 OM P ! ! - ((7 M KJ GPO G9M P+R
) $ H /W

HP U !Q N MNNMKH 9 O !NMKJNP8 M!O NHP A O PG
1 NHP OJUP$G K !7PGG ? H!OP 9M M
1 !P : 9AP N -PKU 9 G KHM!KP99 S
%& '
G 8
HPGP M P NHP 9 I AG 7 NHP L9 N ! I P 2 H LP+
% # I !U %NHP HM N PJW+
%& ' 1 KHMP9 " LU !G
% " P+
%& ' T GJ PT G 7M9GP8 NHP %P Q PMN KM O !M9
" MNH GH %O H I Q 9O I T 9 7P G GLM! !%O M9 PMOT
2 M I NHP GHMO 7 L JKU !QHM I
X H GP 7 QJ P P P! NH G !GNM!N K9 JO LJNG !+
T OM U%! !Q I T K9PM GJ!+S T 9 OG 7M P P99+
9: 4 &

3 3 22+S ! & ;

! - 7 % ! 17BKP G
/ OG !. & $ &) 17BKP G
"#NNP!OM!NG+ 7 -$ 3 ! <
- !&"

T 9 7P NGP97 M!O NHP APGN HPM N 7 N
HM!UG T J 7 NH G Q PMN KM P 2 GN O %NHP 9P P9
17 7J99 KHM Q%O K !7POP MKT M!O Q P NHM!UG
T J NHMN KH U%O N+ SD/PN AP KM99%O AP7 P JG
HMN QP!N9P I M!! 7 JKU !QHM I %G ! LP G !
2%99 HPM H I H G K !7PGG !G EJGN 7T
#!O L !N AT L !N NHP N PMG !G 7H G I MGNP
" P GHM99 MQM ! P9MNP+

2 : - - - / OG !. !& ' - 1 , - #&52 #/ , - - . & " 7 . $! - 3 - "

! - 2 ; 5 3$6 & I 7 NHP >JPP! [R 9(&- "(5 (8 5 2 5 8 "" (5< 5 8 8 - ' - - $ ' - &,$ ' -- -$ ", (5
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@Q MT P I JGN 9 !QP U!PP98 2 M H M GJ N +
GP M!O NMUP L9MKP AT JG S " M97 T J GJ N
P P !M! P N JG8 T J HM P HM97 J L P 8
HP NHP I PNT P P T J MGU G Q P! 8
&PLPMN T J 99 M!O NMUP N+
>+ ; HM!U T J I MEPGNT+
HMN T J J9O 9 P T J GP97 M!O ! NHMN 9 P+
N J!K !G OP %O 9PM P T JD H ! J !
HP O Q! NT 7 T J 77 KP 7G NHP L !N
17 I T LPN N !+
/ MOT I !P L KPPO+
;<
M I G 9 K NPO ! N AT M 7P +
#!O NH GP 7 N JP K !O N ! NHMN T J GJAEPKNG
P !Q PMN Q P M!KP NHP P HM P APP!K I I GG !G
P!N O !M I !Q NHP I H KH HM P 79M %O NHP HPM N
17 M99 NHP 9 TM9N PG S HP P ! M9NH JQH+
T Q O 9 O KM O !M9 NHPT P!N PL MKHPG
GN A NNP 9T !T J MG LJNNP !
17 NHPGP PWMKN !G TPN NHP U !Q J I MGNP

@X H GP H ! J HPM P! GH P9O 7 I G 9[P P! HP PGKMLPG
! N
/M!QJMQP J! I M!!P 9T TPM GJKH H KH A PMUG
HP G OPG 79 TM9NT M!O M9 I GN MLLPM G
2! 9 JO PAP99 !+
! N M9 I GN MLLPM G+
2N O NH MLLPM 7 JL ! NHPGP NMWMN !G+
HP K9 NH P G M99 ! N MA9P N I M !NM !
HP I M!T N NHP I %9 !Q !Q HM P LJN 77
HP GL !GNP G KM OP G 7J99P G PM P G H +
!7N 7 NHP 9 7P K I LP99%O AT HJ!QP +
#!O 9MKU 7 NHP I PM!G ! OPGLP MNP I M!!P
5M !Q NHP P P!N N NHP NPPNH M P M99 ! JL M +
#!O 5M!QP GP PG M I !Q NHP I+$
MWMN ![
X HP P !\M!O HMN NMWMN !\S T 9 O KM O !M9+
4 J NHMN M P A9M I %O 7 N M9 UP NH JG+
! T J 7 NH G NMWMN !\
8! -9PMGP T J G
2U! AJN 7M G !Q9P LM N ! MJQHN
-P NM !G N NHP GNMNP8 M!O 7 !N AJN !NHMN 7 9P F
X HP P NHP G NP99 GNPLG NH I P+
< I T 9 O+
4 J U! ! I P NHM! NHP G AJN T J 7 M I P
H !QG NHMN M P U! !M9 UP H KH M P ! N $H 9PG I P
NH GP H KH J9O ! N EK! NHP I M!O TPN I JGN
-P 7 KP AP NHP MK]JM !NM!KP+ HPGP PWMKN !G
X HP P 7 I T G P P Q!' J9O HM P ! NP NHPT M P
GN LPGN 9P!N N NHP HPM !Q8 M!O N APM NHP I
HP AMKU G GMK 7 KP N NHP 9 MO+ HPT GMT
HPT M P OP G%O AT T J8 P9GP T J GJ77P
HM O M!! PWK9M I MN !+
N 99 PWMKN ![
HP !MNJ P 7 N \ 2! HMN U !O 9PN%G U! +
2G NH G PWMKN !\

<
2 M I I JKH N P!NJ JG
2! NP I LN !Q 7 T J LMN P!KP8 AJN M I A 9OP!%O
!OP T J L I G%O LM O !+ HP GJAEPKN%G Q P7
I PG NH JQH K I I GG !G H KH K I LP9 7 I PMKH
HP G WNH LM N 7 H G GJAGNM!KP N AP 9P PO
X NH JN OP9MT8 M!O NHP L PNP!KP 7 NH G
2G !M I %O T J M G !O M!KP H G I MUPG A 9O I JNHG 8
!QJPG GL N NHP OJN PG JN8 M!O K 9O HPM NG 7 PPCP
#99PQ M!KP !NHP I 8 NHP KJ GPG !
/ P HP P NHP L MTP G O O 8 M!O N%G K I P N LMGG+
H G N MKNMA9P APO P!KP G M G9M P
PMKH !KP!GPO 99+ 2 J9O T J H QH!PGG
X J9O Q P N+]J KU K !G OP MN ! 7
HP P G ! L I P AMGP!PGG+F
T I T 9 7P
H G G MQM !GN J L9PMGJ P+
8! #!O 7 I P
2 HM P ! 7J NHP Q !P !NH G NHM!AT
#G !Q9P KP8 M!O NHMN ! N LMGG%O I P AJN
T 9PM !PO MLL AMN ! 7 NHP EJOQPG+ 27 2 M I
MOJK%O AT Q! M!N N !QJPG H KH !P NHP U!
T 7MKJ9N PG ! LP G ! TPN 99 AP
HP KH ! K9PG 7 I T O !Q D9PN I P GMT
% G AJN NHP 7MNP 7 L9MKP M!O NHP JQH A MUP

$ ' SN P !M I P 7 NHP Q !M9 M!O 7 NHP H ! K9PG+
($ '9 -$ %# NHP Q !M9+ HP GM I P LP G ! S NHP 6 HM N PJW
7 M R S G !' NHP !PWN GKP!P KM3PO AT 6 NHP J PT R ($ ' %9 C !A NH
NHPGP LMGGMQPG NHP !M I P G KHM!QPO AT NHP I OP !' PO N G N ' ($ ' %9 -$ %
I P K !7JG !' G L AMA9T GM PO AT NH G 8 AJN P M9G NH !U NHMN NHP L PN I QHN
!NP!O JKU !QHM I N Q P NHP ($ ' %9 -) % 7 NHP H ! K9PG M !Q
H GN M!' !M I P 2!' H G L PK L NMN ! M!O NHMN 7KP J PT I QHN KM99 H I AT H G
I P 7 I M9 GJ !M I P ($ ' %9 S KH 9MG "P!N !SN H KH K ! P!N
HP AP9 !QPO+ X NH NH G PWL9M!MN !' P PNM !' NHP Q !M9 NPWN !A NH KMGPG+

H G LMGGMQP G ! N PMGT N AP J!OP GN O+ 2G NHP K I LM G !' M G !Q9P M
O JA9P !P \ 5 JKP GMTG N G "' S6 JK9O!QHM I G 7 GN 7!MOP N GMT NHMN
HP G AJN M GHMO 8 ! NHP NP I G M OPMO I M!+ "P NHP!MO P NG N NHP %
K9 JO 7 I G7 NJ!P NHMN P HP9 MG H I M!O 9 UP M GHMO AGKJ PG H G L G
LP NT+R ? H!G !N PMNG NHP K I LM G !MG % ' CS= M I NHP GHMO 7 L
JKU !QHM I H GP L GN M!O O Q! NT G MGGJ I PO AT NHP KM O !M9 NHMN P K9 JOG
M!O+ LL PGGPG I P M!O H QM !G I T L9MKP AT OM UP! !Q I T K9PM GJ!+R 177P !Q
M! NHP PWL9M!MN !' ? H!G !' $ J9O ' D - %' ;M!O NPP P!G !K9 !PG N

- % X P NH !U NHP K I LM G !' G (%# NH JQH ! N PWMKN9T G !Q9P 2
M I NHP GHMO 7 L JKU !QHM I S JKU !QHM I G ! 9 !QP M PM9 NT SAJN
NH G 7 QJ P 7 H I GP97 G MAG APO M!! H 9MNPO AT NHP !GNM!N K9 JO+ HP
I PNMLH H P P 7 QPNG NHMN

6 HP %$ 8 L PG NHP % "% (N JP+R

5M!QP G 7NP!LP G ! 7 PO AT J 9O L PNG+

? H!G !' PWL9M !G NH G 62 M I AJN 7 GN !' NNP 7 K J!GP99 G+R JN
X 9GPT O GK9M I G M!T L NT+ " P JGPG MG M P A HP (% !' NHMN 7 9P+
4

F3 % %% NHP Q !M9+ X M AJ N !' KHM!QPO N N " % %%#+ H KH G NHP
O !M T PMO !Q M!O P NH !U M I JKH 7PPA9P !P+ MNHM !P%G H 9P GLPPKH
G M K I L9M !N 7 NHP " % %% NH H KH NHP U !Q%G GJAEPKN M P LL PGGPO+

% M O NHP #9PWM!O !P !' NH G 9 !P NPP P!G 9PM PG JN 6 Q! M!N R !' NHP
!PWN+

#iO' i N' 'U GG T J+S#'HPM9NH'QPIN9P l PI
/PN' N' Q ' J1O+
8(?' ' H I MG / P99' G'NHP'AMI]JPN' PMOT'
2%'NHP'L T'KHM I AP'\
?i1' 4PG' I T'9 O+
8(' 4 J'Q MKP
2'7PM ' NH'OMiK iQ' G M'9 NN9P'HPMNPO+
#R ' 2'7PM 'N ' I JKH+
8i? HP p%G'7 PGHP'M ' I T'9 O
2i'NHP' ipVW' KHM I AP +
' /PMO' i'T J $9MO PG'p p T' ip+S ppN'LM NIp '
2' I JGN' i N'TPN'7 GMUP'T J+S/pN$G'AP' I p T8S
: O' I T' 9 O'KM O iM9'2'HM p'HM97'M' O CPi'HPM9NHG'
'O iU'N 'NHPGP'7M '9MO PG'MiO'M' IPMGJ P'
'9PMO'NHP I' iKP'MQM i8 MiO'NHPi'9P%G O PM I'
X H %G APGN' i'7M J+S/PN'NHP' I JG K'Ui KU' N+
= 4 & $2 ' & , -

' 32\3 2+

JN'HP'7P99'N 'H I GP97'MQM i'MiO'G ppN9T'
2i'M99'NHP' pGN'GH %O'M' I GN'i A9P'LMN piKP+
% ' 2'O 'i N'NH iU'HP'7PM G'OPMNH+
J p'HP'O pG i N+
"p'ip p' MG G ' IMiEGH'8 NHP'KMJGP
"p' I MT'M' 9 NN9P'Q p p'MN+
p NM i9T'
% '
HP'KM O iM9' G'NHP'piO' 7NH G+
% G 9 UP9T+
T'M99'K iEPKNJ pG'O GN' 9OM p%G'MNNM iOP +
HPi'OPLJNT' 72 P9MIO8 H ' pI %O
3M 9' J pT' MG GPiN'NH NHP 'MiO' i'HMGNP'N
/pGN HP'GH J9O'HP9L'H G 7MNHP +
% ' HMN'N KU' 7GNMNP'
XMG'M'OPPL'pi JG ip+
' #N'H G' pNJ i+
'O JAN'HP' 99' p]JNP' N+' H G' G i NPO+
#iO'QPip M99T' H p p'NHP'U iQ'7M J G
HP'KM O iM9' iGNMiN9T' 99'7iO'pILQ TIpiN D
#iO'7M'pi JQH'7 I'K J N' N +
% ' #99'NHP'K I I iG
"MNP'H I'LP i K JG9T'MIO' % IT'K iGK piKP+
X GH'H I'Npi'7MNH I'OPPL'8 NH G'OJUP'MG I JKH
HPT'9 P'MiO'O NP' i8 KM99'H I'A JiNP JG' JKU iQHM I'
HP'I ' 7M99'K J NPGT+

' 2i'NHP' Q iMG'WN'$ ' A JQHN+R

' 32\3 2+

JN'HP'7P99'N 'H I GP97'MQM i'MiO'G ppN9T'
2i'M99'NHP' pGN'GH %O'M' I GN'i A9P'LMN piKP+
% ' /PN%G GNMiO'K9 GP'MiO'APH 9O'H I +
%& '' #99'Q O'LP L9P+
4 J'NHMN'NHJG'7M'HM P'K IP'N 'L NT'IP+
"PM' HMN'2'GMT'MiO'NHPi'Q 'H IP'MiO'9 GP'IP+
2'HM P'NH G'OMT' PKP %O'M'N M N %G'EJOQ I PiN+
#iO'LE'CF?C H?@G'@B C'N G' 4PN'FG?PGH'LG?D' JCHG '
#iO'C>?'F?PG'?' AH OCGHOG'MGC C' CH('@G
3 pi'MG'NHP'MWP'7M99G' 7?'AP'i N'7M NH7J9[
HP'9M '2'APM'i 'IM9 KP'7 'IT'OPMNH
2N'HMG O ip'JL i'NHP'L pI GPG'AJN'EJGN KP'
JN'NH GP'NHMN'G JQHN'N'2'K J9O' GH'I P' H GN MiG'
P' HMN'NHPT' 99'2'HPM N 9T'7 Q P'NHPI'
4PN'9PN'NHPI'9 U'NHPT'Q9 T'i N' i'I GKH P7+
'AJ 9O'NHP 'P 9G i'NHP'Q M PG' 7Q PMN' I pi8
O 'NHPi'IT'QJ 9N9PGG'A9 O'I JGN'K T'MQM iGN'NHP I+
O '7J NHP'9 7P' i'NH G' 9O'2'ipWP'H LP+
' 99'2'GJP'M9NH JQH'NHP'U iQ'HM P'I p K PG' $
P'NHMI'2'OM P'AP'A 9O'N ' ppL'7 ' JKU iQHM I
#iO'OM P'AP'7 piOG'MiO'7P99 G' H I'N '9PM P'
" G'i A9P'7 piOG'MiO'7P99 G' H I'N '9PM P'
2G' i9T'A NNP'N 'H I ' i9T'OT iQ+
: ' NH' I P'9 UP'Q O'MiQP9G'N 'IT'piO8
#iO'MG NHP'9 iQ'O KP' 7GNPP9'7M99G' i'I P+
MUP' 7T J'L MTP G' iP'G PPN'GMK 7KP+
#iO'9 7N'IT'G J9'N 'HPM pi+S/PMO' i' % : O%G iMIP
?i1'2'O 'APGPPKH'T J'Q MKP'7 'KHM NT+
27'P P'MiT' IM9 KP' i'T J'HPM N
XP P'H O'MQM iGN' IP'i 'N'7 Q P' I P'7 MiU9T+
; %& '' ' H IMG' / P99'2'MG'7 PP'7 Q P'T J'
#G'2' J9O'AP'7 Q pi'2'7 Q P'M99'
HP P'KMi i N'AP'NH GP'iJ iAP 9PGG' 77PiKPG
%: M i GN' I P'NHMN'2'KMii N'NMUP'LPMKP' NH
'A9MKU'pi T'GHM99' I M U I T'Q M P+
D

D HP P'M P'IMiT'G I 9M'iGMMiKPG' i' HMUGLP P' 7'NH G'K iGN JKN iS AP iQ'
HP P'JiOP GN OSMG'i' HP' PKHMiN' 7 PiKP S

6'" ' Q O'M'QPiN9PIMi'T J'GPiN' P9 P7R'E +

I I P!O I P N H G Q MKP8D
#!O 7HP GLPMU 7 JKU !QHM I L MT NP99H I
4 J I PN H I HM97 !HPM P! I T G M!O L MTP G
4PN M P NHP U !Q%G8 M!O 9 I T G J97 GMUP .
HM99K T7 A9PGG !QG !H I MT HP9 P
/ !QP NHM! 2HM P N I P N NP99H G TPM G[
3 AP9 %O M!O9 !Q I MT H G J9P AP[
#!O HP! 9O N I P GHM99 9PMO H I N H G P!O+
: O!PGG M!O HP7 99 JL !P I ! ! I P![
?!1 NHP MNP G OP2 I JGN K !OJKN T J Q MKP8
HP!Q P I T KHM QP JL N G KH 9MG MJW
XH J!OP NMUPG T J N T J P!O+
&4 - PLM P NHP P+
HP OJUP G K I !Q8 GPP NHP AM QP AP PMOT8
#!O7N N NH GJK9 7J ! NJ P MG GJ NG
HP Q PMN!PGG 7H G LP G !+
%& MT G KH 9MG
/PN N M9 !P8 I T GNMNP ! 99AJN I KU I P+
XHP! 2KM I P H NHP 2 MG9 O H QH K !GNMA9P
#!O OJUP 7 JKU !QHM I8 ! L 3O M O HJ!
4PN 2M I KHP NHM! I T AMGP MKKJGP G+
HMN !P P U!P HMN N JNH I PM! N 2 ! GPM8 N8
#!O NH NHMN A9 O 99 I MUP NHP I !P OMT Q M!
7 %N+
T ! A9P7MNHP " P! T 7 JKU !QHM I
XH 7 GN M G%O HPMO MQM !GN JGJ L !Q& KHM O
09T !Q7 GJKK J N H G GP M! M! GNP
P !Q O GN PGG%O MG AT NHMN PNKH APN MT%O+
#!O NH JN N M97P998 : O%G LPMKP AP NH H I [
"P! T NHP P P!NH GJKKPPO !Q N J9T L NT !Q
T7MNHP %G9 GG9 UP M I GN TM9L !KP+
&PGN %O I P N I T H ! J G M!O JN 7 J !G+
MOP I T !M I P !KP I P! A9P+ H G G !
"P! T NHP 3 QHNH 97P H ! J !M I P M!O M99+
HMN I MOP I P HMLLT MN !P GN UP HMG NMUP!
O P T7 I NHP 9O+ 2HMO I T N M9+
#!O IJGN !PPOG GMT M ! A9P !P8 H KH I MUPG I P
#9 NN9P HMLL P NHM! I T PNKHPO7MNHP
4PN NHJG7M P M P !P !7 NJ!PG S NH
OP99AT J GP M!NG AT NH GP I P! P9 %O I GN8
I GN J! !MNJ M9 M!O7M NH9PGG GP KP[
"PM P! HMG M! P!O !M99 4PN T J NHMN HPM I P+
H G7 I M OT !Q I M! PKP P MG KP NM !
XHP P T J M P9 AP M9 7T J 9 PG M!O K J!GP9G+
P GJ P T J AP ! N9 GP8 7 NH GP T J I MUP7 P!OG
#!O Q P T J HPM NG N HP! NHPT !KP LP KP P
HP 9PMGN JA ! T J 7 NJ!PG 7M99M MT
/ UP MNP 7 I TP !P P 7 J!O MQM !
JN HP P NHPT I PM! N G !U TP# #99Q O LP L9P+
- MT7 I P[2 I JGN ! 7 GMUP TP8 NHP 9MGN H J
17 I T9 !Q PM T 97P G K I P JL ! I P+
OM P P99
#!O HP! T J J9O GMT G I PNH !Q NHMN G GMO+
LPMU H 2 7P99+S2HM P O !P8 M!O : O7 Q P I P[
+ 4 & &(7 "
1 NH G G 7J99 7L NT[S N KM99G
2 7PM N I M!T KJ GPG ! NHP HPMOG
HMN P P NHP MJNH G+
% 27 NHP OJUP AP QJ 9N9PGG
$ G 7J99 7 P TPN 2 KM! Q P T J !U9 !Q
17 M! P!GJ !Q P 9 7 N 7M99+
: PMNP NHM! NH G+
2 : O M!QP9G UPPL N 7 I JG[
XHMN I MT N AP\ 4 J O ! N O JAN I T 7M NH G
H G GPK PN G G P QHNT %N 99 P]J P
#GN !Q 7M NH N K !KPM9 N+

D HPGP GH N9 !PG M P ! N !N OJKPO NH JN M I PM! !Q# X NH NH GP LMJGPG
! NHP OP9 P T NHMN L LP 9T AP9 !Q N ! P GLPMU !Q J!OP GJKH K KJ I GNM!KPG
NHPT MOO N NHP LMNH G+ HP NH PP9 !PG APQ ! ! !Q 6%:M !GN I P R M P O !M 9T
L !NPO MG N # HP Q !M9 HMG) 2 * H KH XM AE N !M9NP PO N
)I T Q M P+

6%:M !GN I P2(0) LPMKP NH8 ! A9MKU P! T
$ HM99 I MUP I T Q M P# I I P!O I P N H G Q MKP+R

/PN I P HM P N8
2 O ! N NM9U I JKH+
% 2M I K !7 OP!N8
4 J GHM99 G 5 O T J ! N 7 9MNP OMTG HP
#AJCC !Q 7M GPLM MN !
PN PP! NHP U !Q M!O MNHM !P \
4PG AJN NHP9O ! N
O HP! NHP U !Q !KP HPM O N JN 7M!QP
"P GP! NK I I M!O N NHP 9 O I MT GN M QHN
GN L NHP J I J M!O M99MT NH GP N !QJPG
HMN OJ GN O GLP GP N+
% JN NHMN G9M!OP G $
2G 7 J!O M N JNH ! 8 7 N Q G MQM !
O PGHP NHM! P%P N MG8 M!O HP9O 7 KP NM !
HP U !Q 99 P!NJ P MN N+ 3 NHP NHP KM O !M9+
1 G I P MA JN H I !PM HM P JN 7 I M9 KP
NHP Q O]JPP! L GGPGG%O H I NH M GK JL9P
HMN 99J!O HP K !7 I NH G N +
M O !M9 M I LP JG G M %O M!O 9MNP9T8
#G M99 NH !U 7 NH G AJG !PGG+
2 % G NHP KM O !M98
#!O I P P9T N P P!QP H I !NHP P I LP
O ! N APGN !Q !H I MN H G MGU !Q+
HP M KHA GH L K 7 9PO NH G G LJ L G%O+
%2 NH !U T J HM P H N NHP I M U8 JN G%N ! N K JP9
HMN GHP GH J9O 7PP9 NHP G I M N 7NH G \ HP KM O !M9
X 99 HM P H G 99 M!O GHP I JGN 7M99+
(% G P7J9+
XP M P N LP! HP P N M Q$JP NH G 8
/PN%G NH !U ! L MNP I P+ + 4 &

3 3 22 F / O HM I AP 9M ! " 3

6 TV O S HP H GPG T J 9 OGH L GP!N7 NH M99 NHP KM P 2 HMO 2 GM
P99 KH GP! OOP! M!O 7J ! GHPO HPT P P T J!Q M!O HM!OG I P8 M!O 7
NHP APGN A PPO ! NHP ! NH XHP! NHPT P P PMOT N GPN JN7 / !O ! M I M!
7 I T9 O KM O !M9%G AT K I I GG ! M!O I M !L P N U $P I 7 I I P8 9
NH G PMG ! S " G I MGNP J9O AP GP PO AP7 P M GJAEPKN 7 ! N AP7 PNHP U !Q8
H KH GN LLPO J I JNHG G +R ;

2 7PM HP 99 ! OPPO XP99 9PN H HM P NHP I
O P 99 HM P M99 2 NH !U+

% * ! " $ 5 % % &

! XP99 I PN I T9 O KHM I AP 9M !+D
: O OMT N A NH T J D MKPG+
7&. " G NHP U !Q P I L9 T%O \
2 9P7N H I L MNP+
OJ99 7GMO NH JQHNG M!O N JA9PG+
! XHMN%G NHP KMJGP \
2N GPP I G NHP I M MQP NH H G A NHP %G 7P
"MG K PLN N !PM H G K !GK P!KP+
7&. H G K !GK P!KP
"MG K PLN N !PM M! NHP 9MOT+
! , % G G
H G G NHP KM O !M9%G O !Q NHP U !Q KM O !M9
HMN A9 O L PGN 9 UP NHP P9OPGN G ! 7 7 NJ!P
J !G HMN HP 9 GN+ HP U !Q 99U! H I !P OMT+
7&. - MT : O HP O [HP%99 !P P U! H I GP97P9GP+
! " H 9 9T HP UG ! M99 H G AJG !PGG[
#!O NH HMN CPM9[O ! HP HMG K MKU%O NHP 9PMQJP
PN PP! JG M!O NHP P I LP NHP]JPP! %G Q PMN !PLHP
"P O PG !N NHP U !Q%G G\ J98 M!O NHP P GKMNNP G
5M!QP G O JANG !Q !Q 7NHP K !GK P!KP+
OPM G M!O OPGLM G M!O M99 NHPGP 7 H G I M MQP

6 TV O S HP H GPG T J 9 OGH L GP!N7 NH M99 NHP KM P 2 HMO 2 GM
P99 KH GP! OOP! M!O 7J ! GHPO HPT P P T J!Q M!O HM!OG I P8 M!O 7
NHP APGN A PPO ! NHP ! NH XHP! NHPT P P PMOT N GPN JN7 / !O ! M I M!
7 I T9 O KM O !M9%G AT K I I GG ! M!O I M !L P N U $P I 7 I I P8 9
NH G PMG ! S " G I MGNP J9O AP GP PO AP7 P M GJAEPKN 7 ! N AP7 PNHP U !Q8
H KH GN LLPO J I JNHG G +R ;

2 7PM HP 99 ! OPPO XP99 9PN H HM P NHP I
O P 99 HM P M99 2 NH !U+

% * ! " $ 5 % % &

! XP99 I PN I T9 O KHM I AP 9M !+D
: O OMT N A NH T J D MKPG+
7&. " G NHP U !Q P I L9 T%O \
2 9P7N H I L MNP+
OJ99 7GMO NH JQHNG M!O N JA9PG+
! XHMN%G NHP KMJGP \
2N GPP I G NHP I M MQP NH H G A NHP %G 7P
"MG K PLN N !PM H G K !GK P!KP+
7&. H G K !GK P!KP
"MG K PLN N !PM M! NHP 9MOT+
! , % G G
H G G NHP KM O !M9%G O !Q NHP U !Q KM O !M9
HMN A9 O L PGN 9 UP NHP P9OPGN G ! 7 7 NJ!P
J !G HMN HP 9 GN+ HP U !Q 99U! H I !P OMT+
7&. - MT : O HP O [HP%99 !P P U! H I GP97P9GP+
! " H 9 9T HP UG ! M99 H G AJG !PGG[
#!O NH HMN CPM9[O ! HP HMG K MKU%O NHP 9PMQJP
PN PP! JG M!O NHP P I LP NHP]JPP! %G Q PMN !PLHP
"P O PG !N NHP U !Q%G G\ J98 M!O NHP P GKMNNP G
5M!QP G O JANG !Q !Q 7NHP K !GK P!KP+
OPM G M!O OPGLM G M!O M99 NHPGP 7 H G I M MQP

! & P HP P GNJKU ! S6N 99 I T G J97 GMUP B 2N G ! N O 77 KJ9N N GPP
NHMN HMUGLP P HMO M O 77P P!N I PNMLHTG KM9 ! N ! 7 I NHMN 7H G PO N NHP
L9MKPG NHP !O OJM9 NT !NHP A OT M9 !P+
F &$ 2 1 I P I OP I PO N G PMO 6 &$ I MT N AP 0
D 5 S6 I T Q O 9 O KHM I AP 9M !R S MG HP P NH JGN !N NHP NPWN+

! 7PM ! HP J9 GP HP MG G NJ JG
PL H I M 7 P Q! I M! GN 998 H KH G Q P %H I +
HMN HP M! I MO M! O O PO+
8 ! " PM P! $G LPMKP AP NH H I [
HMN%G H GN M! KM P P! JQH 7 9 ! Q I J I J P G
HP P%G L9MKPG 7 PAJUP+ " P MG M 7 98
0 HP J9O !PPOG AP NJ JG HMN Q O 7P99 X
7 2 K I I M! O H I 7 99 G I T MLL ! N I P ! N8
2 99 HM P ! ! P G ! PM P9GP+ / PM ! NH G A NHP +
X P 9 P ! N N AD Q L%O AT I PM! P LP G !G+
5P9 P NH G NH I OPGNT N NHP] JPP! +
, + 4
HP I GN K ! P! P! N L9MKP NHMN 2 KM! NH ! U 7
0 GJKH PKP LN 7 9PM ! ! Q G 9MKU7 M G8
HP P TP GHM99 I PPN MA JN NH G P QHNT AJG !PGG
T X 9GPT GPP N 7J ! GH%O+ 1 I T 9 O+
X J9O N ! N Q P P M! MA9P I M! N 9PM P
G PPN M APO7P99 \ JN K !GK P! KP K !GK P! KP S
1 %N G M NP! OP L9MKP M! O 2 I JGN 9PM P HP + + 4 &

3 3 , S (> JPP! %G . -

" ! " / MOT+

N 7 NHMN ! P NHP S " P P%D NHP LM! Q NHMN
L ! KHPG8
" G H QH! PGG HM ! Q 9 %O G 9 ! Q NH HP M! O GHP
Q O M 9MOT NHMN ! N ! QJP K J9O P P
- ! J! KP O GH ! J 7 HP SAT I T 9 7P+
HP ! P P U! P HM I O ! Q$8 S 1 ! M7NP
I M! T K J GPG 7 NHP GJ! P! NH ! %O+
N 99 Q ! Q ! M I MEPGNT M! O L I L S NHP H KH
9PM P M NH JGM! O 7 9O I P A NNP NHM!
Y G G PPN MN 7 GN N MK] J P S M7NP NH G L KPGG+

Q HP HP NHP M MJ! N[N G M L NT
X J9O I P M I ! GNP +
" PM NG 7 I GN HM O NP I LP
P9N M! O 9M I P! N 7 HP +
1 : O%G 99[I JKH APNNP
HP ! P%P HMO U! ! L I L NH JQH N AP NP I L M9+
4PN 7 NHMN] JM P9 D 7 NJ! P O O KP
2N 7 I NHP APM P %N G M GJ77P M! KP LM! Q ! Q
#G G J9 M! O A OT%G GP P !Q+
" , #9MG L 9MOT
HP%G M GN M! QP ! MQM !+F
I JKH NHP I P
JGN L NT O L JL ! HP + P 9T
2 G PM %N G APNNP N AP 9 9T A !+
#! O M! QP NH HJ I A9P 9 P G ! K ! NP! N+
HM! N AP LP U%O JL ! M Q9 GNP ! Q Q P7+
#! O PM M Q 9OP! G +
" , 1J K ! NP! N
2G JDAPGN HM ! Q+
0 T I T N NH M! O I M OP! HPMOE
2 J9O ! N AP M] JPP!+
" ? PGH P I P 2 J9O+
#! O P! NJ P I M OP! HPMO 7 %N 8 M! O G J9O T J
0 M99 NH G GL KP 7 T J HTL K GT
4 J NHMN HM P G 7M LM NG 7 I M! ! T J+
" M P N M I M! %G HPM N H KH P P TPN
#77PKNPO P I ! P! KP PM9NH G P P Q! NT8
X H KH N GMT G NH M P A9PGG ! QG8 M! O H KH Q 7NG
@ M ! Q T J I ! K ! Q NHP KMLMK NT

1 T J G 7N KHP P 9 D K ! GK P! KP J9O PKP P+
27 T J I QHN L9PMGP N GN PNKH N
MT Q O N NH S
" ? 4PG N NH M! O N NH SD4 J J9O ! N AP M
] JPP! \
! AN 7 M99 N? P KHPG J! OP HPM P! +
" ? % G GN M! QP $M NH PP LP! KP A PO J9O H P I P+
19O MG 2 M I N] JPP! N JN 2 L MT T J+
X HMN NH ! U T J 7 M OJKHPGG \ HM P T J 9 I AG
APM NHMN 9 MO 7 N N9P
! N JNH+
" ? HP! T J M P PMU9T I MOP -9JKU 77 M 9 NN9P 8 F
2 J9O ! N AP M T J! Q K J! N ! T J MT+
0 I P NHM! A9JGH ! Q K I PG N 7 T J AMKU
M! ! N JKHGM7P NH G AJ OP! $N G N PMU
3 P N QPN M A T+
" T J O .NM9U[
2 G PM MQM ! 2 J9O ! N AP M] JPP!
0 M99 NHP 9O+
" ? 2! 7M NH 7 9 NN9P 3! Q9M! O
4 J%O P! NJ P M! P I AM99 ! Q 2 I TGP97
X J9O 7 M !M !GH P F M9NH JQH NHP P %9 ! Q%O
I P N NHP K ! AJN NHMN+ / H K I PG HP P \

/ O HM I AP 9M !+

: O I 9MO PG+ X HMN P P%N NH N
U!
HP GPK PN 7 T J K !7P P! KP \
9 T Q O 9 O+
N T J OP I M! O8 N M9JPG ! N T J MGU ! Q8
1J I GN PGG% G G P P P L NT ! Q+
2N MG M QP! N9P AJG ! PGG M! O APK I ! Q
HP MKN ! 7 Q O I P! NHP P G H LP
#99 99 AP P99+

2 L MT : O M I P! [D
4 J APM M QP! N9P I ! O M! O HPM P! 9T A9PGG ! QG
0 99 GJKH K PMNJ PG+ HMN T J I MT 7M 9MOT+
-P KP P 2 GLPMU G !KP P9T M! O H QH ! NP%G %
M%P! 7 T J I M! T NJPG NHP U ! Q%G I MEPGNT
I I P! OG H G Q O L ! ! 7 T ZN T J M! O F
5 PG LJ L GP H ! J N T J ! 9PGG 79 !Q
HM! I M KH ! PGG 7 - P I A UP8 NP H KH N N9P
#NH JGM! O L J! O M TPM M! ! JM9 GJLL N+
1JN 7 H G Q MKP HP MOOG ;
2 O ! N U!
X HMN U ! O 7 I T APO P! KP 2 GH J9O NP! OP +
P NHM! I T M99 G ! NH ! Q8 ! I T L MTP G
;# P ! N OG OJ9T HM99 %O ! I T GHPG
P NH NHM! P I LNT M! N PG8 TPN L MTP G M! O GHPG
P M99 2 KM! PNJ ! PGPPKH T J 9 OGH L+
JKHGM7P N GLPMU I T NHM! UG M! O I T APO P! KP+
#G 7 I M A9JGH ! Q HM! O I M O N H G H QH! PGG 8
X H GP HPM9NH M! O TM9NT 2 L MT 7 +
/ MOT
2 GHM99 ! N 7M 9 N I L P NHP 7M K ! KP N
HP U ! Q HMNH 7 T J+ S2 HM P LP JG%O HP P998 + - "
PMJNT M! O H ! J ! HP M P G I ! Q9PO+
HMN NHPT HM P KMJQHN NHP U ! Q M! O H U! G TPN
JN 7 I NH G 9MOT I MT L KPPO M QP I
9 QHNP! M99 NH G G9P \S2%99 N NHP U ! Q+
#! O GMT 2 GL UP NH T J+
T H ! J %O 9 O+
+ 4 / O HM I AP 9M !+

+ HP OMJQHNP 7 M U !Q I T O LG 7 NPM G
2$99 NJ !N GLM UG 77 P+
8! P LMN P! N TPN+
< 2 99 HP! T J M P HJ I A9P8 !MT AP7 P+
1 : O 99 LJ! GH I P 2 O AP9 P P
2!OJK% O AT L NP! N K KJ I GNM!KPG NHMN
4 J M P I !P P!P I T8 M!O I MUP I T KHM99P!QP
4 J GHM99 ! N AP I T EJOQP 7 N G T J
"M P A9 !NH G K M9 APN WN I T 9 O M!O I P+
X H KH : O% OP]JP!KH[SD HP P7 P 2 GMT MQM !
2 JNNP 9T MAH TPM 7 I I T G J9
&P7JGP T J D7 I T EJOQP H I TPN !KP I P
2 H 9O I T I GN I M9 K JG 7 P M!O NH !U ! N
#N M99 M 7 P!O N N JNH+
8! 2 O L 7PGG
4 J GLPMU ! N UP T J GP97 H P P TPN
"M P GN O N KHM NT M!O O GL9MT% O NHP P77PK G
17 O GL G N !QP!N9P M!O 7 GO I
1 P N LL !Q I M!% L P MOM I T J O I P !Q
2 HM P ! GL9PP! MQM !GN T J8 ! !EJGN KP
0 T J M!T H 7M 2 HM P L KPPOPO
1 H 7M 7J NHP GHM99 G M M!NPO
T M K I I GG ! 7 I NHP K !G GN T
4PM NHP H 9P K !G GN T 7 & I P+ 4 J KHM QP HP
HMN 2 HM P A9 ! NH G K M9 2 O OP!T N
HP U !Q G L PGP!N8 7 N AP U! ! N H I
HMN 2 QM !GMT I T OPPO H I MT HP J!O+
#!O NH 9T I T 7M9GPH O[TPM MG I JKH
#G T J HM P O !P I T N JNH 27 HP U!
HMN 2 M I 7 PP 7 T J PL N HP U! G
2 M I ! N 7 T J !Q+ HP P7 P ! H I
2N 9 PG N KJ P I P M!O NHP KJ P G N
&P I P NHPGP NH JQHNG 7 I T J HP H KH AP7 P
" G H QH!PGG GHM99 GLPMU ! 2 O APGPPKH
4 J Q MK JG I MOM I N J!NH !U T J GLPMU !Q+
#!O N GMT G ! I P+
@2 T 9 O I T 9 O
2 M I M G I L9P I M!! JKH N PMU
LL GP T J KJ!! !Q 4 J M P I PPU M!O HJ I A9P
I JNH%O 8
4 J G Q! T J L9MKP M!O KM99 !Q ! 7J99 GPP I !Q
X NH I PPU!PGG M!O HJ I 9 NT AJN T J HPM N
2G K M I I %O NH M QM!KT GL9PP! M!O L OP+
4 J HM P AT 7 NJ!P M!O H G H QH!PGG% 7M J G+
: !P G9 QHN9T %P 9 GNPLG 8 M!O ! M P I J!NPO
X HP P L P G M P T J PNM !P G M!O T J OG D
5 I PGN KG N T J GP P T J 99 M G%N L9PMGP
4 J GP97 L L J!KP NHP 77 KP 2 I JGN NP99 T J+
4 J NP!OP I P T J LP G !%G H ! J NHM!
4 J H QH L 7PGG !GL NJM9 HMN MQM !
2 O P7JGP T J7 I T EJOQP 8 M!O HP P+
P7 P T J M99 MLLPM9 J!N NHP L LP+
A !Q I T H 9P KMJGP %7 P H G H 9 !PGG+
#!O N AP EJOQ%O AT H I+
97 & - ! 3 : "!.. ! "
HP]JPP! G AGN !MNP+
NJAA !N EJGN KP MLN N MKKJGP N M!O
5 GOM !7J9 N AP N PO AT N8 %N G ! N P99+
HP%G Q !Q M MT
M99 HP MQM !+
MNHM !P]JPP! 73!Q9M!O K I P !N NHP K J N+
. MOM I T J M P KM99%O AMKU+
< X HMN !PPO T J ! NP N L MT T J UPPL T J
MT
X HP! T J M P KM99%O PNJ !+SD NHP / O HP9L+
HPT PW I P LMGN I T LMN P!KP [SL MT T J LMGG !
$2 99 ! N NM T ! ! P P I P

L !NH G AJG !PGG I T MLLPM M!KP I MUP
2! M!T 7 NHP K J NG+
9 4 & 9 (55 "" ! ! #NNP!OM!NG+
: NHT MTG MNP
HMN I M!! %NHP 9O H GHM99 PL N HP HMG
APNNP 7P 9PN H I ! !! MJQHN AP N JGNPO+
O GLPMU !Q 7M9GP !NHMN H J M N M9 !P
@27 NHT M P]JM9 N PG G PPN QP!N9P!PGG $
HT I PPU!PGG GM !N 9 UP 7P 9 UP Q P I P!N S
1APT !Q !K I I M!O !Q SM!O NHT LM NG
P P Q!M!O L JG P9GP K J9O GLPMU NHPP JN
HP]JPP! 7 PM NH9T]JPP!G S HP G ! A9P A !8
#!O 9 UP HP N JP ! A 9 NT GHP HMG
M PO HP GP97 N M OG I P+
8! GN Q MK JG G +
2! HJ I A9PGN I M!!P 2 P]J P T J H QH!PGG+
HMN N GHM99 L9PMGP T J N OPK9M P ! HPM !Q
17 M99 NHPGP PM G @7 HP P 2 M I AA%O M!O A J!O+
HP P I JGN 2 AP J!9 G$O# M9NH JQH ! N NHP P
N !KP M!O 7J99T GMN G7 PO HPNHP P P 2
5 O A MKH NH G AJG !PGG N T J H QH!PGG8
/M O M!T GK JL9P !T J MT H KH I QHN
2!OJKP T J N NHP]JPGN ! !%N \ P P
"M P N T J SAJN NH NHM!UG N : O 7 GJKH
TM9 9MOT SGLMUP !P NHP 9PMGN O NHMN I QHN
P N NHP L PEJO KP 7HP L PGP!N GNMNP+
1 N JKH 7HP Q O LP G !\
, T 9 O KM O !M9
2 O PWKJGP T J8 TPM JL ! I !P H ! J
2 7 PP T J 7 I %N 4 J M P ! N N AP NMJQHN
HMN T J HM P I M!T P!P I PG NHMN U! ! N
X HT NHPT M P G AJN 9 UP N 99MQP KJ G+
M U HP!NHP 7P99 G O AT G I P 7NHPGP
HP]JPP! G LJN !M!QP 4 J M P PWKJG%O 8
JN 99 T J AP I P EJGN 7 PO \ T J P P
"M P GH%O NHP G9PPL !Q 7NH G AJG !PGG8 !P P
5PG %O N AP GN %O 8 AJN 7N HM P H !OP %O 7N+
HP LMGGMQPG I MOP N M O N S ! I T H ! J
2 GLPMU I T Q O 9 O KM O !M9 N NH G L !N+
#!O NH NG 7M K9PM H I HMN I %O I P N $N SZ
2 99 AP A 9O NH N I P M!O T J DNNP!N ! S
HP! I M U NHP !OJKP I P!N HJG N KM I P8SQ P HPPO
N % <
T K !GK P!KP 7 GN PKP %O M NP!OP !PGG
K JL9P M!O L KU ! KP NM !GLPPKHPG JNNP %O
T NHP A GH L 7 MT !!P NHP!O P!KH M I AMGGMO 8
XH HMO APP!H NHP GP!N !NHP OPAMN !Q
I M MQP %N WN NHP OJUP 71 9PM!G M!O
1J OMJQHNP M T 2%NHP L Q PGG 7NH G AJG !PGG+
3 P M OPNP I !MNP PG 9JN ! HP
@2 I PM!NHP A GH L O O P]J P M PGL NP8
XHP P !HP I QHN NHP U !Q H G 9 O MO P N GP
XHPNHP J OMJQHNP P P 9PQ N I MNP+
&PGLPKN !Q NH G J I M MQP NH NHP O MQP +
I PN I PG J A NHP %G 7P H G PGL NP GH U
HP A G I 7 I T K !G1 P!KP P!NP %O I P
4PM NH M GL9 NN !Q L P M!O I MOP N N P I A9P
HP PQ ! 7 I T A PMGN8 H KH 7 K%O GJKH MT+
HMN I M!T I MC%O K !G OP !QG O O NH !Q+
#!O L PGG%O ! NH NH G KMJN ! 0 GN I PNH JQHN
2 GN O ! N !NHP G I 9P 7HPM P!8 H HMO
I I M!OPO !MNJ P NHMN I T 9MOT%G+ I A+
27 N K !KP %O M I M9P KH 9O AT I P GH J9O
5 ! I P 77 KPG 79 7P N %N NHM!
HP Q M P O PG N NHP OPMO 7 HP I M9P GGJP
1 O PO HP P NHPT P P I MOP HP T M7NP
H G 9O HMO M %O NHP I 8 " P!KP 2 N U M NH JQHN

$ X +3 9MKUGN !P XH K !N AJNPO M 7P ! NPG N HMUGLP P GMTG NHMN
"$ M!O % M P !GJKH M KMGP NPKH! KM9 NP I G 7 NHP KM!N I 9M < % M!O (% HP P T OG KKJ !" 9 !GHPO+ $ '' HMG APP!L P JG9T
JGPO AT NHP]JPP!NPKH! KM99T+
J9O PMO MG P NH !U I GN J!L PN KM99T 6 T J KM!7 R SLP G !G

GJAEPKN N H I MG N NHP KM P 7 NHP 7 NJ!PG M!O N PMNPO MG 6 GP !NG+R H G G
N K ! P N H QH L PN T !N I MNNP 7 7MKN X HMN M!! I MQP G L PGP!NPO 7 M!! J!
GK JLJ9 JG AJN I GN MA9P I M!N GMT NHMN %= %M P JGPO MG NHP I P P MQP!NG
7H G L9PMGJ P M!O H G 8 %# , NH JN PQM O N NHP QP!P M9 A9 QMN ! 7 N JNH
M P 6 O I PGN KG R H GP P AJN H G 99[
;

C.R. LESLIE. R.A. PINXT

C.W. SHARPE. SCULPT

QUEEN KATHERINE.

(KING HENRY VIII)

LONDON VIRTUE & Co

. ' #9 GN H i J pO' lMOMl
T9 O' 74 U S JN' 7HG i A9P'iMJ p
fPM9 Mi0' APO piKP'HP'GN 99' A P'T J'Q MKP'8
O QPNN iQ'9'UP'M'Q O'lMi'T J'9MN'PKpiGJ p'
NH'7 'T J'H i J'APNNP 'Mi0'T J'KMJGP8
O ' 7'NHP'N M9' 7'NHP'9M ' %P NMUP'T J+
4 J%9'LM N'M MT'O GQ MK%O+
1777P G'MG2'O ' i'M'G Qi' 7LPMKP+
" G'GP KP'Mi0'H G K JiGP9+
%g‡ J' ,APN MT'lP‡ =: -"
'c2T'9 OG'2'NHMIU'T J'A NH'7 'T J'Q O' 99G'8
4P'GLPMU'9UP'H ipGN'lpi8 L MT' : O'TP'L P'G '[
JN'H '%' lMUP'TP'GJOOPi9T'Mi'Mi G p +
2i'GJKH'M'L iN' 7 $PQHN'G 'iMM'lip'H i J
@ P'iPM'lT'97P'2'7PM ' NH'lT' PMU' N'
#iO'N 'GJKH'lpi' 7Q M NT'Mi0'9PM i Q
2i'N JNH'2'Ui 'i N+' 2' MG'GPN'MN' U'
#l iQ'lT'l M OG8 7J99'9 NN9P': O'Ui G'9 UiQ
3 NHP'7 'GJKH'lpi' 'GJKH'AJG ipGG+
O 'HP'GMUP'NHM'2'HM P'APpi'@7 '2'7PPg
HP'9MGN'7N 7'lT'Q PMNipGG 'Q O'T J'Q MKPG+
/PN'lP'HM P'N lP'Mi0'K JiGP9'7 'lT'KMJGP8
#9MG[2'MI'M' lMi'7 pio9PG6'H LP9PGG+
4 J'NJ i'NHP'Q O' P' 77P'iN 'pi T+
K;'' ,4P'NJ i'lP'iN 'i NH iQ' X P'JL i'TP+
#iO'M99'GJKH'7M9GP'L 7PGG G[X J9O'TP'HM P'lP'
@27'T J'HM P'MiT'E JGN KP'MiT'L NT8
1 'AP'M'Ui i'7 pio'%QM iGN'H G'H QHipGG%'L9PMGJ p'
@ H JQH'HP'AP'Q i'G 'OPGLP MNP'N 'AP'H ipGN
27'TP'AP'MiTNH iQ'AJN'KHJ KHlpi%G'HMA NG
-JN'lT'G KU'KMJGP'iN 'H G HMioG'NHMN'HMNPG'lP'\
#9MG[HP'HMG'AMi GH%O'lP'H G APO'M9 PMOT8
" G'9 p'N '9 iQ'MQ '2'MI' 9O'lT'9 OG+
#iO'M99'NHP'7P99 GHL'2'H 9O'i 8 NH'H l
' & $ JN pQH+

2G' i9T'lT APO piKP‡ X HMN'KMi'HMLLPi'
'lP'MA P'NH G pNKHPOipGG'\M99'T J'GNJO pG
MUP'lP'M'KJ GP'9 UP'NH G+
' 4 J'7PM G M P GP+
<' ' "M P'2' 9 %O' NHJG 9 iQS@9PN' lP GLPMU'lT_
GP97+
iKP' NJP'7iOG i'7 pioG SM' 7P'M'N JP' iP'\
#' lMi'@ZOM P'GMT' NH JN' M i Q9 T
p p'TPN'A MiOPO' NH'GJGL K i'\
"M P'2' NH'M99'lT'7J99'M77PKN iG
N 99'lPN'NHP'U iQ'\9 %O'H l'ipWN'HPM pi'\ APT%O'H l'\
ppi' JN' 77 iOipGG'GJLP GN N JG'N 'H l'\
#9l GN'7 Q N'lTL MTP G'N 'K iNPiN'H l'\
#iO'Ml'2'NHJG p M OPO'\%N G i N' P99'9 OG+
iQ'lP'M'K iGNMiN' lMi'N 'HP'HJGAMiO+
lP'NHMN'ip%P'O PMl%O'M'E T'APT iO'H G'L9PMGJ p8
#iO'N 'NHMN' lMi' HPi'GHP'HMG'O iP'l GN+
4PN' 99'2'MOO'Mi'H i J SM'Q PMN'LMN piKP+
8i ' MOMl'T J' MiOP'7 l'NHP'Q O' P'M l'MN+
<' ' T9 O'2'OM P'i N' lMUP'lTGP97G 'QJ 9NT+
'Q P'JL' 99 iQ9T'NHMN'i A9P'N N9P'
4 J'lMGNP' PO'lP'N '' i NH iQ'AJN'OPMNH'
HM99'p%P'O KP'lT'O Qi N PG+
8i ' - MT'HPM'lP+
<' ' X J9O'2'HMO'ip p'N O'NH G'3iQ9 GH'PM NH+
1 '7P9N'NHP+'79MNNP PG'NHMN'Q 'JL i' N[
4P'HM P'MiQP9G%'7MKPG'AJN'HPM pi'Ui G'T J'HPM NG+
XHMN' 99'APK lP' 7'lP'i 'UI PNKHPO'9MOT'\
2'M1'NHP'l GN'JiHMLLT' lMi'9 iQ+
#9MG[L ' piKHPG' HP'P'M P'i 'T J'7 NJiPG'\
9 i' 'X lpi+
HL MKU%O'JL i'M'U iQO l' HP'P'i 'L NT R
'7 pioG'i 'H LP8 i 'U io PO' ppL'7 'l P8
#9l GN'i 'Q M P'M99 %O'lP' S/ UP'NHP'9 9T+
HMN' ikP' MG l GN PGG' 7NHP'7P9O'Mi0'79 J GH%O+

HP' G' M' QM99M I !N' K PMNJ P ' M I O' K I L9MP'
2!' I !O' M ! O' 7PMNJ P' ' 2' LP GJMOP' I P ' 7 I ' HP '
X 99' 7M99 G I P' A9PGG !Q' N ' \NH G' 9M ! O ' H KH' GHM99'
2!' N' AP' I P I C%O+
7& ' JN' 99' \NHP' U ! Q
5 QPGN' \NH G' 9PNNP ' 7' \NHP' KM O ! M9%G \
HP' 9 O' 7 A O[
! ' '
7&.'
HP P' AP' I P' MGLG' \NHMN' AJCC' MA JN' H G' ! GP+
X 99' I MUP' NH G' GN ! Q' \NHP' G !P ≠ M O ! M9' M I LP JG'
2G' GN 9P ! ' M MT' N ' & I P' 8 HMN\H' NM%P ! ' ! ' 9PM P' 8
" MG' 9P7N' \NHP' KMJGP' % \NHP' U ! Q' J ! HM ! O9PO8 M ! O'
2G' L GNPO ' MG'+\NHP' MQP ! N' 7 J ' KM O ! M9+
' GPK ! O' M99' H G' L9 N≠ 2' O ' MGGJ P' T J+
HP' U ! Q' K PO ' H M[MN' \NH G+
‡
! O' 9PN' H I ' K T' H M[9 JOP [
! '
X HP ! ' PNJ ! G' M ! I P ' \
7&.' " P' G' PNJ !\O' ;' H G' L ! !G' 8 H KH'
" M P' GMN G7 PO' \NHP' U ! Q' 7 ' H G' O KP+
QP\NHP ' \NH' M99' 7M I JG' K 99PQPG'
#9 I GN' !' H GNP ! O I ' ' D GH N9T ' 2' AP9 P P+
" G' GPK ! O' I M MQP' GHM99' AP' LJA9 GH%O ' M ! O'
" P ' K ! MN ! ≠ M\HM ! P' ! ' I P'
HM99' AP' KM99%O'] JPP ! ' 8 AJN' L !KPGG' O MQP +
! O' O ' N ' L ! KP' # \NHJ +
! '
" G' GLP99' !' \NHM\' G' JN8 \NHP' U ! Q' HM\NH' 7 J ! O'
79M\NP ' MQM ! G\' H I ' \NHM\' 7 ' P P ' I M G'
HP' H ! PT' 7' H G' 9M ! QJMQP≠ ' HP%G' GPM\9PO+
N' N ' K I P' 77' !' H G' @O GL9PMGJ P+
7 ' '
2' GH J9O' AP' Q9MO' N ' HPM ' GJKH' ! P G' MG' NH G'
1 ! K P' P T' H J +
! '
2 ! ' NHP' O KP ' H G' K ! N M T' L KPPO ! QG'
P' M99' J ! 7 9OPO8 HP P ! ' HP' MLLPM G+
#G' 2' J9O' GH' I ! P' P ! P I T+
7 ' ' KM I P
" G' L MK\N KPG' N ' 9 QH\' \ GN' GN M ! QP9T+
7 . ' 1' H ' \
7&.' HP' KM O ! M9%G 9P\NP ' N ' NHP' L LP' I GKM PO+
! O' KM I P' N ' NHP' PTP≠ %NHP' U ! D ' HP P ! ' MG' PMO
$" ' \NHM\' NHP' KM O ! M9' O O' P ! N PM\' H G' H 9 ! PGG'
' GNMT' NHP' EJOQ I P ! N' %NHP' O KP ' O ' 7'
2N' O O' NMUP' L9MKP ' 6' 2' O R'] J NH' HP ' 6' LP KP P
'c2T U ! Q' G' NM ! Q9PO' ! ' M77PK\ ! ' N ' +
#' K PMNJ P' 7' \NHP'] JPP ! %G' 9MOT' # ! ! P' J99P ! +R
7& ' " MG' NHP' U ! Q' NH G' \
7&.' P9 P P' N+
7 ' ' X 99' NH G' U' \
HP' U ! Q' ! ' NH G' LP KP PG' H I ' H ' HP' K MGNG+
! O' HPOOPG ' H G' ! ' MT+' JN' ! ' NH G' L I N'
#99' H G' N KUG' 7 J ! OP ' M ! O' HP' A ! QG' H G' LHTG K'
#7NP ' H G' LMN P ! \NG' OP\N\H8 \NHP' U ! Q' M9 PMOT'
" \NH' I M PO' \NHP' 7M ' 9M OT≠ $
7 ' ' %X J9O' HP' HMO[
7&.' MT' T J' AP' HMLLT' ! ' T J ' GH ' I T' 9 O' [
O ' 2' L 7PGG ' T J' HM P' N+
7& ' ' M99' I T' E T
MKP' NHP' K ! EJ ! KN ! [T' M I P ! ' N \N [
7 . ' #99' I P ! %G [$
! ' '
7&.' HP P%G' OP ' Q P ! ' 7 ' HP ' K ! \N i
M T ' NH G' G' TP\' AJN' T J ! Q ' M ! O' I MT' AP' 9P7N'
' G I P' PM G' J ! PK J ! NPO+S JN' I T' 9 DG

' F (SP ! 7 KP# ' ;' PMGJ P' 7 ' PMGJ P S
6 " MG' HP' M77PKN I G' ! ' H ! '
H\M\' NHJG' KM ! ' I MJP' H ! ' A \IP' NHP' 9M ' 'ZT' NHP' ! GP
X HP ! ' HP' J9K ' (' M \R

#GL9PP!T /JNHP M!8M!O! N H 9PG IPN
1J KMJGP NHMN GHP GH J9O9 P %NHP A G I 7
1J HM O J9%O U !Q+ #QM ! NHP P G GL J!Q JL
#! HP PN K M! M KH !P M! IP 8 !P
"MNH K M 9%O !N NHP 7M J 7NHP U !Q+
#!O G H G MK9P+
! B "P G PW%O MN G IPNH !Q+
7&. 2 J9O %N P P G IPNH !Q NHMN J9O 7 PN NHP
GN !Q
HP IMGNP K O 7H G HPM N[

3 :" 3 - "& #" ! ?

7&. HP U !Q NHP U !Q+
$;X HMN L 9PG 7 PM9NH HMNH HP MKKJ IJ9MNPO
H G !L N ![M!O HMN PWLP!GP AT NHP H J
PP IG N 79 7$ I H I[" %NHP !M IP 7NH 7N+
5 PG HP MUP NH G N QPNHP \SD IT9 OG
M T J NHP KM O !M\
! T9 O P HM P
N O HP P AGP !Q H I IP GN M!QP K II N !
2G !H G A M ! HP A NPG H G 9 L M!O GNM NG#
N LG !M GJOOP! 9 UG JL !NHP Q J!O+
HP! 9MTG H G 7 !QP !H G NP IL^P 8 GN M QHN+
L !QG JN !N 7MGN QM N8 NHP! GN LG MQM !
N UPG H G A PMGN HM O8 M!O M! ! HP KMGNG
"G PTP MQM !GN NHP I ! ! I GN GN M!QP L GNJ PG
XP HM P GPP!H I GPN H IGP97+
2N IMT P99 AP
HP P G M IJN !T !H G I !O+ H G I ! !Q
-MLP G 7GNMNP HP GP!N IP N LP JGP+
#G 2 P]J %O8 #!O N T J HMN 2 7 J!O
HP P8 ! IT K !GK P!KP LJN J! NN !Q9T\
0 G NH M! ! P!N T NHJG IL N !Q S
HP GP P M LM KP9G 7H G L9MNP H G N PMGJ P+

#G 2 99 9P!O T J KMJGP IT O !Q P99
X NH IT P99 GMT !Q[
% G P99 GM O MQM !8
#!O %N G M U !O 7Q O OPPO N GMT P99
#!O TPN OG M P ! OPPOG+ T 7MNHP 9 %O T J8
"P GM O HP O O8 M!O NH H G OPPO O O K !
" G O JL !T J+ !KP 2 HMO IT 77 KP
2 HM P UPLN T J !PWN IT HPM N8 HM P ! N M9 !P
3IL9 T%O T J HP P H QH L 7NG I QHN K IP H IP+
JN LM %O IT L PGP!N HM !QG N APGN
T A J!N PG JL !T J+
X\9 X HMN GH J9O NH G IPM!\
J + HP / O !K PMGP NH G AJG !PGG[+ ^"GCOP+
"M P 2 ! N IMOP T J
HP L IP IM! 7NHP GNMNP\ 2 L MT T J NP99 IP+
27 HMN 2 ! L ! J!KP T J HM P 7 J!O N JP
#!O 7T J IMT K !7PGG N GMT NHM9+
27T J M P A J!O N JG ! + X HMN GMT T J\
8! T G P P Q! 2 K !7PGG T J TM9Q MKPG+
H P %O !IP OM 9T HM P APP! I P NHM! K J9O
T GNJO PO LJ L GPG P]J NP8 H KH P!N
PT !O M99 IM!%G P!OPM J G S IT P!OPM J G
"M P P P K IP N GH N 7IT OPG PG
4PN 79%O NH IT MA 9 N PG ! P !P!OG
"M P APP! I !P G NHMN P P I P NHPT L !NPO
NHP Q O 7T J I GN GMK PO LP G ! M!O
HP L 7N 7NHP GNMNP+ O T J Q PMN Q MKPG
"PML%O JL ! IP L J!OPGP P 2
M! ! NH !Q P!OP AJN M99PQ M!N NHM! UG8
T L MTP G N HPM P! 7 T J8 IT9 TM9NT+
XH KH P P HMG M!O P P GHM99 AP Q !Q+
99 OPMNH NHMN !NP U 99 N+
OM 9T M!G P %O 8
#9 TM9 M!O APO P!N GJAEPKN G
HP P ! 99JGN MNPO HP H ! J 7 N
5 PG LMT NHP MKN 7 N8 MG %NHP K !N M T+

&KH GNJ77G M!O !M IP!NG 7H JGPH 9O8 H KH
2 7 !O MN GJKH L JO MNP NHMN N LJN GLPMUG
- GGPGG ! 7M GJAEPKN+
! 2N%G HPM P!%G 998
IP GL N LJN NH G LMLP ! NHP LMKUPN
A9PGG T J PTP NHM9+
27 P O O NH !U
" G K !NP IL9MN ! P P MA P NHP PM NH+
#!O 7 W%O !GL NJM9 AEPKN HP GH J9O GN 99
5 P99 !H G IJG !QG AJN 2 M I M7 M O+
" G NH !U !QG M P AP9 NHP I ! ! N NH
" G GP JG K !G OP !Q+
9 ' - .- $ "2 -, - 2 !
3! - ! $!,
8! "PM P!7 Q P IP[
3 P *O A9PGG 1*'2H QH!PGG[
: O IT9 O+
4 J M P 7J99 7HPM P!9T GNJ77 M!O APM NHP ! P!N T
17T J APGN Q MKPG !T J I !O8 NHP H KH
4 J P P! J!! !Q %P 8 T J HM P GKM KP N IP
GNPM9 7 I GL NJM9 9P GJ P M A P7GLM!
UPPL T J PM NH9T MJO N J P ! NHMN
2 OPP I T J M! 99 HJGAM!O M!O M I Q9MO
HM P T J NHP P ! IT K ILM! !+
8! 0 H 9T 77 KPG 2 HM P M N IP8 M N IP
NH !U JL !$NHP LM N 7AJG !PGG H KH
2 APM % - # "" & "! - N& $ HP . - !., - 1 ! $2 $, .! $ E&-31 5 NP!OM!KP N +
#! 4 J HM P GM O P99+
8(#!O P P IMT T J H QH!PGG T UP N QPNHP

#G 2 99 9P!O T J KMJGP IT O !Q P99
X NH IT P99 GMT !Q[
% G P99 GM O MQM !8
#!O %N G M U !O 7Q O OPPO N GMT P99
#!O TPN OG M P ! OPPOG+ T 7MNHP 9 %O T J8
"P GM O HP O O8 M!O NH H G OPPO O O K !
" G O JL !T J+ !KP 2 HMO IT 77 KP
2 HM P UPLN T J !PWN IT HPM N8 HM P ! N M9 !P
3IL9 T%O T J HP P H QH L 7NG I QHN K IP H IP+
JN LM %O IT L PGP!N HM !QG N APGN
T A J!N PG JL !T J+
X\9 X HMN GH J9O NH G IPM!\
J + HP / O !K PMGP NH G AJG !PGG[+ ^"GCOP+
"M P 2 ! N IMOP T J
HP L IP IM! 7NHP GNMNP\ 2 L MT T J NP99 IP+
27 HMN 2 ! L ! J!KP T J HM P 7 J!O N JP
#!O 7T J IMT K !7PGG N GMT NHM9+
27T J M P A J!O N JG ! + X HMN GMT T J\
8! T G P P Q! 2 K !7PGG T J TM9Q MKPG+
H P %O !IP OM 9T HM P APP! I P NHM! K J9O
T GNJO PO LJ L GPG P]J NP8 H KH P!N
PT !O M99 IM!%G P!OPM J G S IT P!OPM J G
"M P P P K IP N GH N 7IT OPG PG
4PN 79%O NH IT MA 9 N PG ! P !P!OG
"M P APP! I !P G NHMN P P I P NHPT L !NPO
NHP Q O 7T J I GN GMK PO LP G ! M!O
HP L 7N 7NHP GNMNP+ O T J Q PMN Q MKPG
"PML%O JL ! IP L J!OPGP P 2
M! ! NH !Q P!OP AJN M99PQ M!N NHM! UG8
T L MTP G N HPM P! 7 T J8 IT9 TM9NT+
XH KH P P HMG M!O P P GHM99 AP Q !Q+
99 OPMNH NHMN !NP U 99 N+
OM 9T M!G P %O 8
#9 TM9 M!O APO P!N GJAEPKN G
HP P ! 99JGN MNPO HP H ! J 7 N
5 PG LMT NHP MKN 7 N8 MG %NHP K !N M T+
HP7 J9!PGG G NHP LJ! GH IP!N+ 2 L PGJ IP
HMN MG IT HM!O HMG LP!%O A J!NT N T J+
T HPM N O LL%O9 P IT L P M !%O H ! J I P+
1!T J NHM!M!T8 G T J HM!O M!O HPM N+
4 J A M ! M!O P P T7J!KN ! 7TEJ L P +
H J9O ! N NHGNM!O !Q NHMN T J A !O 7OJNT+
#G %N P P ! 9 P%G LM N KJ9M AP I] P
IP T J 7 P!O NHM!M!T+
8! ;;- 2 O L 7PGG
HMN 7 T J H QH!PGG%Q O 2 P P 9MA J %O
P NHM!I !P ! 8 NHMN M I HM P M!O 99 AP+D
H JQH M99 NHP 9O GH J9O K MKU NHP OJNT N T J+
#!O NH N 7 I NHP G J98 NH JQH LP 9G O O
#A J!O MG NH KU MG NH JQHN K J9O I MUP NHP I M!O
#LLPM ! 7 IG I P H O8 TPN IT OJNT+
#G O NH M KU MQM !GN NHP KH O !Q 79 O+
H J9O NHP MLL MKH 7NH G 9O P A PMU+
#!O GNM!O J!GHMUP!T J G+
% G ! A9T GL UP!
MUP ! N KP 9 OG HP HMG M 9 TM9 A PMGN+
0 T J HM P GPP!H I LP!%N+ S&iMO %P NH G 8
= 1 3 , , -
#!O M7NP NH G M!O NHP!N A PMU7MGN NH
XHMN MLLPN NP T J HM P+
= 4 . !2 3&,! □ 7
A9PG ! 3 . $- 3 "2 -, 3
8! XHMN GH J9O NH G IPM!\
XHMN GJOOP!M!QP %G NH G N H HM P PML%O N
"P LM NPO7 ! !Q7 I IP MG 7 I !
/PML%O7 I H G PTPG 8 9 UG NHP KHM7PO9 !
L !NHP OM !Q HJ!NG IM!NHMN HMG QM99%O H I8
HP!I MUPG H I ! NH !Q+ 2 IJGN PMO NH G LMLP 8
2 7PM NHP GN T 7H G M!QP +S% G G ;

H G LML P 'HMG J1O ip I p8 % G NHP'MKK JiN' 1?M99'NHMN' 9O? 7 PM9NH 2'HM P O M i'N QPNHP' O 'I ip' i'piOG'8 iOPPO'N 'QM i'NHP'L LPO I #iO'7PP'IT7 piOG i'& Ip+ 1'P9 QPiKP+ 4P'MLLPM' i'p p TNH iQ'IMT A iQ'IT J i'[O N'7 'M'7 9'N '7M99'ATL XHM'K GGOP 9 O 99 'T J'pi JG'KKD GPG'Ipi' 7 I M9 KP8 4 J'HM P' H GN Mi' M MiN'7 'NHPI8MiO'i 'O JAN i'N IP' $99 7 iO'NHP '7N' p M OG+' HMN'GPM9 4 J MGU' NH'GJKH'M' 9PiKP'NHP'UiQ MOP' IP'PIE T' N' NH'NHP'L9MKP'MiO'H i J D+ @ ip'MiO'T J' - $/' NH' -' i'HMiO'QM P'IP 5J iQ'IT9 7P'MiO'N'K i7 I'H G'Q OipGG+ PO' N'AT'9PNNP G'LMNPiNG' ' H %99'NMUP'N'A X 99'A iQ'IP' 77MQM i+' XHMI%G'NH G S6' 'NHP'- LP'RO HP'9PNNP 'MG2'9 p' NH'M99'NHP'AJG ipGG 2' N'N 'H G'H 9 ipGG+' MT'NHPi'7M p p99'7 2'HM P'N JKH%O'NHP'H QHPGN'L iN' 7M99 IT'Q PMNipGG' #iO'7 I'NHMN'7J99'Ip O Mi' 7 IT'Q9P Tj+ 2'HMGNP'i 'N 'IT'GPNN iQ+' 2'GHM99'7M99 / UP'M'A QHN'PWHM9MN i'i'NHP'p piiQ+ #iO'i 'IMi'GPP'Ip'I p+

', B ' ,' (8 ' 5'2 5 8' "' (55 8' ', ' 1O' JDB34E' "' ', / O' HMIAP 9M i+

i ' " PM 'NHP'U iQ%G'L9PMGJ p'KM O iM9' H 'K IIMiOG EAB ' piOP 'JL'NHP'Q PMN'GPM9'L pGPiN9T' 2iN ' J 'HMiOG'8 MiO'N'K i7ip'T J GP97 '#GHP H JGP'IT9 O' 7X iKHPGNP %G 99'T J'HPM'7J NHP'7 I'H G'H QHipGG+ ?4AN+ EB NMT ' OG'KMii N'KM T' +XHP P%G'T J'K II GG i'9 OG'\ OG'KM'PWL pGG9T'\ < 7&.' XH 'OM P'K GG'NHPI ' 99' 7iO' I P'NMHI' 99' ' OG'N 'O ' N 8i' 'JNH NT'G ' P QHNT+' 2'OM P $MiO' I JGN'OPiT' N+' '2'7PPg 'TOJD 27'2'9 %O' I MiT' OG'9 O';2'GH J9O'NP99'

4 J'HM P'MG 9 NN9P'H IPGNT'MG'H i J HMN' i'NHP' MT' 79 TM9NT'MiO'N JNH' M O'NHP'U iQ'I'T p p' TMg IMGNP + 5M P' IMNP'M'G Ji0P'IMi'NHMi' J PT'KMi'AP+ #iO'M99'NHMN'9 P'H G'7 99 PG+ 78.' ' T I'T G J9';' 4 J'9 iQ'K MN'L PGN'L NPKNG'T J8 NH J'GH J9OGN'7PPg ' T G O %NHP'9 7P A9 O' 7NHPP'P9GP+S T'9 OG+ Mi'TP'piOJ P'N 'HPM'NH G M QMiKP4 #iO'7 I'NH G'7P99 '\ 27' P'9 P'NHJG'NM I P9T' 'AP'NHJDEMOPO'AT'M'L PKP' 7GKM 9PN+ OM P P99 i A 9 NT8 9PN'H G'Q MKP'Q '7 M O+ #iO'OM P'JG NF'H G'KML'9 UP'9M UG+ 8i' #99'Q OipGG 2G'L G iN 'NHT'GN IMKH+ D 78.' 4PG'NHMN'Q OipGG 17'Q9PMi iQ'M99'NHP%9MiO%G PM9NH'iN ' ip+ 2iN'T J' i'HMiOG'KM O iM9'AT'PWN N i'8 HP'Q OipGG'7T J' iNP KPLNPO'LMKUPNG+ 4 J'D N'NHP'L LP'MQM iGN'NHP'U iQ'T J'Q OipGG' iQP'T J'L UP'IP'GHM99'AP'I GN'i N JG+ T9 O'7 7 9U'MG'T J'M P'N J9T'i A9P+ #G'T J'pGLPKN'NHP'K II i'Q O'NHP'GNMNP$ 17 J'OPGL G%O'i A 9NT' J' GGJPG+ XH '7HP'9 P' 99'GKM KP'AP'QPiN9PIpi S - OJKP'NHP'Q MiO'GJI' 7H G G iG'NHP'M N K9PG' ', 99PKNPO'7 I'H G'97P 2%9G'GNM N9P'T J' ? GP'NHMi'NHP'GMK iQ'AP99+' XHPi'NHP'A i' piLH' /MT'U GG iQ'Ei'T J'M I G'9 O'KM O iM9+ 8i ' ' 'IJKH'IPH iUG'2'K J9O'OPGL GP'NH G'I MID JN'NHMN'2'MI'A Ji0' i'KHM NT'MQM iGN' N' '+ i ' H GP'M N K9PG'IT9 O'M P'#NHP'U iQ%G'HMiO JN'NH JG'IJPH'NHPT'M P'7 J9 ipG+ 8i ' B #' 'IJKH'7M P+ #io'GL N9PGG'GHM99'I ip' ii KPiKP'M GP+ XHPi'NHP'U iQ'UI G IT'N JNDD+

H G'MMP'K M GP'IPNM9'TP'M P'I J9OPO SPi T+ " 'PMQP 9T'TP'7 99 'IT O GQ MKPG+ #G 7 N'7PO'TP'[MiO'H '-Q ";MiO' MiN i' 4P'MLLPM' i'p p TNH iQ'IMT A iQ'IT J i'[O N'7 'M'7 9'N '7M99'ATL XHM'K GGOP 9 O 99 'T J'pi JG'KKD GPG'Ipi' 7 I M9 KP8 4 J'HM P' H GN Mi' M MiN'7 'NHPI8MiO'i 'O JAN i'N IP' $99 7 iO'NHP '7N' p M OG+' HMN'GPM9 4 J MGU' NH'GJKH'M' 9PiKP'NHP'UiQ i'[2G'NHP P' MT'N 'KJ P'NH G' 2'GPiN'NHP'U iQ'\ 2G'NHP P' MT'N 'KJ P'NH G' MOP' IP'LJN'NH G IM i'GPK PN' i'NHP'LMKUPN' 78.' ' T I'T G J9';' 4 J'9 iQ'K MN'L PGN'L NPKNG'T J8 NH J'GH J9OGN'7PPg ' T G O %NHP'9 7P A9 O' 7NHPP'P9GP+S T'9 OG+ Mi'TP'piOJ P'N 'HPM'NH G M QMiKP4 #iO'7 I'NH G'7P99 '\ 27' P'9 P'NHJG'NM I P9T' 'AP'NHJDEMOPO'AT'M'L PKP' 7GKM 9PN+ OM P P99 i A 9 NT8 9PN'H G'Q MKP'Q '7 M O+ #iO'OM P'JG NF'H G'KML'9 UP'9M UG+ 8i ' #99'Q OipGG 2G'L G iN 'NHT'GN IMKH+ D 78.' 4PG'NHMN'Q OipGG 17'Q9PMi iQ'M99'NHP%9MiO%G PM9NH'iN ' ip+ 2iN'T J' i'HMiOG'KM O iM9'AT'PWN N i'8 HP'Q OipGG'7T J' iNP KPLNPO'LMKUPNG+ 4 J'D N'NHP'L LP'MQM iGN'NHP'U iQ'T J'Q OipGG' iQP'T J'L UP'IP'GHM99'AP'I GN'i N JG+ T9 O'7 7 9U'MG'T J'M P'N J9T'i A9P+ #G'T J'pGLPKN'NHP'K II i'Q O'NHP'GNMNP$ 17 J'OPGL G%O'i A 9NT' J' GGJPG+ XH '7HP'9 P' 99'GKM KP'AP'QPiN9PIpi S - OJKP'NHP'Q MiO'GJI' 7H G G iG'NHP'M N K9PG' ', 99PKNPO'7 I'H G'97P 2%9G'GNM N9P'T J' ? GP'NHMi'NHP'GMK iQ'AP99+' XHPi'NHP'A i' piLH' /MT'U GG iQ'Ei'T J'M I G'9 O'KM O iM9+ 8i ' ' 'IJKH'IPH iUG'2'K J9O'OPGL GP'NH G'I MID JN'NHMN'2'MI'A Ji0' i'KHM NT'MQM iGN' N' '+ i ' H GP'M N K9PG'IT9 O'M P'#NHP'U iQ%G'HMiO JN'NH JG'IJPH'NHPT'M P'7 J9 ipG+ 8i ' B #' 'IJKH'7M P+ #io'GL N9PGG'GHM99'I ip' ii KPiKP'M GP+ XHPi'NHP'U iQ'UI G IT'N JNDD+

5 JA9PNG 2 NH !U 79P JL M!O HMO NHP 7MKPG
PP! 9 GP NH G OMT NHPT HMO APP! 9 GN JKH E T
2 !P P GM AP7 P : PMN AP99 PO IP!+
HMN HMO ! N HM97M PPU N Q 9 UP M I G D
2! NHP 9O N I P 7 M J9O GHMUP NHP L PGG+
!O I MUP NHP I PP AP7 P NHP I ! M! 9 !Q
: J9O GMT S H G G I T 7P R NHP P 8 M99 P P P!
GN M!QP9T ! P L PKP+
% L JN HMN 7 99 %O \
) # N 9P!QNH HP Q MKP GP M!O NH I OPGN LMKPG
M I P N NHP M9NM HP P GHP UHPP9%O M!O GM I N 9 UP+
MGN HP 7M PTPG N HPM P! M!O L MT%O OP JN9T+
HP! GP MQM ! M!O A %O HP N NHP LP L9P
X HP! AT NHP M KHA GH L 7 M! NP AJ T
HP HMO M99 NHP TM9 I MU !QG 7M]JPP!8
#G H 9T 9 3O M O I7PGG %G K !+
HP O M!O A O 7LPMKP M!O M99 GJKH P I A9P I G+
/M O ! A9T ! HP 8 H KH LP 7 I %O NHP KH
X NH M99 NHP KH KPGN I JG K 7 NHP U !QO I+
QPNHP GJ!Q & GHP LM NPO+
#!O NH P QM P H G H ! J G N NHP 9O MQM !+
G A9PGGPO LM N N HPM P! M!O G9PLN ! LPMKP+
4 J I JGN ! I P KM99 N 4 U L9MKP NHMN G L MGN
O G !KP NHP KM O I.M9 7P99 NHMN N N9P%G 9 GN8
% G ! NHP U !Q%G M!O KM99%O X H NPHM99+
) 2 U! N8
JN MN G G 9MNP9T M9NP %O NHMN NHP 9O !M I P
2G 7 PGH MA JN I P+
% X HMN N P P P!O A GH LG
X P P NH GP NHMN P!N ! PMKH G OP 7NHP]JPP!\
) N UPG9T M!O : M O !P 8 NHP !P 7 X !KHPGNP
@ P 9T L P7P %O7 I NHP U !Q%G GPK PNM T
HP NHP / !O !+
% 6 P 7 X !KHPGNP
2G HP9O 9 Q PMN Q O 9 P 7NHP M KHA GH L%G+
HP NJ JG M! I P +
) #99 NHP 9M!O U! G NHMN
" P P TPN NHP P%G ! Q PMN A PMKH8 HP! N K I PG
M! I P 9 7 !O M7 P!O 99 ! N GH !U7 I H I+
% X H I MT NHMN AP 2 L MT T J \
) H I MG P99
I M! I JKH PGNPP I NHN NHP U !Q M!O N J9T
NHT7 P!O+S HP U !Q
" MG I MOP H I I MGNP %NHP EP P9 H JGP+
!O !P M9 PMOT 7NHP L T K J!K 9+
% P 99 OPGP P I P+
) 4PG NH JN M99 O JAN+
I P QP! N9P I P! TP GHM99 Q I T MT H KH
2G N NHP K J N M!O NHP P TP GHM99 AP I T QJPGNG 8
I PNH !Q 2 KM! K I I M!O #G 2 M9U NH NHP
2 99 NP99 TP I P+
%! 4 J I MT K I I M!O JG G + + 4 &

3 3 22+S IA 9N !+

1 %!!! 3 $- # (2) %% 1
- 1 9

S ,AMNP !Q MIG+
HP P G M Q PMN K !N P GT M I !QGN HP K I I P! NMN G HPHP NH G
O I PM !G N HP MK J G N ! 7 PM9H AT NHP KM O !M9+ $ X P HM P ! O JAN NHMN
NHP M99JG ! G N HP MK J G N ! 7 PM9H AT NHP KM O !M9 MG M I M! J!O JAN P9T " $ B

' NHP ' GLPMUP ' 7' I T' 9 !Q' MKN !G
' UPPL' I !P' H ! J '7 I ' K JLN !
JN' GJKH' M !' H !PGN' KH ! K9P ' MG' : 77 NH'
X H I ' 2' I GN' HMNPO' 9 !Q ' NH J' HMGN' I MOP' I P'
X NH' NHT' P9 Q JG' N JNH ' M ! O' I OPGNT+
' !' H G' MGHPG' H ! J ' -PMKP' AP' NH' H I [
-MN P ! KP ' AP' ! PM ' I P' GN 998 M ! O' GPN' I P' 9 P
2' HM P' ! N' 9 !Q' N ' N JA9P' NHPP+ S : O' : 77 NH '
MJGP' NHP' I JG K M ! G' L9MT' I P' NHMN' GMO' ! NP'
2' ! M I %O' I T' U ! P99 ' H 9GN' 2' G N' I PO NMN !Q'
1 !' NHMN' KP9PGN MG' HM I ! T' 2' Q ' N +

7 "' "'-! ' &-

.' HP' G' MG9PPL' 8 : O' P ! KH ' 9P N%G' G N' O !'] J PN+'
0 '7PM ' P' MUP' HP 8 S 7N9T ' QP ! N9P' -MN P ! KP+

' - ! ' $' -! 5' , , 3' ! ' . ' ! $ - 4'
-! 3 -$ "' ' 2 ' !(-$ 2 3' ! ' ' "-'
3 "-' ! .' (5-$ "' 3! " ' B1 I "-' ! ' ' . -#'
(-' ! .' (5-$! ' , $' ' ' "-' 5' . - '
! 3 ' & !' $' ' " # "' ' ' 3 -$ '
. - ' 2 !' ! "' ' -, '3 "' !1 ' ' "# '2 $' '
! '.! & ' ' ' 1 "' & - -# ' ' 2 !' ' "'
'3 "' " 1 ' ' - ' !' ' ! ' 4 ' 2 !$ B2 !'
!(- 1 ' ' - ' ! " ' ' ' 3 -$ "' ! " 3' '
3 "' !1 ' ' "* 2 ' "! $ 5' " 1 ' ' - '
3 "' !' ' - ' 2 !$ 2 !' ' 2 - ' !(- 1 ' ' - '
! " * '2 $ + -' '2 ' (5' -, ! ,' - ' ' -' '
' - ,' - 3 -' ! .' 6! 3$ "' ! " ' &,' ' "-' !'
1 * "' -!' ' ' " 3' 1 - $ 5 3' '
3 "' 2 ' ' ' &- ' ! & -

' + L NG' 7' LPMKP ' HP P' M P' TP' \ # P' TP' M99' Q !P' \
! O' 9PM P' I P' HP P' !' PNKHPO ! PGG' APH ! O' TP' \
. ' MOM I ' P' M P' HP P+
' 2N' G' ! N' T J' 2' KM99' 7
M ' TP' ! !P' P ! NP ' G ! KP' 2' G9PLN' \
. ' ' !P ' I MOM I +
' ' ' \ M ' T J' ! N ' P P ! ! ' M' A9PGGPO' N L'
2 ! NP' I P' N ' M' AM !] JPNG8' H GP' A QHN' 7MKPG'
MGN' NH JGM ! O' APM I G' JL !' I P ' 9 UP' NHP' GJ !' \
HPT' L I G%O' I P' PNP ! M9' HMLL ! PGG8
! O' A JQHN' I P' QM 9M ! OG ' : 77 NH ' H KH' 2' 7PP9'
2' M I ' ! N' $ NHT' TPN' N ' PM ' 9' GHM99
GGJ PO9T+
. ' 2' M I ' I GN' E T7J9 ' I MOM I ' GJKH' Q O' O PM I G'
- GGPGG' T J ' 7M ! KT+
' O' NHP' I JG K' 9PM P+
HPT' M P' HM GH' M ! O' HPM T' N ' I P+' =JE&- ' - -$
' 5 ' T J' ! NP
Y " ' I JKH' HP ' Q MKP' G' M9NP %O' !' NHP' GJOOP !' '
" '9 !Q' HP ' 7MKP' G' O M ! %K " ' LM9P' GHP' 9 UG
! O' 7' M ! ' PM NHT' K 9O' \ M U' HP ' PTPG[
. ' HP' G' Q !Q ' P ! KH' 8 L MT ' L MT+
' " PM P ! ' K I 7 N' HP [

' ' PGGP ! QP +

E --' # ! %N' 9 UP' T J ' Q MKP S
' 4 J' M P' M' GMJKT' 7P99
5PGP P' P' ! ' I P' P P P ! KP' \
. ' ' 4 J' M P' N ' A9M I P+
! !Q' GHP' 99' ! N' 9 GP' HP ' !NPO' Q PMN ! PGG+
' JGP' G ' JOP' APHM J ' Q ' ND ' U ! PP9+
E --' 2' HJ I A9T' O ' P ! N PMN' T J ' H QH ! PGG% LM O !' 8
T' HMGNP' I MOP' I P' J ! I M ! ! P 9T' ' HP P' G' GNMT !Q'
#' QP ! N9PQ M ! ' GP ! N' 7 I ' NHP' U ! Q ' N ' GPP' T J+
' #O I N' H I ' P ! N M ! KP ' : 77 NH' ' JN' NH G' 7P99 '
/ PN' I P' ! P%P ' GPP' MQM !+
+ 4 & ' + " # ' "' & G GH GD

B ') %% 1 ' 2 ' ' !

27' I T' G QHN' 7M 9' ! N+
4 J' GH J9O' AP' 9 O' M I AMGGMO ' 7 I ' NHP' P I LP '
E T' TM9' ! PLHP ' M ! O' T J ' ! M I P' MLJK JG+
, ' MOM I ' NHP' GM I P ' T J ' GP M ! N+
' 1' I T' 9 O+
HP' N I PG ' M ! O' N N9PG ' ! ' M P' M9NP %O' GN M ! QP9T'
X NH' I P ' G ! KP' 7 GN' T J' U ! P ' I P+' JN ' 2' L MT' T J
X HMN' G' T J ' L9PMGJ P' NH' I P' \
,$ +' A9P' 9MOT+
O GN ' I !P' !' GP KP' N ' T J ' Q MKP' 8 NHP' ! PWN
HP' U ! Q%G' P] JPGN' NHMN' 2' J9O' G N' T J8
X H ' Q P PG' I JKH' 7 ' T J ' PMU ! PGG ' M ! O' AT' I P'
P ! OG' T J' H G' L ! KP9T' K I I P ! OMN !G '
! O' HPM N 9T' P ! N PMNG' T J' NMUP' Q O' K I 7 N+
' 1' la$Q O' 9 O ' NHMN' K I 7 N' K I PG' N ' 9MNP
% G' 9 UP' M' LM O !' M7NP ' PWPKJN !' ' +
HMN' QP ! N9P' LHTG K ' Q P ! ' !' N I P' HMO' KJ %O' I P' 8
JN' ! ' 2' M I ' LMGN' M99' K I 7 NG' HP P ' AJN' L MTP G+
" ' O PG' H G' H QH ! PGG' \
, ' MOM I ' !' Q O' HPM9NH+
' ' I MT' HP' P P ' O ' [M ! O' P P ' 79 J GH+
X HP ! ' 2' GHM99' O P99' NH' I G ' M ! O' I T' L ' ! M I P'
M ! GH%O' NHP' U ! QO I [S -MN P ! KP ' G' NHMN' 9PNNP '
2' KMJG%O' T J' NP ' TPN' GP ! N' M MT' \
" ' ' I MOM I
+ 1 3' ' !' 1
' ' 2' I GN' HJ I A9T' L MT' T J' N ' OP9 P '
H G' N ' I T' 9 O' NHP' U ! Q+
' , ' GN' 99 ! Q ' I MOM I +
' 2 ! ' H KH' 2' HM P' K I I P ! OPO' N ' H G' Q O ! PGG'
HP' I OP9' 7' J ' KHMGNP' 9 PG ' H G' T J ! Q' OMJQHNP
HP' OP G' 7' HPM P ! ' 7M99' NH KU' ! ' A9PGG ! QG' !' HP [S '
PGPPKH ! Q' H I ' N ' Q P' HP ' NJ JG' A PPO ! Q8
@ HP' G' T J ! Q ' M ! O' 7' M' ! A9P' I OPGN' ! MNJ P' 8,
2' H LP ' GHP' 99' OPGP P' P998 ' M ! O' M' 9 NN9P'
' 9 P' HP ' 7 ' HP ' I NHP %G' GMUP ' NHMN' 9 %O' H I +
" PM P ! ' U ! G' H ' OPM 9T+' T' ! PWN' L ' LPN N !'
2G ' NHMN' H G' ! A9P' Q MKP' AJ9O' HM P' G I P' L NT'
L !' I T' PNKHPO' I P ! ' NHMN' G ' 9 !Q'
" M P' 7 99 %O' A NH' I T' 7 NJ ! PG' 7M NH7J99T
17' H KH' NHP P' G' ! N' ! P ' 2' OM P' M
@ # ! O' ! ' 2' GH J9O' ! N' 9 P ' AJN' 99' OPGP P+
O ' NJP ' M ! O' N JP' APMJNT' 7' NHP' G J9+
O ' H ! PGNT' M ! O' OPKP ! N' KM MQP
#' QHN' Q O' HJGAM ! O ' 9PN' H I ' AP' M' ! A9P8
! O ' GJ P ' NH GP' I P ! ' M P' HMLLT' NHMN' GHM99' HM P' NHP I +
HP' 9MGN' G' 7 ' I T' I P ! 8 S NHPT' M P' NHP' L PGN+
JN' L P NT' K J9O' ! P P ' O M ' NHP I ' 7 I ' I P8 S
HMN' NHPT' I MT' HM P' NHP ' MQPG' OJ9T' LM O' NHP I +
! O' G I PNH ! Q' P ' N ' P I P I AP ' I P' AT 8
27' HPM P ! ' HMO' L9PMG%O' N ' HM P' Q P ! ' I P' 9 ! QP ' 9 7P+
! O' MA9P' I PM ! G ' P' HMO' ! N' LM NPO' NHJG+
HPGP' M P' NHP' H 9P' K ! NP ! NG S# ! O ' Q O' I T' 9 O
T' NHMN' T J' 9 P' NHP' OPM PGN' !' NH G' X 9O
#G' T J' GH' H GN M ! ' LPMKP' N ' G J9G' OPLM NPO+
NM ! O' NHPGP' L ' LP L9P%G' 7 P ! O ' M ! O' J QP' NHP' U ! Q'
' O ' I P' NH G' 9MGN' QHN+' ,
, ' T' HPM P ! ' 2' 998
1 ' 9PN' I P' 9 GP' NHP' 7MGH !' 7' M' I M ! ' [
' 2' NHM ! U' T J ' H ! PGN' 9 O+' &P I P I AP ' I P'
2 ! ' M99' HJ I 9 NT' J ! N ' H G' H QH ! PGG
MT ' H G' 9 !Q' N JA9P' ! ' G' LMGG ! Q
1JN' 7' NH G' 9ONP99' H I ' !' OPMNH' 2' A9PGG%O' H I
O ' G ' 2' 99+ S !P' PTPG' Q ' O I + SOM P P99
T' 9 O+ S : 77 NH ' 7M P P99+ SD MT' - MN P ! KP
4 J' I JGN' ! N' 9PM P' I P' TPN+' 2' I JGN' N ' APO8
M99' !' I P' I P ! + S X HP ! ' 2' M I ' OPMO ' Q O' P ! KH
OPN' I P' AP' JGPO' NH' H ! J 8 GN P ' I P' P '
X NH' I M OP ! ' 79 P G ' NHMN' M99' NHP' 9O' I MT' U ! '
2' MG' M' KHMGNP' 7P' N ' I T' Q M P ' P I AM9 I ' I P+

HP!' 9MT' I P' 7 NH' M9NH JQH' J!]JPP!%O' TPN' 9 UP'
#'] JPP!' M!O' OMJQHNP 'N ' M' U !Q' !NP ' IP+
2' 0?H' HA' @ADG ' 9 4 & $ " 3' 1

3 3' 2 F ' 5' ' '

') '%- !,'!.' 8 - $' '-MQP' 2 ' ' ! '
(.! ' $' '(5 ' '

' 2N%G' !P' %K9 KU' A T' G%N' ! N' \
%!5' 2N' HMNH' GN JKU+
' HPGP' GH J9O' AP' H J G' 7 ' !PKPGG N PG+
N' 7 ' OP9 QHNG' 8 N I PG' N ' PLM ' J ' !MNJ P'
X NH' K I 7 N !Q' PL GP' M!O' ! N' 7 ' JG'
' MGNP' NHPGP' N I PG+S : O' H J ' 7' ! QHN' G ' H I MG[$
X H NHP' G ' 9MNP' \
?!1' M I P' T J' 7 I' NHP' U !Q' I T' 9 O' \
' 2' O O' G ' H I MG8 M!O' 9P7N' H I' MN' L I P '
X NH' NHP' OJUP' 7' J77 9U+
?!1' 'T 2' I JGN' N ' H I' N
P7 P' HP' Q ' N ' APO+' 2%9' NMUP' I T' 9PM P+
' N' TPN' G ' H I MG' / P99+' X HMN%G' NHP' I MNNP ' \
2N' GPP I G' T J' M P' !' HMGNP' 8 M!' 7' NHP P' AP'
' Q PMN' 77P!KP' AP9 !QG' N %N' Q P' T J ' 7 P!O'
I P' N JKH' 7' T J ' 9MNP' AJG !PGG' ' #77M G' NHMN' M9U'
@#G' NHPT' GMT' GL NG' O ' MN' I O! QHN' HM P'
2!' NHP I' M' 9OP' ' !MNJ P' NHM!' NHP' AJG !PGG'
HMN' GPPUG' OPGLMNKH' AT' OMT+
?!1' T' 9 O' 2' 9 P' T J8
#!O' OJ GN' K I I P!O' M' GPK PN' N ' T J ' PM
JKH' P QHN P ' NHM!' NH G' U+' HP']JPP!%G' !' 9MA J +
HPT' GMT' ' !' Q PMN' PWN P I NT8 M!O' 7PM %O+
HP%9' NH' NHP' 9MA J ' P!O+
' HP' 7 J N' GHP' Q PG' NH
2' L MT' 7 ' HPM N 9T8 NHMN' N' I MT' 7 !O
: O' N I P' M!O' 9 P' ' AJN' 7 ' NHP' GN KU' G ' H I MG
2' GH' N' Q JAA%O' JL' ! +
?!1' PNH !UG' 2' K J9O
T' NHP' M I P!' 8 M!O' TPN' I T' K !GK P!KP' GMTG'
HP%G' M' Q O' K PMNJ P ' M!O' G PPN' 9MOT' O PG'
5PGP P' J ' APNNP ' GHPG+
' JN' G ' G S
" PM ' I P' G ' H I MG' ' 4 J' M P' M' QP!N9P I M!'
17' I !P' !' MT8 2' U! ' T J' GP' P9 Q JG8
#!O' 9PN' I P' NP99' T J' N' 99' ! P%P ' AP' P99 S
% 99' ! N' G ' H I MG' / P99' NMUP+%N' 7' I P S
99' M! I P ' I P99' HP ' N ' HM!OG' M!O' GHP'
9PPL' !' NHP ' Q M PG+
?!1' Ÿ $ ' G ' T J' GLPMU' 7' N
HP' I GN' P I M U%O' % NHP' U !QO I +' #G' 7 ' I P99 S'
PG OP' NHMN' 7' NHP' EP P9 H JGP' HP' G' I MOP' I MGNP '
1%NHP' 99G' M!O' NHP' U !Q%G' GPK PNM T8 7J NHP ' G +
NM!OG' !' NHP' QML' M!O' N MOP' D 7' I P' L P7P I P!NG+
X NH' H KH' NHP' N I P' 99' 9 MO' H I ' HP' M KHA GH L'
2G' NHP' U !Q%G' HM!O' M!O' N !QJP' #!O' H ' OM P' GLPMU'
1!P' GT99MA9P' MQM !GN' H I' \
' 4PG' TPG' G ' H I MG
HP P' M P' NHMN' OM P8 M!O' 2' I TGP97' HM P' P!NJ %O'
' GLPMU' I T' I !O' 7' H I' ' M!O' ' !OPPO' NH G' OMT+
' @2' I MT' NP99' N' T J ' 2' NH !U' 2' HM P'
2!GP!G%O' NHP' 9 OG' % NHP' K J!K 9' NHMN' HP' G'
@O ' G ' 2' U! ' HP' G ' NHPT' U! ' HP' G
#' I GN' M KH' HP PN K' M' LPGN 9P!KP
HMN' O PG' !7PKN' NHP' 9M!O' NH' H KH' NHPT' I %O

' HMA NJM9' K J GP' LMNH'
F3 $ '8 $SK I I J! KMNPO' NH+' ' !' HP' ' :P!N9P I P!' 7' P !M8S'
6' 2' M I' N ' ")' NH' NHPP' 7'G I P' M 7M G+R

" M P' A UP! ' NH' NHP' U !Q8' H ' HMNH' G ' 7M '
: P!' PM ' N ' J ' K I L9M !N' @ 7' H G' Q PMN' Q MKP'
#!O' L !KP9T' KM P ' 7 PGPP !Q' NH GP' 7P99' I GKH P7G'
1J ' PMG !G' 9M O' AP7 P' H I ' HP' HMNH' K I I M!OPO'
I ' I ! !Q' N ' NHP' K J!K 9 A M O'
" P' AP' K ! P!NPO+D' " P%G' M' M!U' PPO' G ' H I MG
#!O' P' I JGN' N' H I ' JN+' O I ' T J ' M77M G'
2' H !OP ' T J' N ' 9 !Q' ' Q O' ! QHN' G ' H I MG+
?!1' M!T' Q O' ! QHNG' I T' 9 O8 2' PGN' T J ' GP M!N+
9 4 ') ' "' - MQP+

-' ' -' 3! 3' !& $ ' ' ' "' ' 5 & ' %
%% &

' ' HM 9PG' 2' 99' L9MT' ! ' I P' N ! QHN8
T' I !O%G' ! N' ! %N' T J' M P' N ' HM O' 7 ' I P+
7&.' ' 2' O O' !P P ' ! 7' T J' AP7 P+
' ' JN' 9 NN9P ' HM 9PG' 8
' GHM99' ! N' HP!' I T' 7M!KT%G' !' I T' L9MT+S
' / P99' 7 I ' NHP']JPP!' HMN' G' NHP' !P G' \
?!1' 2' K J9O' ! N' LP G !M99T' OP9 P ' N ' HP '
X HMN' T J' K I I M!OPO' I P' AJN' AT' HP ' I M!'
2' GP!N' T J ' I PGGMQP' 8 H ' PNJ !%O' HP ' NHM!UG'
2!' NHP' Q PMNPGN' HJ I A9P!PGG' M!O' OPG %O' T J ' H QH!PGG'
GN' HPM N 9T' N ' L MT' 7 ' HP +
' ' X HMN' GMT%GN' NH J' \ H M [
' L MT' 7 ' HP ' \ HMN' ' G' GHP' K T !Q' JN' \
?!1' ' GM O' HP ' I M!8 M!O' NHMN' HP ' GJ77P M!KP' I MOP'
#9 I GN' PMKH' LM!Q' M' OPMNH+
' ' #9MG' Q O' 9MOT'
7&.' : O' GM7P9T']J N' HP ' 7' HP ' AJ OP!' M!O'
X NH' QP!N9P' N M M 9' N ' NHP' Q9MOO !Q' 7'
4 J ' H QH!PGG' NH' M!' HP [
' ' % G' I O! QHN' HM 9PG
- NHPP' N ' APO8 M!O' !' NHT' L MTP G' P I P I AP '
HP' PGNMNP' 7' 1' L ']JPP!+' /PM P' I P' M9 !P8
0 ' 2' I JGN' NH !U' 7' NHMN ' H KH' K I LM!T'
X 99' ! N' AP' 7 P!O9T' N +
7&.' 2' GH' T J ' H QH!PGG' $
#']J PN' ! QHN' M!O' I T' Q O' I GN PGG' 99'
&P I P I AP ' !' I T' L MTP G+' Z
' ' HM 9PG' Q O' ! QHN+
= 4 ' %% &

' ' 1 ' 5

X P99' G ' HMN' 7 99 G' 7
' ' 2' HM P' A JQHN' I T' 9 O' NHP' M KHA GH L
#G' T J' K I I M!OPO' I P+
' ' Ú " M' [M!NP AJ T' \
' #T' I T' Q O' 9 O+
' ' % G' N JP' ' X HP P' G' HP' 5P!!T' \$
' " P' MNNP!OG' T J ' H QH!PGG%L9PMGJ P+
' ' !Q' H I' N ']G+
+ 4 ' 5
?!1' H G' G' MA JN' NHMN' H KH' NHP' A GH L' GLMUP' 8
' M I' HMLL 9T' K I P' H NHP +' + - "

B ' 5 ' 2 '

' ' # O' NHP' QM99P T+
: ' - -' !' - 5
" M' DS2' HM P' GM O+S P' Q !P+
X HMN' 2S' + 4 & ' ' "' 5
' 2' M I ' 7PM 7J9 S X HP P7 P' 7 !G' HP' NHJG' \
% G' H G' MGLPKN' 7' NP +' # 99%G' ! N' P99+
' ' " ' ! ' I T' 9 O' \ 4 J' O ' OPG P' N ' U! '
X HP P7 P' 2' GP!N' 7 ' T J+
' 2N' G' I T' OJNT
' MNNP!O' T J ' H QH!PGG%L9PMGJ P+

F % SGJ I I !PO+
1/+' 22+ 2 %

HP H QH L I N ! 7 H G Q MKP 7 M!NP AJ T8
X H H 9OG H G GNMNP MN O $ I !QGN LJ GJ M!NG
-MQPG M!O .!! !5-
" M[$ G HP ! OPPO
2G NH G NHP H ! J NHPT O !P M! NHP \
% G P99 NHP P%G !P MA P NHP I TPN 2 HMO NH JQHN
H<T HMO LM NPO G I JKH H !PGNT M I !Q NHP I
@#N 9PMGN Q O I M!!P G a MG ! N NHJG !GJ77P
I M! 7 H G L9MKP M!O G !PM J 7M J +
OM!KP MNNP!OM!KP !NHP 9 OGH LG%L9PMGJ PG+
#!O MN NHP O N 9 UPM L GN NH LMKUPNG+
T H 9T M T JNNG NHP P%G U!M P T
/PN NHP I M9 !P M!O O M NHP KJ NM !K9 GP 8
X P GHM99 HPM I P M! !
9 4 &

!& (

/ O HM!KP99 (8 5 (55 8 (8
, 4 2 5 8 ' 5 (/ O HM I AP 9M !
HM!KP99 ,
- . & , , "! ! (K0 . "#
- (3 .'1! "! (!1 $ -.! $ "
, 4 $ (- - 1 - ! " !
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LPMU N NHP AJG !PGG I MGNP GPK PNM T
X HT M P P I PN !K J!K g \ $
! -9PMGP T J H ! J G+
HP KH P7 KMJGP K !KP !G H G Q MKP 7 M!NP AJ T+
" MG HP HMO U! 9POQP 7 N \
! 4PG+
! X H M NG NHP P \
,$ X NH JN I T ! A9P9 OG \
4PG+
, Ec2T9 O M KHA GH L8
#!O HMG O !P HM97 M!H J N U! T J L9PMGJ PG
/PN H I K I P !+
4 J Q MKP I MT P!NP ! +
; ,, ! - ! & B ('
T Q O9 O M KHA GH L 2 M I P T G T
G N HP P MN NH G L PGP!N M!O APH 9O
HMN KHM GNM!O P I LNT J N P M99 M P I P!+
2!J ! !MNJ PG7 M 9 M!O KMLMA9P
17 J 79PGH8 7P M P M!QP9G D JN 7 H KH7 M 9NT+
#!O M!N 7 GO I T J NHMN APGN GH J9O NPMKH JG+
"M P I GOP I PM!%O T J GP97 M!O ! N M9 NN9P
M O NHD U !Q7 GN NHP!H G 9M G !7 99 !Q
HP H 9P PM9 I AT T J NPMKH !Q M!O T J KHML9M !G
@O G P M P !7 I%O NH !P L ! !G+
5 P G M!O OM!QP JG8 H KH M P HP PG PG+
#!O ! N P7 I%O I MT L P LP ! K JG+
X H KH P7 I MN !I JGN AP GJOOP!N +
T ! A9P9 OG 7 NH GP NHMN NM I P 9O H GPG
-MKP NHP I ! N !NHP HM!OG N I MUP NHP I QP!N9P8
JN GN L NHP I JNHG NH GNJAA !A NG M!O GLJ NHP I +
99 NHPT APT NHP I M!MQP 27 P GJ77P
@1JN 7 J PMG !PGG M!O KH 9O GH L NT
!P I M!%G H ! J NH G K !NMQ JG G KU!PGG
,OM P P99 M99 LHTG K8 M!O HMN7 99 G NHP!
I N !G JL M G NH M QP!P M9 NM !N
17 NHP H 9P GNMNP8 MG 7 " 5-$!& !P QHA J G+
HP JLLP 5$ " 5 2 --$
4PN7 PGH9T L N PO J I P I PG+
T Q O9 OG H NHP N !M99 NHP L Q PGG
NH 7 I T 9 7P M!O 77 KP 2 HM P 9MA J %O
#!O NH ! 9 NN9P GNJOT NHMN I T NPMKH !Q+
#!O NHP GN !Q K J GP 7 I T MJNH NT+
QHN Q !P MT M!O GM7P9T8 M!O NHP P!O
X MG P P N O P99 ! G NHP P 9 !Q
@Z GLPMU N NH M G !Q9P HPM N I T 9 OG

GHM PO+

I M! NHMN I P OPNPGNG I P GN G MQM !GN
NH !H G L MNP K !GK P!KP M!O H G L9MKP
5P7MKP G 7 M LJA9 K LPMKP NHM! 2 O +
%- MT HPM P! NHP U !Q I MT !P P 7 !O M HPM N
X NH 9PGG M99PQ M!KP ! N 2 9P! NHMN I MUP
3! T M!O K UPO I M9 KP ! J GH I P!N+
5M P A NP NHP APGN+ 2 O APGPPKH T J 9 OGH LG
HMN ! NH G KMGP 7 EJGN KP I T MKKJGP G
P HMN NHPT 99 I MT GNM!OD7 NH 7MKP N 7MKP+
#!O 7 PP9T J QP MQM !GN I P+
J7+ MT I T 9 O+
HMN KM!! N AP 8 T J M P M K J!GP99
#!O AT NHMN NJP ! I M! OM P MKKJGP T J+
: M + T 9 O APKMJGP P HM P AJG !PGG 7 I P I I P!N+
X P 99 AP GH N NH T J+ % G H G H QH!PGG%L9PMGJ P+
#!O J K !GP!N 7 APNNP N M9 7 T J+
O I HP!KP T J AP K I I NNPO N NHP P
X HP P AP !Q AJN M L MNP I M! MQM !+
4 J GHM99 U! I M! T OM P MKKJGP T J A 9O9T+
P NHM! 2 7PM T J M P L OPO 7 +
M!+ #H I T Q O 9 O 7 X !KHPGNP 2 NHM!U T J
4 J M P M9 MTG I T Q O 7 P!O8 7 T J 99 LMGG
2 GHM99 A NH 7 !O T J 9 OGH L EJOQP M!O EJ +
4 J M P G I P K 7J9 2 GPP T J P!O8
% G I T J!O !Q / P M!O I PPU!PGG 9 O
PK I P M KHJ KH I M! APNNP NHM! M I A N !8
X !GN MT !Q G J9G NH I OPGNT MQM ! +
MGN ! !P M MT + $ HMN 2 GHM99 K9PM I TGP97+
/MT M99 NHP P QHN TP KM! JL ! I T LMN P!KP
2 I MUP MG 9 NN9P O JAN MG T J O K !GK P!KP+
2!O !Q OM 9T !QG+ 2 K J9O GMT I P ;
JN P P P!KP N T J KM99 !Q I MUPG I P I OPGN+
: M + T 9 O I T 9 O T J M P M GPKNM T+
HMN%G NHP L9M ! N JNH# T J LM !NPO Q9 GG O GK P G+
I P! NHMN J!OP GNM!O T J OG M!O PMU!PGG+
! T 9 O 7 X !KHPGNP T J M P M 9 NN9P
T T J Q O7M J N GHM L I P!G ! A9P+
" P P 7MJ9NT TPN GH J9O7 !O PGLPKN
O HMN NHPT HM P APP! %N G M K JP9NT
9 MO M 7M99 !Q I M!+
: O I MGNPM GPK PNM T
2 ODE EABD FAHABD @GDOE8 EAB @?E JAD C
17 ?MM NH G C?LMG ?E A U
! X HT I T MADN \
5 ! N 2 U! T J 7F M 7M J P
17 NH G !P GPKN \ TP M P ! N G J!O+
! N G J!O \
N$G J!O 2 GMT+
! %X J9O T J P P HM97 G H !PGN[
P!%G L MTP G NHP! J9O GPPU T J ! N NHP 7PM G+
2 GHM99 P I P I AP NH G A 9O 9M!QJMQP ,
! 5
&P I P I AP T J A 9O 9 7P N +
H G G N I JKH8
O APM 7 GHM I P I T 9 OG+
2 HM P O !P+
! #!O 2+
HP! NHJG 7 T J I T 9 O S2N GNM!OG MQ PPO
2 NMUP N AT M99 KPG NHMN 7 NH NH
4 J AP K ! PTPO N NHP P M L G !P 8
HP P N P I M ! N 99 NHP U !Q%G 7J NHP L9PMGJ P
P U! !J!N B # P T J M99 MQ PPO 9 OG \
X P M P+
2G NHP P ! NHP MT 7 I P KT+
JN 2 I JGN !PPOG N NHP P I T 9 OG \

X P 7 99 NHP Q !M9 M9 !P PMOG S

6 JN P M P M99 IP! $
2!J ! !MNJ PG 7 M 9 2<KMLMA9P8
17 J 79PGH 7P M P M!QP9G+R

HP NPWN 7 NHP Q !M9 G ! N K9PM AJN N G ! N IP!OPO AT NH G O 9JN !+ XP
AP9 P P NHMN NHP L PN MNNMKHPO M OP7 ! NP I PM! !Q N NHP PWL PGG !6 KMLMA9P N
J 79PGH+R

=

X HMN NHP
X J9O T J PWLPKN 4 J M P GN M!QP9T N JA9PG I P
/PN G I P %NHP QJM O AP PMOT NHP P+

: JM O+

0 I P\
H9JGN 2Q 9 UP MN M N NH NHP \
&PKP P H I
#!O GPP H I GM7P %NHP P +
NMT Q O I T9 OG8
2 HM P M 9 NN9P TPN N GMT / U NHP P I T9 OG8
T NJP 7NHMN !Q 2 NMUP I T KMJGP
1JN 7NHP Q LPG 7K JP9 IP! M!O Q P N
M I GN ! A9PEJOQP NHP U !Q% !Q+
H G G NHP U !Q% !Q+
7& ð% G ! K J!NP 7P N+
7 .% G NHP QHN !Q AT HPM P!2 2N 9O TP M99+
XHP! P7 GN LJN NH G OM!QP JG GN !P M 99 !Q
% J9O7M99 JL ! J GP9 PG+
! 5 T J NH !U I T9 OG+
HP U !Q 99 GJ77P AJN NHP 9 NN9P7 !QP
17NH G I M!N AP PW%O \
% G ! N KP NM !
" I JKH I P G H G 9 7P ! M9JP NH H I [
%X J9O2 P P7M 9T JN !%+
! T I !O QM P IP+
2!GPPU !Q NM9PG M!O !7 I MN !G
#QM !GN NH G I M! @ H GP H !PGNT NHP OP g
#!O H G O GK L9PG !9T P! T MN
4P A9P NHP7 P NHMN AJ !G TP HM P MN TP+

. !2 3! # ' - -
5 PMO G P P Q! H I JKH M P P A J!O N
HPM P!
2!OM 9T NHM!UG NHMN QM P JG GJKH M L !KP8
N !9T Q O M!O GP AJN I GN P9 Q JG
1!P NHMN ! M99 APO P!KP I MUPG NHP KHJ KH
HP KH P7M I 7H G H ! J 8 M!O N GN P!QNHP!
HMN H 9T OJNT JN 7(OPM PGLPKN+
" G TM9 GP97 !EJOQ I P!N K I PG N HPM +
HP KMJGP APN WN HP 4M!O EBH G Q PMN 77P!OP +
4 J P P P Q O MN GJOOP!K I I P!OMN !G
GH L 7X !KHPGNP JN U< 2K IP! N
HPM GJKH 79MNNP T ! 8 M!O !I T L PGP!KP+
HPT M P N NH !M!O AM P N H OP 77P!KPG+
I P T J KM!! N PMKH8 T J L9MT NHP GLM! P9+
#!O NH !U NH MQQ !Q 7T J N !QJP N ! I P8
JN HMNG P%P NH J NMU%GN IP7 2M I GJ P+
H J HMGN M K JP9 !MNJ P M!O M A9 OT+
: O I M! = ! ;G N O !4 9PN IP GPP NHP
L JOPGN
"P NHMN OM PG I GN AJN MQ H G 7 !QP MN NHPP8
T M99 NHMN%G H 9T HP HMO APNNP GNM P+
HM!AJN !KP NH !U NH G L9MKP APK I PG NHPP ! N+
7& MT N L9PMGP T J Q MKP S
G N O PG ! N L9PMGP IP+
2HMO NH JQHN 2HMO HMO IP! 7G IP J!OP GNM!O !Q
#!O GO I 7 I T K J!K 98 AJN 27 !O ! !P+
XMG N O GK PN ! 9 OG N 9PN NH G I M!+
H G Q O I M! @7P 7T J OPGP P NHMN N N9P $
H G H !PGN I M! M N 9 UP M9 JGT7 NA T
#N KHM I AP O \M!O !P MG Q PMN MG T J M P\
XHT HMN M GHM I P MG NH G[5 O I T K I I GG !
O TP G 7M 7 QPN T J GP9 PG\ 2QM P TP
- P MG HP MG M K J!GP99 N N T H I +
N MG M Q I HP P%G G IP 7TP 2GPP+
P J 7 I M9 KP NHM! !NPQ NT+
X J9O N T H I N NHP JN I GN HMO TP I PM!8
XH KH TP GHM99 !P P HM P H 9P2 9 P+
HJG 7M
)$

T I GN O PMO G P P Q! I MT N 9 UP T J Q MKP
9PN I T N !QJP PWKJGP M99+ X HMN MD LJ L G%O
!KP ! !Q H G I L G ! I P!N MG MNHP
@27NHP P AP 7M NH ! I P! I PM!N 7 H G N M9
#!O 7M LJ QMN !N NHP 9O NHM! I M9 KP8
2M I GJ P ! I P+
X P99 P99 I T 9 OG PGLPKN H I 8
MUP H I M!O JGP H I P99 HP%G NHT 7 N+
2 99 GMT NHJG I JKH 7 H I 7M L !KP
MT AP APH 9OP!N M GJAEPKN 2
I 7 H G 9 P M!O GP KP G N H I +
MUP IP! I P MO AJN M99 P I A MKP H I 8
P 7 P!OG 7 GHM I P I T 9 OG+ S T 9 O 7 M!NP AJ T
2HM P M GJ N H KH T J I JGN ! N OP!T I P8
HMN G M 7M T J!Q I M O NHMN) I N M!NG AMLN G I +
4 J I JGN AP Q O7MNHP M!O M!G P 7 HP +
HP Q PMNPGN I !M KH ! M9 P I MT Q9 T
2!GJKH M!H ! J " I MT 2 OPGP P N+
HMN M I M L M!O HJ I A9P GJAEPKN T J \
IP K IP I T9 O T J%O GLM P T J GL !G8%
T J GHM99 HM P
! A9P LM N!P G NH T J8 NHP 9O OJKHPGG 7 7 9U
#!O 9MOT I M]J G 5 GPN X 99 NHPGP L9PMGP T J \
1!KP I P I T9 O 7X !KHPGNP 2 KHM QP T J+
3 I A MKP M!O 9 P NH G I M!+
X NH M N JP HPM N+
#!O A NHP 9 P 2 O N+
#!O 9PN HPM P!
X N!PGG H OPM 2 H 9O NH G K !7 I MN !+
: O I M! NH GP E T7J9 NPM G GH NHT N JP
HPM N+
HP K I I ! KP 2 GPP G P 7PO
17NHPP H KH GMTG NHJG 6 5 I T 9 O 7 M!NP AJ T
#GH P O NJ ! M!O HP G T J 7 P!O 7 P P +RS
IP 9 OG P N 79P N IP M MT8 29 !Q
HM P NH G T J!Q !P I MOP M H GN M!+
#G 2HM P I MOP TP !P 9 OG !P P I M !8
2Q GN !QP T J I P H ! J QM !4 = 4 &

3 3 222 F "
! - '" & & 2 - NP '" - M!+

! 4 J%9 9PM P T J ! GP ?H H TP MGKM9G 5 T J
NMUP CFG K J N >AD ?D ?DNGH \6 TP JOP M?PG 9PM P
T J ?K H
8 9 : O I MGNP L NP 2 AP9 !Q N NHP 9M OP +
! P9 !Q N NHP QM99 G M!O AP HM!QPO T J QJP
2G NH G M L9MKP N M !\SOPNKH IP M O CP!K MA N PP
GNM PG M!O GN !Q !PG8 NHPGP M P AJN G NKHPG N NHP I+S
2%99 GK MNKH T J HPMOG 4 J I JGN AP GPP !Q KH GNP! !QG\
5 T J9 U7 M9P M!O KMUPG HP P T J JOP MGKM9G \
E - MT G AP LMN P!N %N G MG I JKH I L GG A9P
@ !9PGG P G PPL NHP I 7 I NHP O NH KM!! !G
GKMNNP NHP I MG %N G N I MUP NHP I G9PPL
1! MT OMT I ! !Q8 H KH 99 !P P AP
XP I MT MG P99 LJGH MQM !GN -MJ9%G MG GN NHP I +
! " Q N NHPT ! M!O AP HM!Q%O \
E #9MG 2U! ! N8 " QPNG NHP N OP !\
#G I JKH MG !P G J!O KJOQP9 77 J 7 N
@4 J GPP NHP L P I M !OP K J9O O GN AJNP
2 I MOP ! GLM P G +
! 4 J O O ! NH !Q G +
E 2M I ! N M I G ! ! G : JT ! 9A M!O
I NHP I O !AP7 P I P AJN 72GLM PO M!T
HMN HMO M HPMO N H N P NHP T J!Q 9O+
" P GHP KJKU 9O KJKU 9O I MUP
/PN IP !P P H LP N GPP M KH !P MQM !8 M!O NHMN
2 J9O ! N7 M K : O GM P HP +

GH JN !Q HP 6 QML !Q L QR 7 HT9 KU I PM!N L AMA9T NHP
M !Q L Q+

3 3' 2 +S

' & ' -$-!& " 3# ' 9K '#9OP I P!' / O' MT '
: M NP ' ' (8 ' 5' 2 5 8 ' B2 ' -' H
- G'- ..$ ' (8 ' 5' (55 8 ' ' A9P I P!' (3'
3 '- " 3'(!2-'.! ' ! ,5$ " ' 2 ' ' ('
A9P I P!' (3' ' ! ,5$ " ' 2 ' ' ('
,4' 2 5 8 '3!" ! $'(3' H 9O' 5' ("
' ' $ X ' ' ' (! ' (5 ' /MOT' ' .' !2-'
' ' 5' ' ! ' 3!" ! $
"' /MO PG' ' !!',' --' ! ' (!&' ' - 3 $ "
: M NP '-' '-

' "PM P!' 7 I' NHT' P!O9PGG' Q O!PGG' GP!O' L G
LP JG' 9 7P' 9 !Q' M!O' P P' HMLLT' N ' NHP' H QH' M!O' I QHNT'
L !KPGG' 7'3!Q9M!O' 39 CMAPNH'

> !& - ' ' ' "'

' = 3 V' #!O' N ' T J ' TM9' Q MKP ' M!O' NHP' Q O'
]JPP!+
T' ! A9P' LM N!P G' M!O' I TGP97 ' NHJG' L MT8S
#99 K I 7 N' E T' I' NH G' I GN' Q MK JG' 9MOT
" PM P!' P P ' 9M O' JL' N ' I MUP' LM P!NG' HMLLT+
MT' H J 9T' 7M9' JL !' TP[
' ' $ HM!U' T J ' Q O' 9 O' M KHA GH L+
X HM' G' HP ' !M I P'\
3 9 CMAP\NH+
' ' ' NM!O' JL ' 9 O+S
' ' ‡ $ = ' 7 ' ' --' ' H 9O+
X NH' NH G' U GG' NMUP' I T' A9PGG !Q' : O' L NPK\' NHPP'
2!N ' H GP' HM!OG' 2' Q P' NHT' 9 7P+
' # I P!+
' ' T' ! A9P' Q GG LG ' TP' HM P' APP!' N ' L O QM9'8
2' NHM.I U' TP' HPM N 9T8 G ' GHM99' NH G' 9MOT+
X H KH' N I P' GHM99' A !Q' N ' LP!PGG' DHP' GHM99' AP'
' / PN' I P' GLPMU ' G
@ JN' 7P ' ! ' 9 !Q' KM!' APH 9O' NHMN' Q O!PGG
#' LMNNP !' N ' M99' L !KPG' 9 !Q' NH' HP +
#!O' M99' NHMN' GHM99' GJKKPPO' DAM' MG' !P P '
P' K PN JG' 7 GO I ' M 7O' 7M ' NJP+
HM!' NH G' LJ P' G J9' GHM99' AP' ' M99' L !KP9T Q MKPG+
HMN' I J9O' JL' GJKH' M' I QHNT' L PKP' MG' NH G' G+
X NH' M99' NHP' NJPG' NHMN' MNNP !O' NHP' Q O+
HM99' GN 99' AP' O JA9PO' !' HP ' N JNH' GHM99' !J GP' HP +
" 9T' M!O' HPM P!9T' NH JQHNG' GN 99' K J!GP9' HP
HP' GHM99' AP' 9 %O' M!O' 7PM %O' ' P ' !' GHM99' A9PGG' HP $'
" P ' 7 PG' GHMUP' 9 UP' M' 7 P9O' 7' APMNP!' K !+
!O' HM!Q' NHP ' HPMOG' NH' G ' : O' Q G' NH' 9+P '
2!' HP ' OMTG' P P T' I M!' GHM99' PMN' !' GM7PNT'
!OP ' H G' ! ' !P ' HMN' HP' L9M!NG8 M!O' G !Q'
HP' I P T' G !QG' 7' LPMKP' N ' M99' H G' I P QHA J G
: O' GHM99' AP' N J9T' U! !8 M!O' NH GP' MA JN' HP '
O I ' HP ' GHM99' PMO' NHP' LP 7PKN' MTG' 7' H ! J +
!O' AT' NH GP' K9M I' NHP ' Q PMN!PGG ' ! N' AT' A9 O+
' GHM99' NH G' LPMKP' G9PPL' NH' HP ' JN' MG' HP!'
HP' A O' 7' !OP ' O PG ' NHP' I M OP!' LH P! W+
" P ' MGHPG' I P ' K PMNP' M! NHP ' HP ' '
#' G' Q PMN' I' MO I MN ! ' MG' HP GP978 '
' GHM99' GHP' 9PM P' HP ' A9PGGPO!PGG' N ' !P
@X HP!' HPM P!' GHM99' KM99' H D' 7 I' NH G' K9 JO' 7'OM U!PGG '
X H ' 7 I' NHP' GMK PO' MGHPG' 7' HP ' H I J +
HM99' GNM 9 UP' GP ' MG' Q PMN' !' 7M I P' MG' GHP' MG+
!O' G ' GNM!O' 7 W%O ' -PMKP' L9P!NT' 9 P' N JNH ' NP +
HMN' P P' NHP' GP M!NG' N ' NH G' KH GP!' !7M!N'
HM99' NHP!' AP' H G' M!O' 9 UP' M' !P' Q ' N ' H I 8

1 / ' 22+ ' 3 " % S M9P AM P9G'

' ' ' P KT' % I P ' HMN' M' I J9N NJOP' M P' HP P'2
HPT' Q ' GN 99' N ' 7 I' M99' LM NG' NHPT' M P' K I !Q+
#G' 7 P' UPL' N' M' 7M ' HP P[X HP P' M P' NHPGP' L NP G
HPGP' 9MCT' U!M PG' \S 4P' HM P' I MOP' M' 7 !P HM!O ' 7P99 G'
HP P%G' M' N I' MAA9P' 9PN' ! ' # P' M99' NHPGP'
4 J ' 7M NH7J9' 7 P!OG' % NHP' GJAJ AG' \ X P' GHM99' HM P'
: PMN' GN P' 7' I ' ! ' O JAN' 9P7N' 7 ' NHP' 9MO PG+
X HP!' NHPT' LMGG' AMKU' 7 I' NHP' KH GNP! !Q+
' ! # ! %' L9PMGP' T] ' H I J
X P' M P' AJN' I P !8 M!O' HMN' G ' I M!T' I MT' O +
N' AP !Q' N !' M' L PKPG ' P' HM P' O !P
#!' M I T' KM!! ' N' J9P' NHP I
' ' #G' 2' 9 P
27' NHP' U !Q' A9M I P' I P' 7 %N' 2%99' 9MT' TP' M99'
T' NHP' HPP9G ' M!O' GJOOP!9T8 M!O' ' !' T J ' HPMOG'
9ML' J!O' 7 !PG' 7 ' ! PQ9PKN' 4 J' M P' 9MCT' U!M PG8
#!O' HP P' TP' 9 P' AM N !Q' ' 7' AJ I AM OG D' HP!'
4P' GH J9O' O ' GP KP+' " M U ' NHP' N J I LPNG' G J!O8
HPT' M P' K I P' M9 PMOT' 7 I' NHP' KH GNP! !Q
: ' A PMU' M I !Q' NHP' L PGG ' M!O' 7 !O' M' MT' JN'
: ' 9PN' NHP' N L' LMGG' 7M 9T8 ' 2%99' 7 !O'
#' M GHM9GAM' GHM99' H 9O' T J' L9MT' NHPGP' N ' I !NHG+
! ' ' MUP' MT' NHP P' 7 ' NHP' L !KPGG+
E ' 4 J' Q PMN' 7P99 ' GNM!O' K9 GP' JL ' 2%99' I MUP' T J '
HPMO' MKHP+
! ' 4 J' % NHP' KM I A9PN' QPN' JL' % NHP' M 9% 2%99' L KU' T J'
%P ' NHP' LM9PG' P9GP+ 9 4 &

R' ' F !) ' #!' %! ' MG G ' KM99PO% M!O' O P' !M I P' MG' M9G ' Q P!'
N ' M!T' M N 7 K M9' 7 P U+

X HP P P ' NHP' A QHN' GJ!' 7'HPM P!' GHM99' GH !P+
" G' H ! J ' M!O' NHP' Q PMN!PGG' 7'H G' !M I P
HM99' AP ' M!O' I MUP' !P ' ! MN !G ' " P' GHM99' D79 J GH+
! O ' 9 UP' M' I J!NM !' KPOM ' PMKH' H G' A M!KHPG
' M99' NHP' L9M !G' MA JN' H I' >J ' KH 9O P!%G' KH 9O P!
HM99' GPP' NH G ' M!O' A9PGG' HPM P!+

H J' GLPMUPGN' !OP G+D

' HP' GHM99' AP ' N ' NHP' HMLL !PGG' 7'3!Q9M!O
!' MQPO' L !KPGG8 I M!T' OMTG' GHM99' GPP' HP +
! O' TPN' ! ' OMT' NH JN' M' OPPO' N ' K !' N+
X J9O' 2' HMO' U! !' ! ' I P' [AJN' GHP' I JGN' O P
HP' I JGN ' NHP' GM !NG' I JGN' HM P' H P 8 TPN' M' Q !
#' I GN' J!GL NNPO' 9 9T ' GHM99' GHP' LMGG
' NHP' Q J!O ' M!O' M99' NHP' 9O' GHM99' I J !' HP +
' ' 1' 9 O' M KHA GH L+
H J' HMGN' I MOP' I P' ! ' M' I M!8 !P P ' AP7 P'
H G' HMLLT' KH 9O ' O O' 2' QPN' M ! TNH !Q
H G' MK9P' 7'K I 7 N' HMG' G ' L9PMG%O' I P+
HMN ' HP!' 2' M I' !' HPM P!' 2' GHM99' OPG P
' GPP' HMN' NH G' KH 9O' O PG ' M!O' L M GP' I T' MUP +
2' NHM!U' TP' M99 SN ' T J ' I T' Q O' 9 O' I MT +
! O' T J ' Q O' A PNH P!' 2' M I' I JKH' APH 9O !Q8
2' HM P' PKP %O' I JKH' H ! J ' AT' T J ' L PGP!KP+

! O' TP' GHM99' 7 !O' I P' NHM!U7J9+' / PMO' NHP' MT ' 9 OG8
4P' I JGN' M99' GPP' NHP'] JPP! ' M!O' GHP' I JGN' NHM!U' TP+
HP' 99' AP' G KU' P9GP+' H G' OMT ' ! ' I M!' NH !U'
" P' HMG' AJG !PGG' MN' H G' H JGP' 8 7 ' M99' GHM99' GNMT8
H G' 9 NN9P' !P' GHM99' I MUP' N' H 9 OMT+'

9 4 &

3-2/1: 3+

% G' NP!' N ' !P ' NH G' L9MT' KM!' !P P ' L9PMGP'
#99' NHMN' M P' HP P8 I P' K I P' N ' NMUP' NHP ' PMGP+'
! O' G9PPL' M!' MKN' ' N ' 8 AJN' NH GP ' P' 7PM +
X P' HM P' 7 QHNPO' NH' J ' N J I LPNG' 8 G ' %N G' K9PM +'
HPT%9' GMT' %N G' ! MJQHN ' NHP G ' N ' HPM ' NHP' K NT'
#AJG%O' PWN P I P9T ' M!O' N ' K T S6' HMN%G' NNT[R'
X H KH' P' HM P' ! N' O !P' ! P NHP ' NHMN ' 2' 7PM +
#99' NHP' PWLPKNPO' Q O' P' M P' 9 UP' N ' HPM +
0 ' NH G' L9MT' MN' NH G' N I P' G' !9T' !'
HP' I P K 7J9' K !GN JKN !' 7'Q O' I P! 8
0 ' GJKH' M' !P' P' GH %O' NHP I ' 27' NHPT' G I 9P+'
! O' GMT ' %N 99' O ' 2' U! ' NH !' M H 9P'
#99' NHP' APGN' I P!' M P' J G8 7 ' %N G' 99' HML+
27' NHPT' H 9O ' HP!' NHP ' 9MO PG' A O' NHP I ' K9ML+

' ' # ' '

' 2+

' '2 F ' ' &' ' !.'%& ; Y'

& ?HE' A>' CFG' C? G' N DGOC AH ' H' CF ' KM?E' ?DG' PGDE' DG@?D (?LMG ' ?HN'
?DG' GP NGHCME' JD CCG' J CC' DG?C' O?DG ' #FG' @ANG@' GN CAD ' F?PG' >AD'
CFG' @A C' K?DC' DGC? HGN' CFG D' BL C?HOG ' ?HN' H' A@G' O? G ' CFG D'
JADN ' G' F?M' @ADG' CMA GME' >AMAJ' CFG' AD H?M ' J CF' BOF' M FC'
OF?H G ' ? ' ?DG' ?L AMBCGME' HGOG ?SE' CA' @?(G' C DG' OGHG' HCGMM LMG

' ' ' .'.!!$ ". '

C' ?KKG?D ' >DA@' ? FG8 ' =' $ >G' A>' 0?O (G' MCAH I' CF?C' ?@AH C'
ACFGD' DGHOF' >? F AH ' H' CFG' OABDC' A>' GHDE') ' CFG' FGDA' A>' CFG'
L A D?KFE' ?E ' =' ' F?N' @E' >G?CFGD' H' @E' O?K' ? ' L ' ? ' ?' >M? ' H' CFG'
>ADGCAK I

' +

' ' R , & ' '2 "!2' !1 .' YO

#FG' AMN' @ANG' A>' LB MN H ' O? CMG ' AD' @?H AH ' LE' JF OF' ?' KD H-
O K?M' DAA@' OABMN' LG' 0A@@?HNGN' >DA@' ?' J HNAJ' AKGH H ' HCA' C ' '
MMB CD?CGN' LE' ?' MGCCGD' >DA@' & ?CCFG J' ?D (GD ' DOFL FAK' A>' ?HCGD-
LBDE ' H' D 3' R = HN' >' C' KMG? G' FGD' & ?SG CE ' FG' @?E' OA@G' H'
CFDAB F' @E' ?MMGDE ' ?HN' GG' CFG' N KA C AH' A>' CFG' F?M' H' N HHGD-
C@G ' ?C' ?' J HNAJ ' AKGH H ' CFGDGBH S I

D HP' LMGGMQP' P!O !Q' HP P ' M!O' APQ ! ! !Q S

;' 6'] ' GHM99' NH G' LPMKP' G9PPL' NH' HP SR

MG' HP9O' N ' AP' M!' !NP L 9MN ! ' M!O' MG O !M 9T' L !NPO' !' A MKUPNG+' 5 77P !Q'
7 I ' NHP' !GJM9' L ! !G ' 7 ' PMG !G' GNMNPO' !' J ' 2!N OJKN T' N KP ' P' HM P'
PI PO' NHP' I M UG' AT' H KH' NHP' GJLL GPO' !NP L 9MN !' G' K I N7 !9T' O G_
N !QJ GHPO+

)%

8' ' R =' !"'"-, '5!& ' -,!! -Z

#FG' ?MB AH' ' ' CA' CFG' KD?OC OG' A>' KAH AD ' ?C' ?' OFD CGH H ' KDG-
GHC H ' CFG' OF MN' J CF' KAAH ' O?MMGN' ?KA CMG' KAAH ' #FG' AMN'
KM?E ' OAHC?H' @?HE' ?MMB AH ' CA' CF ' OB CA@ ' ? ' H' ?' OA@GNE' A>'
& NNMGCAH8 '

6' ' 5 % ' X HMN' HMG' HP' Q P!' HP ' \S HMN' G' N ' Q GG L' \
' 5 %' #' 7M ' H QH' GNM!O !Q' KJL ' M!O' N ' Q PMN' G % ' ' %- %' !P' 7'NHP I '
Q 9N+R

' R ,' > -B3 " Z

#FG' LG?D ?DNGH' AH' CFG' . ?H (NG ' DG@?D (?LMG' GHAB F' CA' LG' N -
C H B FGN' H' CFG' @?K ' A>' $AHNAH' H' CFG' C@G' A>' ! M T?LGCF

-' ' R =' 8 !' "'! $ &(-'LY

#FG' ODE' A>' =' MBL ' I' J? ' BDG' CA' ND?J' CA GCFGD' CFG' $AHNAH'
=' CDBH0FGAHGGD ?HN' CFG' ?KKG?D?HOG' A>' =' CFG' FAKG' A>' CFG' CD?HN' I'
O?HHAC' >?M' CA' DG@ HN' B ' A>' CFG' FGDA O' ?KKDGHC OG ' A>' CFG' J?COF@?(GD'
A>' MGGC' CDGGC ' H' CF?C' H @ C?LMG' K OCBDG' A>' ?HO GHC' @?HHGD ' =' #FG'
ADCBHG ' A>' GM I

' Z ' R =' ' (& ! ' !.' !2 B $! ' ' (-' !.'
? !&- Z

#FG G' ?MMB AH ' ?DG' KGDF?K ' HAJ' HG KM O?LMG ' 0AFH AH' BKKA GN'
' (& ! ' CA' F?PG' LGGH' ?' BD C?H O?M' @GGC H FAB G ' . BC' J FE'
FABMN' CFG' =' EABCF ' CF?C' CFBHNGD' ?C' ?' KM?EFAB G' I' LG' GHNBD?LMG' LE'
CFG' >DGQBGHCGD ' A>' CFG' #D LBM?C AH' W' . GO?B G ' ?E ' CGGPGH ' BOF'
?H' ?BN GHOG' J? ' >?@M ?D GN' CA' G OG ' A>' HA G' LE' CFG' LGMMAJ H ' A>'
CFG D' KDG?0FGD ' DG' HAC' CFG' CD LBM?C AH' A>' #A J GD' MM' A>' CFG' ?@G'
>?@ ME' ? ' CFG' M@L ' A>' $ @GFAB GW R CFA G' J FA' CDABLMG R N CBDL'
#A J GD' MM' W' A@G' A>' , ' EABD' >? CF>BM' >D GHN ' A>' CFG' BLBDL I' KA (GH'
A>' LE' CFG' 0F?@LGDM?H' W' #ACPGD' MM ' NAJ H' CA' ?' PGDE' DGOGHC' KGD AN '
J? ' ?' DG?C' DG ADC' A>' P? ?LAHN ' J FA' KM?EGN' K COF' ?HN' CA ' ?HN'
ACFGD' ?@G

7 ?' ?? 7 7

,

'2+

) 'ND?@?A? GHDE') '□'G GHC?MME AHG A?'K? G?HCDE' ' AMGD□N G 0?MM '□C'=?' ADC A?'FD ODLG 'CFG NDG 'A?'CFG CJA' KD□HOG 'GPGH' CA' CFG @?MG C'LBCCAH '0F?@LGD 'A?'LMBG PGMPGC'?HM' OMACF A> AMN'N?TTMG ABD GEG 'H' GPGDE' K? G ;' ?HN' A?'='CFG DG?G ?HM AANME'KM?CG I'?HN ='CFG HALMG '>G? C□H '?HN' 0FGGD I'CFG ?OOABHC' JABMN' >BDH□ F ABC'? NATGH' NG GHGD?CG '>HANGDH' 0ABD?H F□ CAD□?H ' G' F?PG' K?OG' AHME'>AD' F□ 'NG ODK□CAH' A?'CFG >□D C @GGC□H 'A?'CFG CJA' (H Z' R

='#FGH' CFG (H 'A?' iH M?HN' FAJ□G' F□@ GM?' A@GNG?M' >AD J?DN' □H LG?BCE'?HN' KGD AH? G'CFG @A C' AANMG C' KD□HOG' CF?C' GPGD' DG□ HGN' APGD' CFG DG?M□H' 17 i H M?HN' F□ 'D?OG J?'?KK?H□GMMGN' □H'?' ?D@GHC' A?' OMACF A> □MPGD'17N?@? ('DLLGN'J□CF' OMACF A> AMN' A'CF□O('?'@□ F□ CGH□H ' ?BN□O□?M @BDNGD' □ '□N□ K?CO□FGN' LE' F@' □H' >GJ'MCHG '?OOABHC'A?'CAB□H?@GHC'?HN' KDAOG □AH '?HN' @?DD□? G '?HN' OF□□ - A?'+AMN I'F?' >□MGN' F□' FDAH□OMG A?'CF□' D□G H'J□CF CFG @A C'GM?LAD?CG KAD?DE A?' GHDE') '?HN' J?' KDG GHC' ?C CFG =' □GMN' A?'CFG MACF □CCH□H 0?H' LG' >□HGD' CF?H' CFG AKGH□H ' ?'MM' JFA' J?'?'OAHCG@-

='#FG' O?DN□H?M'LA□M□H '□H F?□DGN'? ?H C CFG %B'G(B'A?'.BO(□H F?@' ?OOABHC' A?'CF□ 'GPGHC' F?(KGD□F? '>AMMAJ□GN' A*H FGN R

DA@' F□ 'KDAOG □AH '?HN' F□' @? (□H ' ?MM' CBDH' J□CFAB□ ?H G>>AD□ CA' @A□G' GD□AB '@?CCG□R CFG' ?DD C A?' .BO(□H F?@' H' CFG ?OOABHC' A?'CF□ 'GPGHC' F?(KGD□F? '>AMMAJ□GN' A*H FGN R

='#FG' O?DN□H?M'LA□M□H '□H F?□DGN'? ?H C CFG %B'G(B'A?'.BO(□H F?@' ?HN' CF□D C□H '>AD' F□ 'LMAAN'NGP□ GN' CA' @?(G F?DMG' HGPGC'CF?C' FG@' V?'

CADOFG ' ?HN' 0AHPGEGN' CFG@' BK' ⊓HCA' CFG 0F?>⊓H ' ?HN' J6?² @?D-
PGMMAB ME' '?>CGD' FG' F?N' @?NG' 0GP6DGHOG' FG'K?B GN'?JFMG I'
>CGD' F⊔ ' GHCGHOG' =';CFG %B(G' A>' .BO(⊓H F?@' ?⊔N R '& E'MADN' A>'
AD>AM(' EAB' F?PG' ?⊔N ? ' ?' CD?⊓CAD' FABMN' LG' ?⊔N' BHCA' LBC' 'J?'
HGPGD' HAHG' LBC' @E'MADN ' HAC⊓H '@?M⊓ H >AD' CF?C' EAB' F?PG' NAHG
CA' @G' LBC' CFG' GCGDH?M' +AN'>AD' PG' EAB' @E' NG?CF' ? ' NA' ' F?MM
CFG' ACFGD' L⊔ FAK' #FGH' ?C' LACF' CFG' GHN ' J⊓CF' ?' L?D' @?NG >AD
@ADG' D?OG' @?E' OA@G' >DA@' F⊔@' CF?H' NG ⊓DG' ' NG ⊓DG' EAB ZHE'
MADN ' ?HN' ?MM @E' >GMAJ ' CA' KD?E' >AD' @G &
='#FGH' J ?' CFG' GN G' A>' CFG ? G' CBDH6N' CAJ?DN ' F⊔@' ?HN' A'MGN'
⊓HCA' ?' L?D G' ⊓D #FA@? ' $APGMM NG ⊓DGN' F⊔@' CA' ⊓C AH CFG 0B F⊔AH '
?HN' O?DKGC' ADN?HGN' >AD' F⊔@' FG' ?⊔N'⊀ ?E' >AD' JFGH' 'JGHC CA'
G C@⊓H CGD' ' J ?' %B'(G' A>' .BO(⊓H F?H5' HAJ' '?@' LBC' iNJ?DN'
.AFBH' CFG' @A C O?⊓C>>' A>' CFG' JADMN & #FB ' CFGE M?HNGN' ?C' CFG'
#G@KMG' JFGDG' DGOG⊓PGN' F⊔@' ⊓D ⊓OAM?')?J G' ?HN' ⊓D' ⊓MM?@'
?HNG ' .?DAHGC ' ?HN' MGN' F⊔@' CFDAB F' CFG' O⊓CE' JFA' NG ⊓DGN' GP6D
CFG' KGAKMG' CA' KD?E' >AD' F⊔@' A>' JFA@' A@G' J6KC' ?HN' M?@GHCGN' ?HN
?⊔N' #F⊔ ' ⊔ ' CFG' GHN' A>' GP⊔M' M⊔>G' +AN'>AD ⊓PG' F⊔@' FG' JZ?' ?' KDABN'
KD⊔HOG' ⊓C ⊔ ' ?' K⊓CE' CF?C' FG' LGF?PGN' F⊔@' A' ? ?⊔H C F⊔ ' (⊓H ' ?HN
MG G' MADN' JFA@' +AN' KDG GPPG' #FB ' ?LABC' ⊓⊓⊓T' A>'CFG' OMA0(' FG' J?'
LDAB F⊓ ? ' ?' O? C @?H' CA' CFG #AJ6D I
AM⊔H LGN' CFB ' H?DD?CG ' CFG' O⊔DB@ C?HOG' JF⊔OF' B G C ' CFG
N?MA BG' LGCJ6GH' ?@K6B'?HN' AM GE'⊔H'CFG' GOANH' OGHG' R
='LABC' CF⊔ ' C⊔@G' CFG ' (⊓H ' D6OG⊔PGN' ⊓HCA' >?PABT' %AOCAD' CGKFGH'
+?DN⊔HGD' JFA G' GDP⊓OG' FG' B GN' ⊓H @?CCGD ' A>' DG?C GODG E ?HN'
J G⊔ F⊓ ' ?N@⊓⊓CH ' F⊔@' ⊓H CFG DAA@' A>' %AOCAD' ?OG ' CFG' JF⊔OF' LG⊓H '
0AHC⊓HB?MME'?LDA?N' ⊓H ?@L? ?NG '?HN' CFG' ?@G A>CGHC⊓@G ' HAC @BOF'
HGOG ?DE' LE' CFG' O?DN⊔H?N8 ' ?KKA⊓HC@GHC' ?C MGH CF' FG' CAA(' BOF' D⊔G>'
CFGDGJ⊔CF' CF?C' FG' >GMM ABC' A>'F⊔ ' D⊔ F⊓ J⊔C I
#FG' DG?C' CD⊔?M' OGHG ⊔ ' >BMME' NG ODLGN' LE' ?PGHN⊔ F ' ⊓H AHG' A>'
CFG @A C ⊓HCGDG C⊓H ' K⊔GOG ' A>' @G@AD JD⊓C⊓H ' J⊔F⊓OF' ABD' M?H B? G
>BDH⊔ FG ' G' CD?O(' F?(KGDG' ?C GPGDE' CGK R
=',G' ,F?MM' BHNGD C?HN' ?' ' ?⊔N' LG>ADG' CF?C' CM⊔GCG' J ?' ?' 0ABDC
GDGOCGN' ⊓H' CS⊓G' .M?O(>D⊔?D ' ⊓H $AHNAH' JFGDG' CFG G' CJA' O?DN⊔H?M ' ?C
>AD' $BN G ' A J' J⊔MM ' GC EAB' ABC' CFG @?HHGD' ?HN' ADNGD' A>' CFG
0ABDC' CFGDG' ⊓D C ' CFGDG' J ?' ?' 0ABDC' KM?OGN' J⊔CF' C?LMG ' LGHOFG '
?HN' L?D '⊠(G ?' 0AH ⊔ CADE' ?' KM?OG' $BN⊔O⊔?M V>AD' CFG' $BN G ' CA' ⊓C AH '
=';#FG' NB(G' J ?' ' LDAB F⊔ CA' CFG' L?D' ADG' 0F?>⊓H ' ?HN' J6?² @?D-
PGMMAB ME' '?>CGD' FG' F?N' @?NG' 0GP6DGHOG' FG'K?B GN'?JFMG I'
>CGD' F⊔ ' GHCGHOG' =';CFG %B(G' A>' .BO(⊓H F?@' ?⊔N R '& E'MADN' A>'
AD>AM(' EAB' F?PG' ?⊔N ? ' ?' CD?⊓CAD' FABMN' LG' ?⊔N' BHCA' LBC' ';J?'
HGPGD' HAHG' LBC' @E'MADN ' HAC⊓H '@?M⊓ H >AD' CF?C' EAB' F?PG' NAHG
CA' @G' LBC' CFG' GCGDH?M' +AN'>AD ⊓PG' EAB' @E' NG?CF' ? ' NA' ' F?MM
CFG' ACFGD' L⊔ FAK' #FGH' ?C' LACF' CFG' GHN ' J⊓CF' ?' L?D' @?NG >AD
@ADG' D?OG' @?E' OA@G' >DA@' F⊔@' CF?H' NG ⊓DG' EAB ZHE'
MADN ' ?HN' ?MM @E' >GMAJ ' CA' KD?E' >AD' @G &
='#FGH' J ?' CFG' GN G' A>' CFG ? G' CBDH6N' CAJ?DN ' F⊔@' ?HN' A'MGN'
⊓HCA' ?' L?D G' ⊓D #FA@? ' $APGMM NG ⊓DGN' F⊔@' CA' ⊓C AH CFG 0B F⊔AH '
?HN' O?DKGC' ADN?HGN' >AD' F⊔@' FG' ?⊔N'⊀ ?E' >AD' JFGH' 'JGHC CA'
G C@⊓H CGD' ' J ?' %B'(G' A>' .BO(⊓H F?H5' HAJ' '?@' LBC' iNJ?DN'
.AFBH' CFG' @A C O?⊓C>>' A>' CFG' JADMN & #FB ' CFGE' M?HNGN' ?C' CFG'
#G@KMG' JFGDG' DGOG⊓PGN' F⊔@' ⊓D ⊓OAM?')?J G' ?HN' ⊓D' ⊓MM?@'
?HNG ' .?DAHGC ' ?HN' MGN' F⊔@' CFDAB F' CFG' O⊓CE' JFA' NG ⊓DGN' GP6D
CFG' KGAKMG' CA' KD?E' >AD' F⊔@' A>' JFA@' A@G' J6KC' ?HN' M?@GHCGN' ?HN
?⊔N' #F⊔ ' ⊔ ' CFG' GHN' A>' GP⊔M' M⊔>G' +AN'>AD ⊓PG' F⊔@' FG' JZ?' ?' KDABN'
KD⊔HOG' ⊓C ⊔ ' ?' K⊓CE' CF?C' FG' LGF?PGN' F⊔@' A' ? ?⊔H C F⊔ ' (⊓H ' ?HN
MG G' MADN' JFA@' +AN' KDG GPPG' #FB ' ?LABC' ⊓⊓⊓T' A>'CFG' OMA0(' FG' J?'
LDAB F⊓ ? ' ?' O? C @?H' CA' CFG' #AJ6D I
AM⊔H LGN' CFB ' H?DD?CG ' CFG' O⊔DB@ C?HOG' JF⊔OF' B G C ' CFG
N?MA BG' LGCJ6GH' ?@K6B'?HN' AM GE'⊔H'CFG' GOANH' OGHG' R
='LABC' CF⊔ ' C⊔@G' CFG ' (⊓H ' D6OG⊔PGN' ⊓HCA' >?PABT' %AOCAD' CGKFGH'
+?DN⊔HGD' JFA G' GDP⊓OG' FG' B GN' ⊓H @?CCGD ' A>' DG?C GODG E ?HN'
J G⊔ F⊓ ' ?N@⊓⊓CH ' F⊔@' ⊓H CFG' DAA@' A>' %AOCAD' ?OG ' CFG' JF⊔OF' LG⊓H '
0AHC⊓HB?MME'?LDA?N' ⊓H ?@L? ?NG '?HN' CFG' ?@G A>CGHC⊓@G ' HAC @BOF'
HGOG ?DE' LE' CFG' O?DN⊔H?N8 ' ?KKA⊓HC@GHC' ?C MGH CF' FG' CAA(' BOF' D⊔G>'
CFGDGJ⊔CF' CF?C' FG' >GMM ABC' A>'F⊔ ' D⊔ F⊓ J⊔C I
#FG' DG?C' CD⊔?M' OGHG ⊔ ' >BMME' NG ODLGN' LE' ?PGHN⊔ F ' ⊓H AHG' A>'
CFG @A C ⊓HCGDG C⊓H ' K⊔GOG ' A>' @G@AD JD⊓C⊓H ' J⊔F⊓OF' ABD' M?H B? G
>BDH⊔ FG ' G' CD?O(' F?(KGDG' ?C GPGDE' CGK R
=',G' ,F?MM' BHNGD C?HN' ?' ' ?⊔N' LG>ADG' CF?C' CM⊔GCG' J ?' ?' 0ABDC
GDGOCGN' ⊓H' CS⊓G' .M?O(>D⊔?D ' ⊓H $AHNAH' JFGDG' CFG G' CJA' O?DN⊔H?M ' ?C
>AD' $BN G ' A J' J⊔MM ' GC EAB' ABC' CFG @?HHGD' ?HN' ADNGD' A>' CFG'
0ABDC' CFGDG' ⊓D C ' CFGDG' J ?' ?' 0ABDC' KM?OGN' J⊔CF' C?LMG ' LGHOFG '
?HN' L?D '⊠(G ?' 0AH ⊔ CADE' ?' KM?OG' $BN⊔O⊔?M V>AD' CFG' $BN G ' CA' ⊓C AH '
CADOFG ' ?HN' 0AHPGEGN' CFG@' BK' ⊓HCA' CFG' OF?>⊓H ' ?HN' J6?² @?D-
HB@LGD' A>' NDB@ ' ?HN' >⊠G ' ? ' ' F?PG' GMNA@' GGH' CA' GCFGD' ?C' AHG'
C⊓G@ ⊓H ?HE' @? QBG' ' C' CFGD⊓' ?DD⊓P?M' ⊓HCA' CFG' OF?@LGD' C⊓JA'?HN' CJA'
CA' GCFGD' CFGE' JGHC' NDGGOME' LG>ADG' CFG' O?DN⊔H?M' JFGDG' FG' ?C' ?MBC⊓H '
(H⊔ FC' A>'?' AANME' KGD' AH?' G' CF?C' @BOF' @ADG' DG' G@LMGN' CFG' ⊓H 8 '
KGD' AH' ⊓H' CF?C' @? (' CF?H' ?HE' ACFGD' #FG' (⊓H ' FG?⊓D⊓H ' ?HN' KGD-
OGP⊓H ' CFG' O?DN⊔H?M' A' NGOG⊓PGN' ⊓H F⊓ ' G ⊓C@?CAH ?HN' OFA⊓OG' OABMN'
HAC' >ADLG?D' M?B F⊓H ' LBC' KMBO(GN' NAJ⊓H' F⊓ ' P⊔ AD' ?HN' &? CGD'
F?PG' NG ⊓DGN' @G' CA' NGOL?PG' BHCA' EABD' D?OG' CFB ' #FGE ' F?P⊔H '
BHNGD' C?HN⊔H ' A?'CF⊓ ' EABD' CD⊓B@KF?HC' L?HQBGC' JFGDG' J ?' ? ' G@LMGN'
BOF' ?' HB@LGD' A>'G OGMMGHC' >?⊓D' N?@G ' OABMN' NA' HA' MG ' BHNGD' CFG
CFGDG' ?@AH ⊓C CFG⊓@' DGSA⊓OGN' P ⊓E' @BOF' #FG' O?DN⊔H?M' G>C' AAH '
NG ⊓DGN' F⊓ ' F⊓ FHG ' CA' C?(G (CFG' S⊠?OG' A>' G C?CG ' CA' J⊓A@' CFG' (⊓H '
?H JGGN' CF?C' FG' JABMN' F⊓CF' FG' ?HN' KDGK?DGN' >AD' F⊓@' ?HN' A'
NGK?DCGN' ?HN' JGHC' CD?⊓ FC⊓HCA' @E'MADN8 ' LGNOF?@LGD' J ?' ?' >?GMM'
CFGD⊓' HOA@K?D?LMG' LG?BC⊓' ? >AD' CA' DGK?⊓D' F⊓CFGD' CA' P⊔G J ?' ? ' J GMM

?HN' @BOF' MG 'DHN>DGDGHC' 0ABH GM' '>MGG CA' EAB' ? ' CA' CFG' FG2N' A>' CA' F=' D?O6B ' HA' DHN>>GDGHC' 0ABH GM' LBC' BOF' ? ' LG' ? ' HGN' @G' ?H JGD' F>?H ' HA' DHN>>GDGHC' 0ABH GM' LBC' BOF' ? ' LG' ? ' HGN' @G' JCCF' JFA G' CP□ NA@' ?HN' MG2DH=H ' ' ?@' HAC' ?0QB?HCGN ' ,G' @B C OAH DNGD' CF?C CFGE 0?HHAC' LG' DHN>>GDGHC 0ABH GMAD '>AD' @E' K?DC' JFOCF LG' EABD' BLSGOC ' ?HN' C?(GH' ABC' A>' JAH' 0ABH0DM' LG>ADG' JFGDG@H CFGE' LG' @2NG' KDPE' ?HN' N?DC' HAC' >AD' EABD' N□ KMG? BDG' N□ ALGE' EABD' FB@LMG M?HN' ALGNDGHC' J]>G' GP6D' 0AH>AD@?LMG' CA' EABD' JDMM' ?HN' KMG?' ?HN' DHCGHC' LG□H ' AHOG' @?NG KD□PE' CFGDGCA' #FGDG>ADG ' @A C JDMM' ?HN' DHCGHC' LG□H ' AHOG' @?NG KD□PE' CFGDGCA' #FGDG>ADG ' @A C FB@LME' DGQB□DG' EAB ' □H' CFG' J?E' A>' 0F?D□CE ' ?HN' >AD' CFG' MAPG' A>' +AN ' JFA' □ ' CFG' LG C'SBN G ' CA' K?DG' @G' CFG' G CDG@□CE A>' CF□ ' HG'J' 0ABDC' BHCM' ' @?E' LG' ?NPGD□ GN' J F?C' J?E' ?HN' ADNGD' @E' >D□GHN ' □H' K?□H ?ML?E ' JGMM' KMG? GN' ?HN' 0AHCGHCGN' J□CF' ?MM' CFCH ' JFGDG□H' EAB' F?N' ?HE' NGM' FC' AD' N?MM?HOG' JFGCFGD' □C' JGDG' □H' M□CCMG' AD' @BOF4' ' HGPGD' DBN GN' □H' J?ADN' AD' 0ABHCGH?HOG' AD' FAJGN ?' P□ ? G' AD' K?D(' A>' N□ - 0AH'CGHC?CAH' ' MAPGN' ?MM' CFA G' J'FA@' EG' MAPGN' AHME' >AD' EABD' ?(G' J FGCFGD' ' F?N' 0?B G' AD' HA' ?HN' JFGCFGD' CFGE' JGDG @E' >D□GHN ' AD' DG ADCGN' ? ?□H' CA' FGD' >AD@GD' KM?OG ' LBC' FG CAA(' FGD' J?E' CD?□ FC ABC' A>' CFG' FAB G' MG?H□H ' ? ' FG' J?' ' JAHC' ?MJ?E ' CA' NA' BKAH' CFG ?D@' A>' FGD' GHGD?M' DGOG□PGD' 0?MMGN' &.? CGD' +D>>□CF' HN' CFG (□H ' LG□H ' ?NPGDC□ GN' A>' FGD' NGK?DCBDG' OA@@?HNGN' CFG' ODCGD' CA' 0?MM' FGD ? ?□H ' JFA' 0?MMGN' FGD' LE' CFG' H?@G' A>' ?C'F?D□HG' QBGGH' A>' iH M?HN' 0A@G' □HCA' CFG' 0ABDC &' Y0 ' □CF' CF?C QBACF' &.? CGD' +D>>□CF'5 ; ',■ ' ; & H ' AH &' QBACF' FG' ('C @?(GCF HA' @?CCGD' >AD' C' ' HA' □HN□>>GDGHC' OABDC>AD' @G'CFGDG>ADG' ' J□MM' HAC' C?DDE' +A' AH' EABD' □ ' HN' CFB ' FG' NGK?DCGN' ABC' A>'CF?C' OABDC' □CFABC' ?HE' >?DCFGD J?E & HN' CFB ' FG' NGK?DCGN' ABC' A>'CF?C' OABDC' □CFABC' ?HE' >?DCFGD ?H JGD' ?C' CF?C C□@G' AD' ?C ?HE' ACFGD' HAD' JABMN' HGPGD' ?KKG?D' ?C ?HE ACFGD' OABDC' ?>CGD

=' #FG' (□H ' KGDOG□P□H ' CF?C FG' J?' ' NGK?DCGN' □H BOF' ADC' 0?MM□H ' CA' F□ ' D?O6B ' @G@ADE ?MM' FGD' M?@GHC' JADN ' CF?C FG' F?N' KDAHABH0GN' LG>ADG' F@' ?HN' ?MM' CFG' ?BN□GH0G' ?□N' CFF=' □H G >>G 0 C' AD? @BOF & QBACF' FG<' ? ' CFG' QB8GH' □ ' AHG' ' J□M' □H FGD' ?L GHOG' NGOM?DG' BHCA' EAB' ?MM' @E' MADN ' FGDG' KDG GHC' ? G@LMGN' FG' F?CF' LGGH' CA' @G' ? ' CDBG' ? ' ALGN□GHC' ?HN' ? ' 0AH>AD@?LMG' ?' J□G' ? ' ' OABMN' □H' @E'>?HC? E J□ F' AD' NG □S G' FG' F?CF' ?MM' CFG' P□DCBAB ' QB?M□CG ' CF?C A*' FC' CA' LG' □H' ?' JA@?H' A>' FGD' N□ H□CE ' AD' □H' ?HE' ACFGD' A>' L? GD G C?CG' BDGME ?HN' ?PGMM M?2HGN' @GH ' ?HN' @GH' A>' ? ' AAN' SBN @GHC' ? ' N?E ' ? ' J□ G ' ? ' '?GMM M?2HGN' @GH ' ?HN' @GH' A>' ? ' AAN' SBN @GHC' ? ' LG' ?C' CF□ ' KDG GHC' □H' LACF' DG?M@ ' J FA' CFAB FC' CFGH' CFG' @?DD?' G LGC'J GGH' EAB' ?HN' @G ' AAN' ?HN' M?J>B M' CFGDG>ADG' □C □ ' ?' J'AHNGD' CA' FG?D' JF?C' HGJ'□HPGHC□AH ' ?DG' HA'J' □HPGHCGN' ? ?□H C' @G ' CF?C' HGPGD' □HCGHNGN' LBC' FAHG CE ' ?HN' 0?B G' @G CA' C?HN' CA' CFG' ADNGD' ?HN' SBN - @GHC' A>' CF□ ' HG'J' 0ABDC' JFGDG□H' EG' @?E' NA' @G' @BOF' ?DAH ' □>' EG' @□CCGN' CFG' 0F?D G' ?0OADN□H ' CA' CFG' JF□OF' +L N' J□M□H ' JG' J□MM' LG' DC FC J□GMM' 0AHCGHC□AH' BL@□C' ABD' GM>' CA' ALGE' CFG' ?@G >AD' ABD' K?DC' NABLC□BM' O? G' FGDG□H' ' @APG N' >□ C' CF□ ' @?CCGD' □H' 0AH>G □H' CA' EAB' @E' $ADN' A>' $□HOAM□H ' @E' FA CME' >?CFGD' HN' @BOF' ? ' CFGH EABD GM>' J GDG' □H' A@G NABLC' CA' □PG' @G' 0ABH GM' @APGN' @G' CA' ? (' >BDCFGD' 0ABH GM' M□DD' □FGDG □' ' J'FGDG' @APGN' @E' MADN ' J'FGDG □' ' @APGN' @E' MADN ' J'FGDG □' ' @APGN' @E' $ADN' A>' ?HCGDLBDE' ? □H ' EABD' M□OGHOG' V>AD? @BOF' ? ' EAB' J'GDG' ABD @GCDAKAM□C?H ' CA' KBC' CF□ ' @?CCGD' □H' QBG C□AHZ' ?HN' A' ' N□N' A>' ?MM' EAB' @E' MADN ' CA' CFG' J F□OF' EG' F?PG' ?MM' D?HCGN' LE' J□C□H ' BHNGD' ?MM' EABD KM□G' G' EABD' F□ FHG ' @QBACF' CFG' □ .□ FAK' A>' ?HCGDLBDE' ' ' NABLC' HAC @?H ' ' ?@□' DGHOF' (□H ' ? ' @?DD?' G CA' LG' OAHOMBNGN' BKAH' CFG' NGL?C□H ' >AD' CFG' OAHOMB □AH' A>' ?' @?DD?' G CA' LG' OAHOMBNGN' LGC'J GGH' CFG' KD□HOG ' ABD' N?B F□GD' &.?DE' ?HN' CFG' %B(G' A>' DMG?H ' CFG' DGHOF' (□H ' GOAHN' AH

=' HN' BKAH' CFG' DG AMBC□AH' ?HN' NGCGD@□H?C□AH' CFGDGA>' FG' NG □DGN DG K□CG' CA' ?NPGDC□ G' CFG' (□H ' F□ ' @? □GD' CFGDGA>' J FGCFGD' ABD' N?B F□GD' &.?DE' FABMN' LG' □C□@?CG' □H' DG KGOC' A>' CFG' @?DD?' G' JFGOF□ J?' A@GC□@G' LGC'J GGH' CFG' QBGGH' FGDG' ?HN' @E' LDAC□GD' CFG' M?CG' KD□HOG' DCFBD' #FG G' JADN ' JGDG' A' OAHOG□PGN' J□CF□H' @E' ODBKBMAB ' OAH-OGHOG' CF?C□C' LDGN' ?' NABLC' J□CF□H' @E' LDG?' C' J'FJ□OF' NABLC' KD□O(GN' PG GN ' ?HN' CDABLMGN' A' @E' @□HN ' ?HN' A' N□ QB□GCGN' @G ' CF?C ' J?' □H' DG?C' NABLC' A>' +AN8 ' □HN□ H?C□AH ' J'FJ□OF' ' ' GG@GN' @G ' ?KKG?DGN' □□ F□ J GMM' @BOF' CFG□D?CFGD>AD' CF?C FG' F?CF' HAC' GHC' @G ?HE□ BG @?MG4 >AD' ?MM' BOF' □ BG' @?MG ? ' ' F?PG' DGOG□PGN' A>' CFG' QBGGH' N□GN' □HOAHC□-HGHC' ?>CGD' CFGE' J GDG' LAD1H' A' CF?C' ' NABLC' F@GHC' A>' +AN' □H CF?C' LGF?M>' ' #FB ' LG□H ' CDABLMGN' □H J?PG ' A>' ?' ODBKBMAB ' OAH-OGHOG ' ?HN' K?DC□E' □H' NG K?□D' A>' ?HE' □ BG' @?MG' LE' M□GD' □C ND?PG' @G ?N' CA' EAB' ?C' J ABMN' HGPGD' OAH GHC' CA' HA' BOF' ?OC' > D' □C J GDG @BOF' ? ?□H C' @E' OAH □NGD' CFG G C?CG' A>' CF□ ' DG?M@ ' ?HN' CFG' N?H GD' □C CAAN' □H >AD' M?O(' A>' □ BG' @?MG' CA' BOOGGN' @G' □H' CF□ ' □@KGD□?M' N□ H□CE' ' CFAB F□' □C AAN ' CFGDG>ADG ' □H' DGMG>' A>' CFG' J G□ FCE' LBDNGH' A>' ODBKB-MAB ' OAH OGHOG' ?□N' CFG' QB□GC G C?CG' A>' CF□ ' HALMG' DG?M@' ' CA' ?CCG@KC CFG' M?' J' CFGDG□H' ?HN' J FGCFGD' ' @□ FC C?(G' ?HACFGD' J>G' □H 0?' G CF?C @E' >□D C' OAKBM?C□AH' J□CF' CF□ ' GHCMG'JA@?H' JGDG' HAC' M?'J>B M' ' JF□OF' □HCGHN' HAC' >AD' ?HE' OGHOK□ OAH0BK□ 0?DH?M' OAH0BK□ 0GHOG' HAD' >AD' ?HE N□ KMG? BDG' AD' @□ M□(G' A>' CFG' QB8GH8 ' KGD AH' AD' ? G' J□CF' JFA@' ' OABMN' LG ' ? ' J'GMM OAHCGHC' CA' OAHC□HBG' NBD□H ' @E' M□>G' □' ABD' @?DD?' G @?E' C?HN' J□CF + AN8 ' M?J ' ? ' J□CF' ?HE' JA@?H' ?M□PG ' □H' J F□OF' KA□HC' OAH □ CGCF' ?MM CF□ ' NABLC' CF?C' JG' A' HAJ' ?LABC' CA' CDE' LE' CFG' M□?DHGN' J□ NA@' ?HN' @GHC' A>'EAB' ABD' KDGM?CG ' ?HN' K? CAD ' A>'CF□ ' D□?M@' FGDG ? G@LMGN >AD' CF?C' KBD□KA G ' CA' J FA G' OAH O□GHOG' ?HN' SBN @GHC' ' F?PG' 0A@-@□CCGN' CFG' 0F?D G' ?0OADN□H ' CA' CFG' J F□OF' +L N' J□M□H ' JG' J□MM' LG'

D□ FC J'GMM' 0AHCGHCGN' CA' BL@□C' ABD' GM>' CA' ALGE' CFG' ?@G >AD' ABD' K?DC' FGDG□H' ' AHOG' KGDOG□PGN' @E' OAH O□GHOG' J'AB□NGN' J□CF' CFG NABLC>BM' O? G' FGDG□H ' @APG□N' >□ C' CF□ ' @?CCGD' □H' OAH>G □H' CA' EAB' @E' $ADN' A>' $□HOAM□H ' @E' FA CME' >?CFGD' HN' @BOF' ? ' CFGH EABD GM>' J GDG' □H' A@G NABLC' CA' □PG' @G' 0ABH GM' @APGN' @G' CA' ? (' >BDCFGD' 0ABH GM' M□DD' □FGDG □' ' J'FGDG □' ' @APGN' @E' MADN ' J'FGDG □' ' @APGN' @E' $ADN' A>' ?HCGDLBDE' ? □H ' EABD' M□OGHOG' V>AD' @BOF' ? ' EAB' J'GDG' ABD @GCDAKAM□C?H ' CA' KBC' CF□ ' @?CCGD' □H' QBG C□AHZ' ?HN' A' ' N□N' A>' ?MM' EAB' @E' MADN ' CA' CFG' J F□OF' EG' F?PG' ?MM' D?HCGN' LE' J□C□H ' BHNGD' ?MM' EABD KM□G' G' EABD' F□ FHG ' @QBACF' CFG' □ .□ FAK' A>' ?HCGDLBDE' ' ' NABLC' HAC @?H ' ' ?@□' DGHOF' (□H ' ? ' @?DD?' G CA' LG' OAHOMBNGN' BKAH' CFG' NGL?C□H ' >AD' CFG' OAHOMB □AH' A>' ?' @?DD?' G CA' LG' OAHOMBNGN' LGC'J GGH' CFG' KD□HOG ' ABD' N?B F□GD' &.?DE' ?HN' CFG' %B(G' A>' DMG?H ' CFG' DGHOF' (□H ' GOAHN' AH

=' HN' BKAH' CFG' DG AMBC□AH' ?HN' NGCGD@□H?C□AH' CFGDGA>' FG' NG □DGN DG K□CG' CA' ?NPGDC□ G' CFG' (□H ' F□ ' @? □GD' CFGDGA>' J FGCFGD' ABD' N?B F□GD' &.?DE' FABMN' LG' □C□@?CG' □H' DG KGOC' A>' CFG' @?DD?' G' JFGOF□ J?' A@GC□@G' LGC'J GGH' CFG' QBGGH' FGDG' ?HN' @E' LDAC□GD' CFG' M?CG' KD□HOG' DCFBD' #FG G' JADN ' JGDG' A' OAHOG□PGN' J□CF□H' @E' ODBKBMAB ' OAH-OGHOG' CF?C□C' LDGN' ?' NABLC' J□CF□H' @E' LDG?' C' J'FJ□OF' NABLC' KD□O(GN' PG GN ' ?HN' CDABLMGN' A' @E' @□HN ' ?HN' A' N□ QB□GCGN' @G ' CF?C ' J?' □H' DG?C' NABLC' A>' +AN8 ' □HN□ H?C□AH ' J'FJ□OF' ' ' GG@GN' @G ' ?KKG?DGN' □□ F□ J GMM' @BOF' CFG□D?CFGD>AD' CF?C FG' F?CF' HAC' GHC' @G ?HE□ BG @?MG4 >AD' ?MM' BOF' □ BG' @?MG ? ' ' F?PG' DGOG□PGN' A>' CFG' QBGGH' N□GN' □HOAHC□-HGHC' ?>CGD' CFGE' J GDG' LAD1H' A' CF?C' ' NABLC' F@GHC' A>' +AN' □H CF?C' LGF?M>' ' #FB ' LG□H ' CDABLMGN' □H J?PG ' A>' ?' ODBKBMAB ' OAH-OGHOG ' ?HN' K?DC□E' □H' NG K?□D' A>' ?HE' □ BG' @?MG' LE' M□GD' □C ND?PG' @G ?N' CA' EAB' ?C' J ABMN' HGPGD' OAH GHC' CA' HA' BOF' ?OC' > D' □C J GDG @BOF' ? ?□H C' @E' OAH □NGD' CFG G C?CG' A>' CF□ ' DG?M@ ' ?HN' CFG' N?H GD' □C CAAN' □H >AD' M?O(' A>' □ BG' @?MG' CA' BOOGGN' @G' □H' CF□ ' □@KGD□?M' N□ H□CE' ' CFAB F□' □C AAN ' CFGDG>ADG ' □H' DGMG>' A>' CFG' J G□ FCE' LBDNGH' A>' ODBKB-MAB ' OAH OGHOG' ?□N' CFG' QB□GC G C?CG' A>' CF□ ' HALMG' DG?M@' ' CA' ?CCG@KC CFG' M?' J' CFGDG□H' ?HN' J FGCFGD' ' @□ FC C?(G' ?HACFGD' J>G' □H 0?' G CF?C @E' >□D C' OAKBM?C□AH' J□CF' CF□ ' GHCMG'JA@?H' JGDG' HAC' M?'J>B M' ' JF□OF' □HCGHN' HAC' >AD' ?HE' OGHOK□ OAH0BK□ 0GHOG' HAD' >AD' ?HE N□ KMG? BDG' AD' @□ M□(G' A>' CFG' QB8GH8 ' KGD AH' AD' ? G' J□CF' JFA@' ' OABMN' LG ' ? ' J'GMM OAHCGHC' CA' OAHC□HBG' NBD□H ' @E' M□>G' □' ABD' @?DD?' G @?E' C?HN' J□CF + AN8 ' M?J ' ? ' J□CF' ?HE' JA@?H' ?M□PG ' □H' J F□OF' KA□HC' OAH □ CGCF' ?MM CF□ ' NABLC' CF?C' JG' A' HAJ' ?LABC' CA' CDE' LE' CFG' M□?DHGN' J□ NA@' ?HN' @GHC' A>'EAB' ABD' KDGM?CG ' ?HN' K? CAD ' A>'CF□ ' D□?M@' FGDG ? G@LMGN >AD' CF?C' KBD□KA G ' CA' J FA G' OAH O□GHOG' ?HN' SBN @GHC' ' F?PG' 0A@-@□CCGN' CFG' 0F?D G' ?0OADN□H ' CA' CFG' J F□OF' +L N' J□M□H ' JG' J□MM' LG' DC FC J□GMM' 0AHCGHC□AH' BL@□C' ABD' GM>' CA' ALGE' CFG' ?@G >AD' ABD' K?DC' FGDG□H' ' AHOG' KGDOG□PGN' @E' OAH O□GHOG' J'AB□NGN' J□CF' CFG NABLC>BM' O? G' FGDG□H ' @APG□N' >□ C' CF□ ' @?CCGD' □H' OAH>G □H' CA' EAB' @E' $ADN' A>' $□HOAM□H ' @E' FA CME' >?CFGD' HN' @BOF' ? ' EAB' J'GDG' ABD @GCDAKAM□C?H ' CA' KBC' CF□ ' @?CCGD' □H' QBG C□AHZ' ?HN' A' ' N□N' A>' ?MM' EAB' @E' MADN ' CA' CFG' J F□OF' EG' F?PG' ?MM' D?HCGN' LE' J□C□H ' BHNGD' ?MM' EABD KM□G' G' EABD' F□ FHG ' @QBACF' CFG' □ .□ FAK' A>' ?HCGDLBDE' ' ' NABLC' HAC @?H ' ' ?@□' DGHOF' (□H ' ? ' @?DD?' G CA' LG' OAHOMBNGN' BKAH' CFG' NGL?C□H ' >AD' CFG' OAHOMB □AH' A>' ?' @?DD?' G CA' LG' OAHOMBNGN' LGC'J GGH' CFG' KD□HOG ' ABD' N?B F□GD' &.?DE' ?HN' CFG' %B(G' A>' DMG?H ' CFG' DGHOF' (□H ' GOAHN' AH

=' HN' BKAH' CFG' DG AMBC□AH' ?HN' NGCGD@□H?C□AH' CFGDGA>' FG' NG □DGN DG K□CG' CA' ?NPGDC□ G' CFG' (□H ' F□ ' @? □GD' CFGDGA>' J FGCFGD' ABD' N?B F□GD' &.?DE' FABMN' LG' □C□@?CG' □H' DG KGOC' A>' CFG' @?DD?' G' JFGOF□ J?' A@GC□@G' LGC'J GGH' CFG' QBGGH' FGDG' ?HN' @E' LDAC□GD' CFG' M?CG' KD□HOG' DCFBD' #FG G' JADN ' JGDG' A' OAHOG□PGN' J□CF□H' @E' ODBKBMAB ' OAH-OGHOG' CF?C□C' LDGN' ?' NABLC' J□CF□H' @E' LDG?' C' J'FJ□OF' NABLC' KD□O(GN' PG GN ' ?HN' CDABLMGN' A' @E' @□HN ' ?HN' A' N□ QB□GCGN' @G ' CF?C ' J?' □H' DG?C' NABLC' A>' +AN8 ' □HN□ H?C□AH ' J'FJ□OF' ' ' GG@GN' @G ' ?KKG?DGN' □□ F□ J GMM' @BOF' CFG□D?CFGD>AD' CF?C FG' F?CF' HAC' GHC' @G ?HE□ BG @?MG4 >AD' ?MM' BOF' □ BG' @?MG ? ' ' F?PG' DGOG□PGN' A>' CFG' QBGGH' N□GN' □HOAHC□-HGHC' ?>CGD' CFGE' J GDG' LAD1H' A' CF?C' ' NABLC' F@GHC' A>' +AN' □H CF?C' LGF?M>' ' #FB ' LG□H ' CDABLMGN' □H J?PG ' A>' ?' ODBKBMAB ' OAH-OGHOG ' ?HN' K?DC□E' □H' NG K?□D' A>' ?HE' □ BG' @?MG' LE' M□GD' □C ND?PG' @G ?N' CA' EAB' ?C' J ABMN' HGPGD' OAH GHC' CA' HA' BOF' ?OC' > D' □C J GDG @BOF' ? ?□H C' @E' OAH □NGD' CFG G C?CG' A>' CF□ ' DG?M@ ' ?HN' CFG' N?H GD' □C CAAN' □H >AD' M?O(' A>' □ BG' @?MG' CA' BOOGGN' @G' □H' CF□ ' □@KGD□?M' N□ H□CE' ' CFAB F□' □C AAN ' CFGDG>ADG ' □H' DGMG>' A>' CFG' J G□ FCE' LBDNGH' A>' ODBKB-MAB ' OAH OGHOG' ?□N' CFG' QB□GC G C?CG' A>' CF□ ' HALMG' DG?M@' ' CA' ?CCG@KC CFG' M?' J' CFGDG□H' ?HN' J FGCFGD' ' @□ FC C?(G' ?HACFGD' J>G' □H 0?' G CF?C @E' >□D C' OAKBM?C□AH' J□CF' CF□ ' GHCMG'JA@?H' JGDG' HAC' M?'J>B M' ' JF□OF' □HCGHN' HAC' >AD' ?HE' OGHOK□ OAH0BK□ 0GHOG' HAD' >AD' ?HE N□ KMG? BDG' AD' @□ M□(G' A>' CFG' QB8GH8 ' KGD AH' AD' ? G' J□CF' JFA@' ' OABMN' LG ' ? ' J'GMM OAHCGHC' CA' OAHC□HBG' NBD□H ' @E' M□>G' □' ABD' @?DD?' G @?E' C?HN' J□CF + AN8 ' M?J ' ? ' J□CF' ?HE' JA@?H' ?M□PG ' □H' J F□OF' KA□HC' OAH □ CGCF' ?MM CF□ ' NABLC' CF?C' JG' A' HAJ' ?LABC' CA' CDE' LE' CFG' M□?DHGN' J□ NA@' ?HN' @GHC' A>'EAB' ABD' KDGM?CG ' ?HN' K? CAD ' A>'CF□ ' D□?M@' FGDG ? G@LMGN >AD' CF?C' KBD□KA G ' CA' J FA G' OAH O□GHOG' ?HN' SBN @GHC' ' F?PG' 0A@-@□CCGN' CFG' 0F?D G' ?0OADN□H ' CA' CFG' J F□OF' +L N' J□M□H ' JG' J□MM' LG'

1 / 4 22+

#FG' OGHG' A>' CFG' P CA' A>' CFG' ?DN H?M ' AM GE' ?HN' ?@KG B ' CA' BGGH' ?CF?D HG' F? ' C ' AD H' H' CFG' H?DD?C PG' A>' ?PGHN F R

=' HN' CFGH' @E' MADN' DA G' BK' ?HN' @?NG' F@' DG?NE' C?(H ' F ' L?D G ' ?HN' JGHC' CD? FC' CA' . ?CF' M?OG' CA' CFG' ACFGD' O?DN H?M ' ?HN' A' JGHC' CA GCFGD' BHCA' . D NG JGMM ' N DGOCME' CA' CFG' QBGGH8 ' MAN H ' ?HN' CFGE ' LG H ' H' FGD' OF?@LGD' A>' KDG GHOG ' FAJGN' CA' CFGZ GHCMG@?H' B FGD' CF?C' CFGE' O?@G' CA' KG?(' J CF' CFG' QBGGH8 ' D?OG ' #FG' GHCMG@?H' B FGD' ?NPGDC GN' CFG' QBGGH' CFGDGA>' HOAHC HGHC ' CF' CF?C' FG' O?@G' ABC' A>' FGD' KD PE' OF?@LGD' J CF' ?' (G H' A>' JF CG' CFDG?N' ?LABC' FGD' HGO(' HCA' CFG' OF?@LGD' A>' KDG GHOG ' JFGDG' CFG' O?DN H?M ' JGDG' P H ' A>' ?CCGHN?HOG' BKAH' FGD' OA@ H ' C' JFA G' OA@ H ' QBACF' FG ' M?O(' @E' MADN ' ' ?@' PGDE ' ADDE' CA' O?B G' EAB' CA' ?CCGHN' BKAH' @ G ' JF?C ' EABD' KMG? BDG' J CF' @ GW8 ' >' C' KMG? G' EAB 8 QBACF' @E' MADN' O?DN H?M ' ' CA' A' HCA' EABD' KD PE' OF?@LGD ' JG' J MM' FAJ' EAB' CFG' O?B G' A>' ABD' OA@ H 8 ' & E' MADN 8 QBACF' FG ' ' >' EAB' F?PG' ?HECF H ' CA' ?E ' KG?(' C' AKGHME' LG>ADG' ?MM' CFG G' >AM(' >AD' ' >G?D' HACF H ' CF?C' EG' O?H' ?E' AD' ?MMG G' ? ?H C @G ' LBC' CF?C ' JABMN' ?MM' CFG' JADMN' FABMN' LACF' FG?D' ?HN' GG C4' CFGDG>ADG' ' KD?E' EAB' KG?(' EABD' @HN ' AKGHME I' #FGH' LG ?H' @E' MADN' CA' KG?(' CA' FGD' H' $?C H ' ' ?E ' AAN' @E' MADN 8 QBACF' FG ' < KG?(' CA' @G' H' ! H M F ' ' LG GGOF' EAB ' ?MCFAB F' ' BHNGD C?HN' $?C H 8 ' AD AACF ' CFGH 8 QBACF' @E' MADN ' ' & ?N?@ ' ' >' C' KMG? G' EABD' D?OG ' JG' OA@G' LACF' CA' (HAJ' EABD' @HN ' FAJ' EG' LG' N - KA GN' CA' NA' H' CF ' @?CCGD' LGCJGGH' CFG' (H ' ?HN' EAB ' ?HN' ?M A' CA' NGOM?DG' GODGCME' ABD' AK H AH ' ?HN' ABD' OABH GM' BHCA' EAB JF OF' JG' F?PG' HCGHNGN' A>' PGDE' TG?M ?HN' ALGN GHOG' CF?C' JG' LG?D' CA' EABD' D?OG 8 ' & E' MADN ' ' CF?H (' EAB' CFGH 8 QBACF' FG ' ' A>' EABD' AAN' J MM ' LBC' CA' @?(G' ?H JGD' CA' EABD' DGQBG C ' O?HHAC' A' BNNGHME ' >AD' ' J ? ' GC' ?@AH ' @E' @? NGH ' ?C' JAD(' CF H (H ' >BMM' M CCMG' A>' ?HE' BOF' @?CCGD' JFGDG H' CFGDG' HGGNGCF' ?' MAH GD' NGM LGD?C AH ' ?HN' ?' LGCCGD' FG?N' CF?H' @ HG ' CA' @?(G' ?H JGD' CA' A' HALMG' J G' @GH' ? ' EG' LG ' ' F?N' HGGN' A>' AAN' OABH GM' H' CF ' O? G ' JF OF' CABOFGCF' @G' A' HG?D ' ?HN' >AD' ?HE' OABH GM' AD' >D GHN F K' CF?C ' O?H' >HN' H' ! H M?HN ' CFGE' ?DG' HACF H ' CA' @E' KBDKA G' AD' KDA>C ' #F H (' EAB ' ' KD?E' EAB ' @E' MADN ' J MM' ?HE' ! H M F@?D' OABH GM' AD' LG' >D GHNME' BHCA' @G' ? ?H C' CFG' (H 8 ' KMG? BDG ' CFGE' LG H ' F ' BLSGOC 'W ?E ' >AD AACF ' @E' MADN ' ' ?HN' >AD' DHE' OABH GM' H' JFA@' ' NA' HCGHN' CA' KBC' @E' CDB C' LG' HAC' FGDG ' CFGE' LG' H' K?H ' H' @E' H?C PG' OABHCDE ' M? ' @E' MADN ' ' ' ?@' ?' KAAD' JA@?H ' M?O(H ' LACF' J C' ?HN' BHNGD C?HN H ' B>>O GHCME' CA' ?H JGD' BOF' ?KKDAPGN' J G' @GH' ? ' EG' LG' LACF ' H' A' JG FCE' ?' @?CCGD ' ' KD?E' EAB' CA' G CGHN' EABD' AAN' ?HN' HN>>GDGHC' @HN ' H' EABD' ?BCFAD CE' BHCA' @G ' >AD' ' ?@' ?' @KMG' JA@?H ' NG C CBCG' ?HN' L?DDGH' A>' D GHN F K' ?HN' OABH GM' FGDG' H' ?' >ADG H' DG AH ' ?HN' ? ' >AD' EABD' OABH GM' ' J MM' HAC' DG>B G ' LBC' LG' M?N' CA' FG?D 8

=' HN' J CF' CF?C' FG' CAL(' @E' MADN' LE' CFG' F?HN ' ?HN' MGN' F@' HCA' FGD' KD PE' OF?@LGD ' J CF' CFG' ACFG ' O?DN H?M ' JFGDG' CFGE' JGDG' H' MAH ' OA@@BH O?C AH ' JG ' H' CFG' ACFGD' OF?@LGD ' @ FC' A@GC @G' FG?D' CFG' QBGGH' KG?(' PGDE' MABN ' LBC' JF?C' C' J? ' JG' OABMN' HAC' BHNGD C?HN' #FG' OA@@BH O?C AH' GHNGN ' CFG' O?DN H?M ' NGK?DCGN' ?HN' JGHC' N DGOCME' CA' CFG' (H ' @?(H ' CA' F @' DGM?C AH' A>' CMG D' C?M(' J CF' CFG' QBGGH ' ?HN' ?>CGD' DG ADCGN' FA@G' CA' CFG D' FAB G ' CA' BKKGD I

#FG' O DOB@ C?HOG' A>' AM GE' HOBDD H ' CFG' (H 8 ' N KMG? BDG' CFDAB F' CFG' ?OO NGHC?M' N OAPGDE' A>' ?' =' OFGNBMG' I' A>' F ' JG?MCF' ' HAC' BKKADCGN' LE' F CAD O?M ?BCFAD CE ' #FG' CADE' ' CAMN' A@GJF?C' N >>GDGHCME' A>' #FA@? ' " BCF?MM ' . FAK' A>' %BDF?@ ' JFA' GHC' CA' CFG' (H ' CFDAB F' AM GE ' ?' LAA(' BKAH' F ' KD P?CG' ?>>?D ' H CG?N' A>' ?' =' #DG?C G' AH' CFG' ! C?CG' A>' CFG' H NA@ I' G?0F' F?P H ' LGGH' LABHN' H' JF CG' PGMMB@ '

#FG' ND?@?C O' OAHNGH ?C AH' A>' CFG' ?OC AH' F? ' KDANBOGN' A@G' F CAD O?M' OAH>B AH ' #FG' %B(G' A>' AD>AM(' JFA@' JG' @GGC H' CFG' >D C' OGHG ' LG>ADG' . BO(H F?@8 ' ?DDG C' H' 52 ' N GN' H' 525 ' #FG' %B(G' A>' AD>AM(' JFA' BOOGGNGN' F@' ' CFG' ?@G' KGD AH' ? ' CFG' ! ?DM' A>' BDDGE' A>' CFG' KDG GHC' ?OC ' >AD' . BO(H F?@' J? ' F ' =' >?CFGD H ' M?J I ' . GCJGGH' CFG' ?DDG C' A>' AM GE' ?HN' CFG' OFD CGH H ' OGHG' F?(' KGDG' @G?HC ' KDAL?LME ' CA' OF?H G' CFG' KGD AH ' >AD' J G' F?PG' H' CFG' KDAOG AH' =' CFG' AMN' %BOFG ' A>' AD>AM(I' #FG' ! ?DM' A>' BDDGE' ' CFGH' GHDE' AJ?DN

' :' #FG' NG@?HN' A>' CFG' DG?C' G?M' >DADZ' AM GE' J? ' @?NG' LE' CFG' %B(G ' ' A>' B>>AM(' ?HN' AD>AM(' ?HN' CFG' KDAOGGN H ' ' CFB ' NGC?MGN' LE' ?PGHN F R

= >CGD' ?DN H?M' ?@KG A' J? ' CFB ' NGK?DCGN' ?HN' AHG ' & OF?GM-@? ' #GDHU' NDGJ' HG?D ' ? ?H C' CFG' JF OF' @E' MADN' DGCBDHGN' BHCA' F ' FAB G' ?C' G C@H CGD' ?HN' JFGH' CFG' CGD@' LG ?H' FG' JGHC' CA' CFG' F?MM' H' BOF' M (G' ADC' ?HN' G CBDG' ? ' FG' J? ' JAHC' @A C' OA@@AHME' CA' NA ' ?HN' ?C' H' CFG' OF?HOGDE ' LG H ' OF?HOGMMAD ' >CGD' JF OF' N?E' FG' HGPGD'

)*

?C' CFGDG' @ADG ' #FG' HG C' N?E' FG' C?DD GN' ?C' FA@G ' G KGOC H ' CFG' OA@ H ' A>' CFG' %B(G ' A>' B>>AM(' ?HN' AD>AM(' JFA' O?@G' HAC' CF?C' N?E ' LBC' CFG' HG C' N?E' O?@G' CF CFGD' BHCA' F @ ' CA' JFA@' CFGE' NGOM?DGN' FAJ' CFG' (H 8 ' KMG? BDG' J ? ' CF?C' FG' FABMN' BDDGHNGD' ?HN' NGM PGD' BK' CFG' DG?C' G?M HCA' CFG D' F?HN ' ?HN' CA' NGK?DC @KME' BHCA' FGD ' ?' FAB G' CB?CG' H F' ?@KCAH' ABDC ' LGMAH H ' CA' CFG' L FAKD O' A>' HOFG CGD ' & E' MADN ' BHNGD C?HN H ' CFG D' @G ? G ' NG@?HNGN' A>' CFG@' JF?C' OA@@ AH' CFGE' F?N' CA' PG' F@' ?HE' BOF' OA@@?HN@GHC' W

FA' ?H JGDGN' F@' ? ?H ' CF?C' CFGE' JGDG' B>>O GHC' OA@@ AHGD ' H' CF?C' LGF?M ' F?P H ' CFG' (H 8 ' OA@@?HN@GHC' LE' F ' @ABCF' A' CA' NA ' < , GC 8 QBACF' FG ' < CF?C ' HAC' B>>O GHC' >AD' @G ' J CFABC' >?DCFGD' OA@- @?HN@GHC' A>' CFG' (H 8 ' KMG? BDG ' >AD' CFG' DG?C' G?M' A>' ! H M?HN' J? ' NGM PGDGN' @G' LE' CFG' (H 8 ' AJH' KGD AH ' CA' GHSAE' NBD H ' @E' M>G ' J CF' CFG' @H CD?C AH' A>' CFG' A>> OG' ?HN' F F' DAA@' A>' OF?HOGMMAD F K' A>' ! H M?HN' ' >AD' @E' BDGCE' JFGDGA>' ' F?PG' CFG' (H 8 ' MGCCGD ' K?CGHC' CA' FAJ 8 F OF' @?CCGD' J? ' DG?CME' NGL?CGN' LGCJGGH' CFG' NB(G ' ?HN' F@' J CF' @?HE' CABC' JADN ' LGCJGGH' CFG@ ' JFA G' JADN ' ?HN' OFGO(' FG' CAA(' H' K?C GHOG' >AD' CFG' C @G ' H' A' @BOF' CF?C' CFG' NB(G ' JGDG' >?H' CA' NGK?DC' ? ?H' J CFABC' CFG D' KBDKA G' ?C' CF?C' KDG GHC' ?HN' DGCBDHGN' ? ?H' BHCA' HN AD' CA' CFG' (H ' ?HN' JF?C' DGKADC' CFGE' @?NG' ' O?HHAC' CGMM ' FAJLG C' CFG' HG C' N?E' CFGE' O?@G' ? ?H' >DA@' CFG' (H ' LD H H ' J CF' CFG@' CFG' (H 8 ' MGCCGD ' >CGD' CFG' DGOG KC' ?HN' DG?N H 'A>' CFG' ?@G' LE' @E' MADN ' JF OF' J? ' NAHG' J CF' @BOF' DGPGDGHOG ' FG' NGM PGDGN' BHCA' CFG@' CFG' DG?C' G?M ' OAHCGHCGN' CA' ALGE' CFG' (H 8 ' F F' OA@@?HN@GHC ' ?HN' GG H ' CF?C' CFG' (H 8 ' KMG? BDG' J? ' CA' C?(G' F ' FAB G ' J CF' CFG' OAHCGHC ' J? ' JGMM' KMG? GN' @KME' CA' NGK?DC' CA' FGD ' C?(H ' HACF H ' LBC' AHME' A@G' KDAP AH' >AD' F ' FAB G

=' HN' ?>CGD' MAH ' C?M(' LGCJGGH' CFG' NB(G ' ?HN' F@' ' CFGE' NGK?DCGN ' J CF' CFG' DG?C' G?M' A>' ! H M?HN ' CA' HN AD ' BHCA' CFG' (H ' #FGH' JGHC' @E' MADN' O?DN H?M ' ?HN' O?MMGN' ?MM' A>> OGD ' H' GPGDE' A>> OG' H' F ' FAB G' LG>ADG' F@' ' CA' C?(G' ?OOABHC' A>' ?MM' BOF' CB>>' ? ' CFGE' F?N' O F?D G I

#FG' ?DC OMG ' A>' ?OOB ?C AH' ? ?H C' AM GE' ?DG' PGH' ?C' MGH CF' H' CFG' AMN' F CAD ?H ' LBC' CFGE' JGDG' >D C' OADDGOCME' KD HCGN' LE' $ADN' A(G' H' F ' =' H C CBCG I' #FG' @ADG' @KADC?HC' A>' CFG@' ?DG' >ABHN' H' CFG' OF?D G ' FG?KGN' BKAH' CFG' >?MMGH' @?H' LE' BDDGE ' B>>AM(' ?HN' AD>AM(

#FG' CABOF H ' G OM?@?C AH' A>' AM GE R

6' " MO' 2' AJN' GP %O' I T' : O' N9 ' HM97' NHP' CPM9' 2' GP %O' I T' U !Q ' HP' J9O' ! N !' I !P' MQP' " M P' 9P7N' I P' !MUPO' N ' I !P' P!P I PG' R S

' >ABHN' H' ?PGHN F R

=' < GMM ' JGMM ' & ? CGD' H CAH I' QBACF' FG ' =' ' GG' CFG' @?CCGD' ? ?H C' @G' FAJ' C' ' >D?@GN ' LBC' >' ' F?N' GDPGN' +AN' ? ' N M GHCME' ? ' ' F?PG' NAHG' CFG' (H ' FG' JABMN' HAC' F?PG' PGH' @G' APGD' H' @E' DGE' F?D 8 I

#FG' OGDG@AH G ' ?CCGHN H ' CFG' OADAH?C AH' A>' HHG' . BMMGH' ?DG' @A C' @HBCGME' NG OD LGN' LE' ?MM ' DA@' CF?C' ABDOG' F?(KGDG' NGD PGN' HAC' AHME' CFG' H?DD?C AH' H' CFG' >D C' OGHG' A>' CF ' ?OC ' LBC' =' CFG' DNGD' A>' CFG' DAOG AH I' D' #FA@? ' & ADG' J? ' CFG' OF?HOGMMAD' AH' CF ' AOO?- AH' ' ?HN' FG' ' HCDANBOGN' ? ?H' H' CFG' >D CF' ?OC

G' F?PG' AHME' K?OG' >AD' ?' >D? @GHC' A>' ?MM8 ' NG OD KC AH ' HAD' HNGGN ' JABMN' C' ?>>ADN' ?HE' MMB CD?C AH' A>' CFG' CG C' CA' CD?H OD LG' F ' A@GJF?C' CGN AB ' G KA C AH' A>' CFG' @? H> OGHC' FA@? G' A>' CFG' OABDC' ?HN' CFG' O CE' CA' AHG' BKAH' JFA@' CFG' ? G' >GMM' J CF H' CFDGG' EG?D ' R

=' FGH' FG' J? ' CFB ' LDAB FC' CA' CFG' F F' KM?OG' @?NG' H' CFG' @ NNG ' A>' CFG' OFBDOF' LGCJGGH' CFG' OFA D' ?HN' CFG' F F' ?MC?D' FG' J? ' GC' H' ?' D OF' OF?D ' HN' ?>CGD' CF?C' FG' F?N' DG CGN' ?JF MG' FG' NG OGHNGN' NAJH' CA' CFG' F F' ?MC?D' ?HN' CFGDG' KDA CD?CG' FGD GM>' JF MG' CFG' DOF- L FAK' A>' ?HCGDLBDE' ?N' OGDC?H' OAMMGOC ' CFGH' FG' DA G ' ?HN' CFG' L FAK' ?HA HCGN' FGD' AH' CFG' FG?N' ?HN' AH' CFG' LDG? C ' ?HN' CFGH' FG' J? ' MGN' BK' ? ?H' JFGDG ' ?>CGD' N PGD ' AD AH ' ?N ' CFG' ?DOFL FAK' GC' CFG' ODAJH' A>' C ' ! NJ?DN' AH' FGD' FG?N ' ?HN' CFGH' NGM PGDGN' FGD' CFG' OGKCDG' A>' AMN' H' FGD' D FC' F?HN ' ?HN' CFG' DAN' A>' PADE' J CF' CFG' NAPG' H' CFG' MG>C' F?HN ' ?HN' CFGH' ?MM' CFG' OFA D' ?H ' & ŸYO

#FG' O DOB@ C?HOG ' JF OF' KDGOGNGN' CFG' NG?CF' A>' AM GE' ?DG' NG OD LGN' LE' ?PGHN F R

=' HN' CFG' HG C' N?E' FG' CAA(' F ' SABDHGE' J CF' & ? CGD' H CAH' ?HN' CFG' B?DN ' HN' ? ' AAH' ? ' CFGE' G K GN' CFGD' AMN' @? CGD' H' BOF' ?' M?@GHC?LMG' G C?CG ' CFGE' M?@GHCGN' F@' J CF' JGGK H ' GEG ' JFA@' @E' MADN' CAA(' LE' CFG' F?HN ' ?HN' N PGD ' C@G ' LE' CFG' J?E ' ? ' FG' DANG ' FG

PABMN C?M(' J□CF CFG@ ' A@GC□@G J□CF AHG ?HN A@GC□@G J□CF ?HACFGD ' C H□ FC FG J? ' MAN GN ?C ?' FAB G A>' CFG ! ?DM A>' FDGJ LBDE8 ' O?MMGN ?DN J□O (' ?MM ' PGDE GP□M ?C G? G ' #FG HG C N?E FG DANG CA ACC□H F?@ ' ?HN CFGDG MAN GN CF?C H□ FC ' @ADG □O(GD ' ?HN CFG HG C N?E' JG DANG CA $G□OG CGD' LLGE ' ?HN LE CFG J?E FG J? GN A □O(' CF?C FG J? ' N□PGD ' C□@G ' M□(GME CA F?PG >?MMGH >DA@ F□ ' @BMG ?HN LG□H ' H□ FC LG>ADG JG O?@G CA CFG LLGE A>' $G□OG CGD ' JFGDG ' ?C F□ ' OA@□H ' □H ?C CFG ?CG ' CFG ?LLAC A>' CFG KM?OG ' J□CF ?MM F□ ' OAHPGHC ' @GC F□@' J□CF CFG M□ FC A>'@?HE CADOFG ' ' JFA@' CFGE D□ FC FAHABD?LME DGOG□PGN J□CF DG?C DGPGDGHOG ' #A JFA@' @E MADN ?□N ' < ?CFGD' LLAC ' ' ?@' OA@G F□CFGD CA MG?PG @E LAHG ' ?@AH ' EAB 8 JFA@' CFGE LDAB FC AH F□ ' @BMG CA CFG C?□D 8 >AAC A>' F□ ' OF?@LGD ' ?HN CFGDG ?M□ FCGN ' ?HN & ? CGD' □H CAH CFGH CAA (' F□@' LE CFG ?D@' ?HN MGN F□@' BK CFG C?□D ' JFA CAMN @G ?>CGDJ?DN ' CF?C FG HGPGD O?DD□GN A FG?PE ?' LBDNGH □H ?MM F□ ' M□>G ' HN ? ' AAH ? ' FG J? ' □H F□ ' OF?@LGD FG JGHC □HOAHC□HGHC CA F□ ' LGN ' PGDE □O(' #F□ ' J? ' BKAH ?CBDN?E ?C H□ FC ' ?HN CFGDG FG OAHC□HBGN □O(GD ?HN □O(GD

=' * KAH & AHN?E □H CFG @ADH□H ' ? ' ' CAAN LE F□ ' LGN □NG ' ?LABC G□ FC A>' CFG OMAO(' CFG J□HNAJ ' LG□H ' OMA G FBC ' F?P□H ' J? M□ FC ' LBDH□H ' BKAH CFG OBKLA?DN ' ' LGFGMN F□@' ? ' @G GG@GN ' ND?J□H ' >? C CA F□ ' GHN ' G ' KGDOG□P□H ' @E F?NAJ BKAH CFG J?MM LE F□ ' LGN □NG ' ? (GN JFA J? ' CFGDG W < □D ' ?@' FGDG 8 QBACF ' < AJ NA EAB W8 QBACF FG CA @G ' <) GDE JGMM ' □D 8 QBACF ' <□>' @□ FC GG EABD D?OG JGMM 8 < F?C □ ' □C A>' CFG OMAO('W8 ?□N FG CA @G ' < AD-AACF ' □D 8 ?□N ' <□C □ ' K? C G□ FC A>' CFG OMAO(' □H CFG @ADH□H 8 < ! □ FC A>' CFG OMAO('W8 QBACF FG ' < CF?C O?HHAC LG 8 DGFG?D □H ' N□PGD ' C□@G < G□ FC A>' CFG OMAO(R G□ FC A>' CFG OMAO(' ?E ' H?E 8 QBACF FG ?C CFG M? C ' <□C O?HHAC LG G□ FC A>' CFG OMAO(' >AD LE G□ FC A>' CFG OMAO(' EG F?MM MA G EABD @? CGD ' >AD @E C□@G ND?JGCF HG?D CF?C ' @B C NGK?DC ABC A>' CF□ ' JADMN 8 I

#FG MGCCGD A>' ?CF?D□HG CA CFG (□H ' A>' JF□OF CFG BL C?HOG □ ' □H AM□H FGN ' J? ' >□D C KBLM□ FGN LE AMENADG) □D □M ' ?HN J? ' CD?H -M?CGN LE $ADN GDLGDC R

=' & E @A C NG?D MADN ' (□H ' ?HN FB L?HN R

=' #FG FABD A>' @E NG?CF HAJ ?KKDA?OF□H ' ' O?HHAC OFAA G LBC ' ABC A>' CFG MAPG ' LG?D EAB ' ?NP□ G EAB A>' EABD ABM8 ' FG?MCF ' JF□OF EAB AB FC CA KDG>GD LG>ADG ?MM OAH □NGD?C□AH ' A>' CFG JADMN AD >MG F JF?C AGPGD ' >AD JF□OF EGC EAB F?PG O? C @G □HCA @?HE O?M?@□C□G ' ?HN EABD GM>' □HCA @?HE CDABLMG ' .BC ' >AD □PG EAB ?MM ' ?HN KD?E +AN CA NA A M□(GJ□ G ' AD CFG DG C ' OA@@GHN BHCA EAB & ?DE ABD N?B FCGD ' LG GGOF□H ' EAB CA LG ?' AAN >?CFGD CA FGD ' ? ' ' F?PG FGDGCA>ADG NG □DGN ' ' @B C GHCDG?C EAB ?M A CA DG KGOC @E @?□N ' ?HN □PG CFG@' □H @?DD□? G VJF□OF □ ' HAC @BOF ' CFGE LG□H ' LBC CFDGG ' '' ?HN CA ?MM @E ACFGD GDP?HC ' ?' EG?D8 ' K?E LG □NG ' CFG□D NBG ' MG C ACFGD J□ G CFGE FABMN LG BHKDAP□NGN >AD ' $? CME ' ' @?(G CF□ ' PAJ ' CF?C @□HG GEG ' NG □DG EAB ?LAPG ?MM CF□H ' ?DG JGMM I

' +

F?(KGDG ' JFA ' ?OOADN□H ' CA &?MAHG ' DG?N HA F□ CADE LBC AM□H FGN8 ' @?E HAJ LG CD?OGN CA ?HACFGD ABDOG R CA AHG A>' CFG @A C KAKBM?D LAA(' □H ABD M?H B? G ' =' A 8 ' OC ' ?HN &AHB@GHC ' A>' CFG FD□ C□?H &?DCED I' KD□HCGN □H 543 ' BD KAGC ?J' CFG ND?@?C□O KAJGD A>'CF□ ' OGHG ' CFAB F CFG AOOBDDGHOG CAA(' KM?OG MAH ' ?>CGD CFG L□DCF A>' !M□T?LGCF R

=' FGH H□ FC O?@G ' CFG (□H ' GHC □D HCFAHE %GHHE ?LABC @□N-H□ FC CA $?@LGCF CA CFG ?DOFL□ FAK ' J□MM□H ' F□@' >ADCFJ□CF CA DG ADC BHCA F□@' ?C CFG OABDC ' #FG @G ? G NAHG ' CFG ?DOFL□ FAK KGGN□ME ?NNDG GN F□@ GM>' CA CFG ' OABDC ' ?HN OA@□H ' □HCA CFG ?MMGDE JFGDG CFG (□H ' J?M(GN ?HN C?DD□GN >AD F□@' F□ ' F□ FHG ' ?□N ' < F ' @E MADN A>' ?HCGDLBDE ' O?H CGMM EAB HGJ ' AD N□PGD ' JG□ FCE OAH □NGD?-C□AH ' □C □ ' NGCGD@□HGN LE @G ?HN CFG OABHO□M CF?C EAB CA @ADD J ?C H□HG A>' CFG OMAO(' F?MM LG OA@@□CCGN CA CFG #AJGD ' >AD CF?C EAB ?HN EABD OF?KM?□H ' V? ' □H>AD@?C□AH □ ' □PGH B ' F?PG C?B FC ?HN KDG?OFGN ' ?HN CFGDGLE AJH J□CF□H CFG DG?M@' BOF ?' HB@LGD A>' G GOD?LMG FGDG □G ' CF?C □C □ ' >G?DGN ' CFG JFAMG DG?M@' LG□H ' □H>GOCGN J□CF CFG@' HA @?MM OAHCGHC□AH ?HN OA@@AC□AH ' J□MM D□ G CFGDGLE ?@AH C @E BLSGOC ' ? ' A>'M?CG N?E ' CFG M□(G J? ' □H N□PGD ' K?DC ' A>' +GD@?HE ' ?HN CFGDG>ADG CFG OABHO□M F?PG DGQBG CGN @G ' >AD CFG CD□?M A>' CFG @?CCGD ' CA B>>GD CFG@' CA OA@@□C EAB CA CFG #AJGD ' AD GM G HA @?H N?DG OA@G >ADCF ? ' J□CHG ' □H CFA G @?CCGD ' EAB LG□H ' ?' OABH GMMAD 8

= FGH CFG (□H ' F?N ?□N F□ ' @□HN ' CFG ?DOFL□ FAK (HGGMGN NAJH ' ?HN ?□N ' < ' ?@' OAHCGHC ' □>' □C KMG? G EABD D?OG ' J□CF ?MM @E FG?DC ' CA A CF□CFGD ?C EABD F□ FHG 8 OA@@?HN@GHC ' ?KN ' @B C FB@LME CF?H(' EABD & ?SG CE CF?C ' @?E OA@G CA @E CD□?M ' >AD CFGDG LG CF?C F?PG @?HE J?E ' M?HNGDGN @G ' ?HN HAJ ' CF□ ' J?E ' FAKG CA CDE @E GM>' HAC JADCFE A>' BOF DGKADC 8

= #FG (□H ' KGDOG□P□H ' CFG @?H8 ' BKD□ FCHG ' SA□HGN J□CF BOF □@KM□O□CE ' ?□N ' < F $ADN ' JF?C @?HHGD A8 @?H LG EAB W F?C □@KM□O□CE □ ' □H EAB ' ' F?N CFAB FC CF?C EAB JABMN D?CFGD F?PG BGN CA B ' CA F?PG C?(GH CFG K?□H ' CA F?PG FG?DN EAB ?HN EABD ?OOB GD ' CA GCFGD >AD EABD CD□?M ' J□CFABC ?HE BOF □HNBD?HOG ' %A EAB HAC (HAJ JF?C C?CG EAB LG □H J□CF CFG JFAMG JADMN ' ?HN FAJ @?HE DG?C GHG@□G ' EAB F?PG W %A EAB HAC OAH □NGD JF?C ?H G? E CF□H ' □C □ ' CA KDAOBDG CFDGG AD >ABD >?M G (H?PG ' CA J□CHG ' ? ?□H C EAB W #F□H(' EAB CA F?PG LGCCGD MBO(' CF?C ?E CF?H EABD @? CGD FD□ C F?NW ' GG LE □C EAB J□MM DBH FG?NMAH ' CA EABD BHNA□H ' □>' JABMN B>>GD EAB ' ,ABD GHG@□G ' F?MM HAC A KDGP?□M ? ?□H C EAB ' >AD ' F?PG ACFGDJ□ G NGP□ GN J□CF @E GM>' CA (GGK EAB ABC A>' CFG□D ' F?HN ' ,GC ' HACJ□CF C?HN□H ' CA @ADDAJ JFGH CFG OABHO□M F?MM □C ' ?HN GHN >AD EAB ' DG ADC BHCA CFG@' ?HN □>' □H OF?D □H ' EAB J□CF CF□ ' @?CCGD ' CFGE NA OA@@□C EAB CA CFG #AJGD ' DGQB□DG A>' CFG@' LGO?B G EAB ?DG AHG A>' CFG@' ?' OABH GMMAD ' CF?C EAB @?E F?PG EABD ?OOB GD ' LDAB FC LG>ADG CFG@' J□CFABC ?HE >BDCFGD □HNBD?HOG ' ?HN B G >AD EABD-GM>' ? ' AAN KGD B? □AH ' CF?C J?E ' ? ' EAB @?E NGP□ G ' ?HN □>' HA GHCDG?CE AD DG? AH?LMG DGQBG C JMM GDPG ' CFGH NGM□PGD BHCA CFG@' CF□ ' @E D□H ' VJF□OF CFGH CFG (□H ' NGM□PGDGN BHCA CFG ?DOFL□ FAK ' ?HN ?E BHCA CFG@' >' CFGDG LG HA DG@GNE ' @E MADN ' LBC CF?C ' @B C HGGN ' A CA CFG #AJGD ' CFGH ' DGPA(G @E O?B G >DA@ EAB ' ?HN ?KKG?M CA CFG (□H 8 ' AJH KGD AH LE CF□ ' CA(GH BHCA EAB ?MM ' >AD V ?□N CFG (□H ' CFGH BHCA CFG ?DOFL□ FAK ' A AAH ? ' CFGE F?MM GG CF□ ' @E D□H ' CFGE (HAJ □C A JGMM CF?C CFGE F?MM BHNGD C?HN CF?C ' F?PG DG GDPGN CFG JFAMG O?B G □HCA @□HG AJH F?HN ' ?HN NGCGD@□H?C□AH ' ?HN CF?C ' F?PG N□ OF?D GN CFG@' CFGDGA> 8

=' #FG ?DOFL□ FAK ' KGDOG□P□H ' CFG (□H 8 ' LGH□ H□CE A @BOF CA F□@' J?DN ' F?N @BOF ?NA CA >ADLG?D CG?D ' < 8)GMM 8 ?□N CFG (□H ' < A EABD J?E ' @E MADN ' ?HN NA ? ' ' F?PG L□NNGH EAB 8 & E MADN ' FB@LM□H ' F□@ GM>' J□CF CF?H(W ' CAA(' F□ ' MG?PG A>' CFG (□H 8 ' F□ FHG ' >AD CF?C H□ FC ' :'

=' H CFG @ADDAJ ' ?LABC H□HG A>' CFG OMAO(' LG>ADG HAAH ' CFG OABHO□M GHC ?' GHCMG@?H B FGD >AD CFG ?DOFL□ FAK ' JFA ' JFGH FG O?@G CA

CF?H(' EABD & ?SG CE CF?C ' @?E OA@G CA @E CD□?M ' >AD CFGDG LG CF?C F?PG @?HE J?E ' M?HNGDGN @G ' ?HN HAJ ' CF□ ' J?E ' FAKG CA CDE @E GM>' HAC JADCFE A>' BOF DGKADC 8

= #FG (□H ' KGDOG□P□H ' CFG @?H8 ' BKD□ FCHG ' SA□HGN J□CF BOF □@KM□O□CE ' ?□N ' < F $ADN ' JF?C @?HHGD A8 @?H LG EAB W F?C □@KM□O□CE □ ' □H EAB ' ' F?N CFAB FC CF?C EAB JABMN D?CFGD F?PG BGN CA B ' CA F?PG C?(GH CFG K?□H ' CA F?PG FG?DN EAB ?HN EABD ?OOB GD ' CA GCFGD >AD EABD CD□?M ' J□CFABC ?HE BOF □HNBD?HOG ' %A EAB HAC (HAJ JF?C C?CG EAB LG □H J□CF CFG JFAMG JADMN ' ?HN FAJ @?HE DG?C GHG@□G ' EAB F?PG W %A EAB HAC OAH □NGD JF?C ?H G? E CF□H ' □C □ ' CA KDAOBDG CFDGG AD >ABD >?M G (H?PG ' CA J□CHG ' ? ?□H C EAB W #F□H(' EAB CA F?PG LGCCGD MBO(' CF?C ?E CF?H EABD @? CGD FD□ C F?NW ' GG LE □C EAB J□MM DBH FG?NMAH ' CA EABD BHNA□H ' □>' JABMN B>>GD EAB ' ,ABD GHG@□G ' F?MM HAC A KDGP?□M ? ?□H C EAB ' >AD ' F?PG ACFGDJ□ G NGP□ GN J□CF @E GM>' CA (GGK EAB ABC A>' CFG□D ' F?HN ' ,GC ' HACJ□CF C?HN□H ' CA @ADDAJ JFGH CFG OABHO□M F?MM □C ' ?HN GHN >AD EAB ' DG ADC BHCA CFG@' ?HN □>' □H OF?D □H ' EAB J□CF CF□ ' @?CCGD ' CFGE NA OA@@□C EAB CA CFG #AJGD ' DGQB□DG A>' CFG@' LGO?B G EAB ?DG AHG A>' CFG@' ?' OABH GMMAD ' CF?C EAB @?E F?PG EABD ?OOB GD ' LDAB FC LG>ADG CFG@' J□CFABC ?HE >BDCFGD □HNBD?HOG ' ?HN B G >AD EABD-GM>' ? ' AAN KGD B? □AH ' CF?C J?E ' ? ' EAB @?E NGP□ G ' ?HN □>' HA GHCDG?CE AD DG? AH?LMG DGQBG C JMM GDPG ' CFGH NGM□PGD BHCA CFG@' CF□ ' @E D□H ' VJF□OF CFGH CFG (□H ' NGM□PGDGN BHCA CFG ?DOFL□ FAK ' ?HN ?E BHCA CFG@' >' CFGDG LG HA DG@GNE ' @E MADN ' LBC CF?C ' @B C HGGN ' A CA CFG #AJGD ' CFGH ' DGPA(G @E O?B G >DA@ EAB ' ?HN ?KKG?M CA CFG (□H 8 ' AJH KGD AH LE CF□ ' CA(GH BHCA EAB ?MM ' >AD V ?□N CFG (□H ' CFGH BHCA CFG ?DOFL□ FAK ' A AAH ? ' CFGE F?MM GG CF□ ' @E D□H ' CFGE (HAJ □C A JGMM CF?C CFGE F?MM BHNGD C?HN CF?C ' F?PG DG GDPGN CFG JFAMG O?B G □HCA @□HG AJH F?HN ' ?HN NGCGD@□H?C□AH ' ?HN CF?C ' F?PG N□ OF?D GN CFG@' CFGDGA> 8

=' #FG ?DOFL□ FAK ' KGDOG□P□H ' CFG (□H 8 ' LGH□ H□CE A @BOF CA F□@' J?DN ' F?N @BOF ?NA CA >ADLG?D CG?D ' < 8)GMM 8 ?□N CFG (□H ' < A EABD J?E ' @E MADN ' ?HN NA ? ' ' F?PG L□NNGH EAB 8 & E MADN ' FB@LM□H ' F□@ GM>' J□CF CF?H(W ' CAA(' F□ ' MG?PG A>' CFG (□H 8 ' F□ FHG ' >AD CF?C H□ FC ' :'

=' H CFG @ADDAJ ' ?LABC H□HG A>' CFG OMAO(' LG>ADG HAAH ' CFG OABHO□M GHC ?' GHCMG@?H B FGD >AD CFG ?DOFL□ FAK ' JFA ' JFGH FG O?@G CA

F?(KGDG ' JFA ' ?OOADN□H ' CA &?MAHG ' DG?N HA F□ CADE LBC AM□H FGN8 ' @?E HAJ LG CD?OGN CA ?HACFGD ABDOG R CA AHG A>' CFG @A C KAKBM?D LAA(' □H ABD M?H B? G ' =' A 8 ' OC ' ?HN &AHB@GHC ' A>' CFG FD□ C□?H &?DCED I' KD□HCGN □H 543 ' BD KAGC ?J' CFG ND?@?C□O KAJGD A>'CF□ ' OGHG ' CFAB F CFG AOOBDDGHOG CAA(' KM?OG MAH ' ?>CGD CFG L□DCF A>' !M□T?LGCF R

=' FGH H□ FC O?@G ' CFG (□H ' GHC □D HCFAHE %GHHE ?LABC @□N-H□ FC CA $?@LGCF CA CFG ?DOFL□ FAK ' J□MM□H ' F□@' >ADCFJ□CF CA DG ADC BHCA F□@' ?C CFG OABDC ' #FG @G ? G NAHG ' CFG ?DOFL□ FAK KGGN□ME ?NNDG GN F□@ GM>' CA CFG ' OABDC ' ?HN OA@□H ' □HCA CFG ?MMGDE JFGDG CFG (□H ' J?M(GN ?HN C?DD□GN >AD F□@' F□ ' F□ FHG ' ?□N ' < F ' @E MADN A>' ?HCGDLBDE ' O?H CGMM EAB HGJ ' AD N□PGD ' JG□ FCE OAH □NGD?-C□AH ' □C □ ' NGCGD@□HGN LE @G ?HN CFG OABHO□M CF?C EAB CA @ADD J ?C H□HG A>' CFG OMAO(' F?MM LG OA@@□CCGN CA CFG #AJGD ' >AD CF?C EAB ?HN EABD OF?KM?□H ' V? ' □H>AD@?C□AH □ ' □PGH B ' F?PG C?B FC ?HN KDG?OFGN ' ?HN CFGDGLE AJH J□CF□H CFG DG?M@' BOF ?' HB@LGD A>' G GOD?LMG FGDG □G ' CF?C □C □ ' >G?DGN ' CFG JFAMG DG?M@' LG□H ' □H>GOCGN J□CF CFG@' HA @?MM OAHCGHC□AH ?HN OA@@AC□AH ' J□MM D□ G CFGDGLE ?@AH C @E BLSGOC ' ? ' A>'M?CG N?E ' CFG M□(G J? ' □H N□PGD ' K?DC ' A>' +GD@?HE ' ?HN CFGDG>ADG CFG OABHO□M F?PG DGQBG CGN @G ' >AD CFG CD□?M A>' CFG @?CCGD ' CA B>>GD CFG@' CA OA@@□C EAB CA CFG #AJGD ' AD GM G HA @?H N?DG OA@G >ADCF ? ' J□CHG ' □H CFA G @?CCGD ' EAB LG□H ' ?' OABH GMMAD 8

= FGH CFG (□H ' F?N ?□N F□ ' @□HN ' CFG ?DOFL□ FAK (HGGMGN NAJH ' ?HN ?□N ' < ' ?@' OAHCGHC ' □>' □C KMG? G EABD D?OG ' J□CF ?MM @E FG?DC ' CA A CF□CFGD ?C EABD F□ FHG 8 OA@@?HN@GHC ' ?KN ' @B C FB@LME JF?C AGPGD ' >AD JF□OF EGC EAB F?PG O? C @G □HCA @?HE O?M?@□C□G ' ?HN EABD GM>' □HCA @?HE CDABLMG ' .BC ' >AD □PG EAB ?MM ' ?HN KD?E +AN CA NA A M□(GJ□ G ' AD CFG DG C ' OA@@GHN BHCA EAB & ?DE ABD N?B FCGD ' LG GGOF□H ' EAB CA LG ?' AAN >?CFGD CA FGD ' ? ' ' F?PG FGDGCA>ADG NG □DGN ' ' @B C GHCDG?C EAB ?M A CA DG KGOC @E @?□N ' ?HN □PG CFG@' □H @?DD□? G VJF□OF □ ' HAC @BOF ' CFGE LG□H ' LBC CFDGG ' '' ?HN CA ?MM @E ACFGD GDP?HC ' ?' EG?D8 ' K?E LG □NG ' CFG□D NBG ' MG C ACFGD J□ G CFGE FABMN LG BHKDAP□NGN >AD ' $? CME ' ' @?(G CF□ ' PAJ ' CF?C @□HG GEG ' NG □DG EAB ?LAPG ?MM CF□H ' ?DG JGMM I

F?(KGDG ' JFA ' ?OOADN□H ' CA &?MAHG ' DG?N HA F□ CADE LBC AM□H FGN8 ' @?E HAJ LG CD?OGN CA ?HACFGD ABDOG R CA AHG A>' CFG @A C KAKBM?D LAA(' □H ABD M?H B? G ' =' A 8 ' OC ' ?HN &AHB@GHC ' A>' CFG FD□ C□?H &?DCED I' KD□HCGN □H 543 ' BD KAGC ?J' CFG ND?@?C□O KAJGD A>'CF□ ' OGHG ' CFAB F CFG AOOBDDGHOG CAA(' KM?OG MAH ' ?>CGD CFG L□DCF A>' !M□T?LGCF R

=' FGH H□ FC O?@G ' CFG (□H ' GHC □D HCFAHE %GHHE ?LABC @□N-H□ FC CA $?@LGCF CA CFG ?DOFL□ FAK ' J□MM□H ' F□@' >ADCFJ□CF CA DG ADC BHCA F□@' ?C CFG OABDC ' #FG @G ? G NAHG ' CFG ?DOFL□ FAK KGGN□ME ?NNDG GN F□@ GM>' CA CFG ' OABDC ' ?HN OA@□H ' □HCA CFG ?MMGDE JFGDG CFG (□H ' J?M(GN ?HN C?DD□GN >AD F□@' F□ ' F□ FHG ' ?□N ' < F ' @E MADN A>' ?HCGDLBDE ' O?H CGMM EAB HGJ ' AD N□PGD ' JG□ FCE OAH □NGD?-C□AH ' □C □ ' NGCGD@□HGN LE @G ?HN CFG OABHO□M CF?C EAB CA @ADD J ?C H□HG A>' CFG OMAO(' F?MM LG OA@@□CCGN CA CFG #AJGD ' >AD CF?C EAB ?HN EABD OF?KM?□H ' V? ' □H>AD@?C□AH □ ' □PGH B ' F?PG C?B FC ?HN KDG?OFGN ' ?HN CFGDGLE AJH J□CF□H CFG DG?M@' BOF ?' HB@LGD A>' G GOD?LMG FGDG □G ' CF?C □C □ ' >G?DGN ' CFG JFAMG DG?M@' LG□H ' □H>GOCGN J□CF CFG@' HA @?MM OAHCGHC□AH ?HN OA@@AC□AH ' J□MM D□ G CFGDGLE ?@AH C @E BLSGOC ' ? ' A>'M?CG N?E ' CFG M□(G J? ' □H N□PGD ' K?DC ' A>' +GD@?HE ' ?HN CFGDG>ADG CFG OABHO□M F?PG DGQBG CGN @G ' >AD CFG CD□?M A>' CFG @?CCGD ' CA B>>GD CFG@' CA OA@@□C EAB CA CFG #AJGD ' AD GM G HA @?H N?DG OA@G >ADCF ? ' J□CHG ' □H CFA G @?CCGD ' EAB LG□H ' ?' OABH GMMAD 8

= FGH CFG (□H ' F?N ?□N F□ ' @□HN ' CFG ?DOFL□ FAK (HGGMGN NAJH ' ?HN ?□N ' < ' ?@' OAHCGHC ' □>' □C KMG? G EABD D?OG ' J□CF ?MM @E FG?DC ' CA A CF□CFGD ?C EABD F□ FHG 8 OA@@?HN@GHC ' ?KN ' @B C FB@LME JF?C AGPGD ' >AD JF□OF EGC EAB F?PG O? C @G □HCA @?HE O?M?@□C□G ' ?HN EABD GM>' □HCA @?HE CDABLMG ' .BC ' >AD □PG EAB ?MM ' ?HN KD?E +AN CA NA A M□(GJ□ G ' AD CFG DG C ' OA@@GHN BHCA EAB & ?DE ABD N?B FCGD ' LG GGOF□H ' EAB CA LG ?' AAN >?CFGD CA FGD ' ? ' ' F?PG FGDGCA>ADG NG □DGN ' ' @B C GHCDG?C EAB ?M A CA DG KGOC @E @?□N ' ?HN □PG CFG@' □H @?DD□? G VJF□OF □ ' HAC @BOF ' CFGE LG□H ' LBC CFDGG ' '' ?HN CA ?MM @E ACFGD GDP?HC ' ?' EG?D8 ' K?E LG □NG ' CFG□D NBG ' MG C ACFGD J□ G CFGE FABMN LG BHKDAP□NGN >AD ' $? CME ' ' @?(G CF□ ' PAJ ' CF?C @□HG GEG ' NG □DG EAB ?LAPG ?MM CF□H ' ?DG JGMM I

F?(KGDG ' JFA ' ?OOADN□H ' CA &?MAHG ' DG?N HA F□ CADE LBC AM□H FGN8 ' @?E HAJ LG CD?OGN CA ?HACFGD ABDOG R CA AHG A>' CFG @A C KAKBM?D LAA(' □H ABD M?H B? G ' =' A 8 ' OC ' ?HN &AHB@GHC ' A>' CFG FD□ C□?H &?DCED I' KD□HCGN □H 543 ' BD KAGC ?J' CFG ND?@?C□O KAJGD A>'CF□ ' OGHG ' CFAB F CFG AOOBDDGHOG CAA(' KM?OG MAH ' ?>CGD CFG L□DCF A>' !M□T?LGCF R

=' FGH H□ FC O?@G ' CFG (□H ' GHC □D HCFAHE %GHHE ?LABC @□N-H□ FC CA $?@LGCF CA CFG ?DOFL□ FAK ' J□MM□H ' F□@' >ADCFJ□CF CA DG ADC BHCA F□@' ?C CFG OABDC ' #FG @G ? G NAHG ' CFG ?DOFL□ FAK KGGN□ME ?NNDG GN F□@ GM>' CA CFG ' OABDC ' ?HN OA@□H ' □HCA CFG ?MMGDE JFGDG CFG (□H ' J?M(GN ?HN C?DD□GN >AD F□@' F□ ' F□ FHG ' ?□N ' < F ' @E MADN A>' ?HCGDLBDE ' O?H CGMM EAB HGJ ' AD N□PGD ' JG□ FCE OAH □NGD?-C□AH ' □C □ ' NGCGD@□HGN LE @G ?HN CFG OABHO□M CF?C EAB CA @ADD J ?C H□HG A>' CFG OMAO(' F?MM LG OA@@□CCGN CA CFG #AJGD ' >AD CF?C EAB ?HN EABD OF?KM?□H ' V? ' □H>AD@?C□AH □ ' □PGH B ' F?PG C?B FC ?HN KDG?OFGN ' ?HN CFGDGLE AJH J□CF□H CFG DG?M@' BOF ?' HB@LGD A>' G GOD?LMG FGDG □G ' CF?C □C □ ' >G?DGN ' CFG JFAMG DG?M@' LG□H ' □H>GOCGN J□CF CFG@' HA @?MM OAHCGHC□AH ?HN OA@@AC□AH ' J□MM D□ G CFGDGLE ?@AH C @E BLSGOC ' ? ' A>'M?CG N?E ' CFG M□(G J? ' □H N□PGD ' K?DC ' A>' +GD@?HE ' ?HN CFGDG>ADG CFG OABHO□M F?PG DGQBG CGN @G ' >AD CFG CD□?M A>' CFG @?CCGD ' CA B>>GD CFG@' CA OA@@□C EAB CA CFG #AJGD ' AD GM G HA @?H N?DG OA@G >ADCF ? ' J□CHG ' □H CFA G @?CCGD ' EAB LG□H ' ?' OABH GMMAD 8

= FGH CFG (□H ' F?N ?□N F□ ' @□HN ' CFG ?DOFL□ FAK (HGGMGN NAJH ' ?HN ?□N ' < ' ?@' OAHCGHC ' □>' □C KMG? G EABD D?OG ' J□CF ?MM @E FG?DC ' CA A CF□CFGD ?C EABD F□ FHG 8 OA@@?HN@GHC ' ?KN ' @B C FB@LME JF?C AGPGD ' >AD JF□OF EGC EAB F?PG O? C @G □HCA @?HE O?M?@□C□G ' ?HN EABD GM>' □HCA @?HE CDABLMG ' .BC ' >AD □PG EAB ?MM ' ?HN KD?E +AN CA NA A M□(GJ□ G ' AD CFG DG C ' OA@@GHN BHCA EAB & ?DE ABD N?B FCGD ' LG GGOF□H ' EAB CA LG ?' AAN >?CFGD CA FGD ' ? ' ' F?PG FGDGCA>ADG NG □DGN ' ' @B C GHCDG?C EAB ?M A CA DG KGOC @E @?□N ' ?HN □PG CFG@' □H @?DD□? G VJF□OF □ ' HAC @BOF ' CFGE LG□H ' LBC CFDGG ' '' ?HN CA ?MM @E ACFGD GDP?HC ' ?' EG?D8 ' K?E LG □NG ' CFG□D NBG ' MG C ACFGD J□ G CFGE FABMN LG BHKDAP□NGN >AD ' $? CME ' ' @?(G CF□ ' PAJ ' CF?C @□HG GEG ' NG □DG EAB ?LAPG ?MM CF□H ' ?DG JGMM I

6 X HMN' I MI'NHMN' GPPG NHP' P P H 9 IQ' HPP9
1 7' HMIQP'NHP' H KH'M99 I NM9 NH IQG O NH'G MT+
JN'NHMN'NHP PAT'O NH'7 IO'MIO'L9M I9T'7PP9

BLSGOC' V?HN' A' AMG@HME'M?EH ' F' ' F?HN' BKAH'F' ' LDG? C' ?N ' LE'
CFG >?□CF ' A.JG'CA' +AN' ' C?(G CF□ ' @?H' FGDG' @E'MADN' A?' ?HCGDLBDE'
CA' LG' A?' ?MM' ACFGD' ?' @A C' >?□F>BM' BLSGOC' BHCA' B ' ?HN' AHG' CA' JFA@'
JG' ?DG' @BOF' LGFAMN□H ' □P□H ' F□@' DG?C' @A@@GHN?CAH ' ACFGD J□ G $
HN ' J□CF' CF?C' AHG' AD' CJA' A?' CFG OF□G>G C' A?' CFG' OABHO□M' @?(□H '
CFGD□' G' OB G' NGOM?DGN' CF?C' □H' DGQBG' CH ' F□ ' □HNBD?HOG' □C' J ?' D?CFGD
@G?HC' >AD' F□ ' CDC?M' ?HN' F□ ' KBD ?CAH'? ?□H C' CFG' OA@@AH' >?@G' ?HN'
M?HNGD' A?' CFG' JADMN' CF?H' >AD' '@?MOG' OAHOG□PGN' ? ?□H C' F□@'
‹ GMM' JGMM' @E'MADN ' VQBACF' CFG (□H ' C?(G' F□@' ?HN' JGMM' B G' F□@'
? ' FG' □ ' JADCFE' CA' LG' ?HN' @?(G' HA' @ADG' ?NA ß HN' J□CF' CF?C'
GPGDE' @?H' O?B' F□' F□@' LE' CFG' F?HN' ?HN' @?NG' >?□D' JG?CFGD' A?' ?MCA'
GCFGD ' JFO□F' @□ F□ G? □ME' LG' NAHG' J□CF' CF?C' @?H I

#FG' OFD□ CGH□H ' A?' CFG D□HOG ' I□T?LGCF' ?C' +DGGHJ□OF' □ ' CFG' M? C'
= FAJ1' A?' CF□ ' = F□ CAD□O?M' @? QBG I' H' CFG' NG' OD□KCAH' A?' CF□ '
OGDG@AHE' ?MM' □ ' ? ?□H' BKGDL ' #FG' @A C' □@KADC?HC' K?D' A?' CFG
N?E8 ' KDAOGGN□H ' □ ' LD□G>ME' N□ K?COFGN' LE' CFG' OFDAH□OMGD' R

i

6 2'K I P i ' I P'N ' IMUP'T J'9MJQH'8 NH iQG i +
HMN'APM' M P QHMT' MIO' M GP JG A
MO' H QH' MIO' U IQ' 7J99 7GNMP'MIO' P '
JKH' i A9P'GKPIPG'MG O M 'NHP'PTP'N '79 +
X P'i 'L PGPIN+R

) ' □ ' CFG' OA@@GHOG@GHC' A?' CFG' @A C' DG@?D(?LMG' KDAMA BG' A?' CFG
>G J' JF□OF' ?DG ?CC?OFGN' CA' F?(KGDG8 ' KM?E ' C' □ UCA' ABD' @□HN ' ?'
KGD>GOC' G KA □C□AH' A?' CFG' KD□HO□KMG' BKAH' JF□OF' CFG' KAGC' JAD(GN' □H
CFG' OAH CDBOC□AH' A?' CF□ ' ND?@?' .GM□GP□H ' JF?CGPGD' JG□ F□' A?'
CFG@G JF□OF' F?(KGDG' KDAKA GN' CA' □MMB CD?CG' □H CF□ ' ND?@?' R

?BCFAD□CE'CFGDG @?E LG' >AD'CFG' OAHCD?DE' KH□AH' CF?C' CFG' GHDE') '
J? ' ? HGJ' KM?E' □H' 4 3 ' CFGDG' F?N' LGGH' ?' OAH □NGD?LMG' □HCGDP?M'
LGCJGGH' □C ' KDANBOC□AH' ?HN' CF?C' A?' CFG' GHDE') R CFG' M? C' □H' CFG'
ADNGD' A?'DGKDG GHC?C□AH' A?' F□ ' KDGP□AB ' F□ CAD□G ' %BD□H ' CF?C' □HCGDP?M'
GPGD?M' A?' CFG' KAGC8 ' @E C' ?N@□D?LMG' OA@GN□G ' F?N' LGGH' BHQBG -
C□AH?LME' KDANBOGN ' ?HN' CFG' ?BN□GHOG' A?' 4 3' J? ' KGDF□O' ?CAM'
DGPGMM□H ' □H' CFG' DGOAMGOC□AH ' A?' CFG' J□C' A?' #ABO□ CAHG ' AD' CFG' @ADG'
DGOGHC' JF□@ □G ' A?' BCAMEOB ' .B□ CFG' KAGC' JFA' J?' GQB?MME'
@? CGD' A?'CFG' CG?D ' ?HN' CFG' @□MG^UA?' F□ ' ?BN□GHOG' KDGK?DG ' CFG@' >AD'
? GD□AB ' P□GJ' A?' CFG ? KGOC ' A?' DG?M' M‹>G R =' ' 0A@GG' HA' @ADG' CA'
@?(G EAB' M?B F I' G' CFAB F□' CAA' CF?C' CFG' KAKBM?D' NG □DG' >AD'
HA□ E' OA@L?C ' ?HN' CFG' BH?PAN?LMG' NG>□O□GHO□G ' A>'CFG' C? G' H' CFG'
DGKDG GHC?C□AH' A?' L?CCMG' OGHG R FG' F?N' LG>ADG' NG ODLGN' □C ? '
?H ' = BHJADCFE' O?>>AMNI' >AD' = P? CE' >□GMN I R @□ F□ LG' K? □H ME'
?NPGDCGN' CA ' ?HN' CF?C CFG' MAJH ' A?' CFG' ?@G C? G' JFA@'FG F?N'
□HNGGN'DG>AD@GN' LBC' JFA' CAM' NGM□ FCGN'CFG' ='G?D ' A?' CFG' DABHNM□H 'I'
JJCF' CFG□D' G CG@KAD?M' DBNGHG '@□ F□' LG' M□ FCME' DGHABHOGN' G'
N□ OM?□FGN' CFGH' =' LACF' >AAM' ?HN' >□ F□C F G G' J GGD' HAC'?@AH □' CFG
?CCD?OC□AH ' A>'CF□ ' JAD(' A>' F□ ' @?CBDGD' ? G ' G' F?N' CA' A>>GD' JG□ FCE'
?HN GD□AB ' CFGH ' ?N' ?HN' F□ F' CF□H ' HALMG OGHG ' CF?C' OA@-
@?HNGN' CG?D ' C?CG ?HN' JAG' JGGG' CA' LG G F□L□GN' CA GCFGD' CFGDG
J? ' CA' LG' K? G?HCDE' LBC' □C J? ' CA' LG' >BMM' A>' K□CE ' ?HN' CFG' AG' J?'
CA' LG' CFG @ADG' □HCGH G >DA@' □C ' CDBCF' HN' FAJ' N□N' CF□ ' @? CGD' A>'
F□ ' ?DC' KDA>G ' CA' LG' ?LMG' CA' KDANBOG' BOF' NGGK'G@AC□AH' >DA@' CFG'
G F□L□CAH' A>' OGHG ' CF?C ?M@A C' O?@G' NAJH' CA' F□ ' AJH' C□@G ' ' CF?C'
CFG' >?CFGD ' ?HN' D?HN>?CFGD ' A>' F□ ' ?BN□GHOG' F?N' J□CHG GN' □H' CFG□D'
BHKAGC□O?M' DG?M□CE ' CF?C' LGMAH' GN' HAC' CA' CFG' KGD□AN' JFGH' CFG' JADN'
J? ' CFG' AMG' ?DL□CGD' A>' CFG' NG' C□S□G ' A>' KD□HOG ' ?HN' >?PABD□CG ' LBC'
JFGH' @GH' >GMM' LE' □HCD□ BG' ?HN' HAC' LE' L?CCMG ' ?HN' GPGH' CFG' G' A>'CFG'
O?K□D□OAB ' NG KAC' CDBO(' □H' CFG' H?@G' A>'CFG' M?J'W #FGDG' J ? ' ?HAC□FGD'
DG?C' KAGC' A>' CF□ ' ? G A>' F□ F' KAGCDE' JFA' F?N' □HNO□?CGN' C G GHGD?M'
CFG@G JF□OF' F?(KGDG' KDAKA GN' CA' □MMB CD?CG' □H CF□ ' ND?@?' R

BLSGOC' V?HN' A' AMG@HME'M?E□H ' F□ ' F?HN' BKAH'F□ ' LDG? C' ?□N ' LE'
CFG >?□CF ' A.JG'CA' +AN' ' C?(G' CF□ ' @?H' FGDG' @E' MADN' A?' ?HCGDLBDE'
CA' LG' A?' ?MM' ACFGD' ?' @A C' >?□F>BM' BLSGOC' BHCA' B ' ?HN' AHG' CA' JFA@'
JG' ?DG' @BOF' LGFAMN□H ' □P□H ' F□@' DG?C' @A@@GHN?CAH ' ACFGD J□ G $
HN ' J□CF' CF?C' AHG' AD' CJA' A?' CFG' OF□G>G C' A?' CFG' OA@BHO□M' @?(□H '
CFGD□' G' OB G' NGOM?DGN' CF?C' □H' DGQBG' CH ' F□ ' □HNBD?HOG' □C' J ?' D?CFGD'
@G?HC' >AD' F□ ' CDC?M' ?HN' F□ ' KBD ?CAH'? ?□H C' CFG' OA@@AH' >?@G' ?HN'
M?HNGD' A?' CFG' JADMN' CF?H' >AD' '@?MOG' OAHOG□PGN' ? ?□H C' F□@'
‹ GMM' JGMM' @E'MADN ' VQBACF' CFG (□H ' C?(G' F□@' ?HN' JGMM' B G' F□@'
? ' FG' □ ' JADCFE' CA' LG' ?HN' @?(G' HA' @ADG' ?NA ß HN' J□CF' CF?C'
GPGDE' @?H' O?B' F□' F□@' LE' CFG' F?HN' ?HN' @?NG' >?□D' JG?CFGD' A?' ?MCA'
GCFGD ' JFO□F' @□ F□ G? □ME' LG' NAHG' J□CF' CF?C' @?H I

#FG' OFD□ CGH□H ' A?' CFG D□HOG ' I□T?LGCF' ?C' +DGGHJ□OF' □ ' CFG' M? C'
= FAJ1' A?' CF□ ' = F□ CAD□O?M' @? QBG I' H' CFG' NG' OD□KC□AH' A?' CF□ '
OGDG@AHE' ?MM' □ ' ? ?□H' BKGDL ' #FG' @A C' □@KADC?HC' K?D' A?' CFG'
N?E8 ' KDAOGGN□H ' □ ' LD□G>ME' N□ K?COFGN' LE' CFG' OFDAH□OMGD' R

?DG' O?DD□GN' □HCA' CFG' NGKCF ' A?' CFG' >BCBDG' CA' F?PG' CFG' ?@G'
CD□B@KF' A?' =' @BC?L□C□E1' B G' CGN' CA' A*□' OAHCG@KM?C□AH ' #F□ ' □'
CFG' CFG@G' J F□OF' CFG' KAGC' G@KF?C□O?ME' KDG' GHC' CA' B ' BHNGD' □C '
? KGOC' A?' ?NHG

6' P'GMO'MG' P' J9G'IMUP'T J' H IU'TP'GPP'
HP' P T'LP G IG' 7 J'i A9P'GN T+
#G'NHPT' P P'9 IQ8 NH IU'T J'GPP'NHP I'Q PM+
#iO'7 99 %G' NH'NHP'QPIP MG' NH IQ'MIO'G PM'
1 7'NH JGMiO'7 piOG 8 N9 pI ' i'M I IpiN'GPP'
" 'G i'NH G' I QHN ipGG' I PPMG' I GP T[R

.G?DH ' □H' @□HN' CFG DG?C KD□HO□KMG' A?'CFG' KM?E' □C' ?KKG?D ' CA' B ' CA
AKGH' J□CF' □H BM?D' ?DC' #FG' □GMN' A?'CFG' MACF' A?' +AMN' □ ' KDG GHCGN
CA' ABD' PDGJ ' HAC' ? ' ?' @GDG' K□GOC' A?' AD□H?DE' NG OD□KC□AH' LBC' ?
F?P□H ' ?' ND?@?C□D' OAHHGOC□AH' J□CF' CFG' KD□HO□K?M' ?OC□AH' . E' CF□
NG OD□KC□AH' JG' ?DG' ?C' AHOG' ?HN' @A C' H?CBD?MME' □HCDANBOGN' CA' CFG
OF?D?OCGD ' A?' CFG' KDABN' HALMG ' JFA G' F?CDGN' AM GE' F?' ' KDAPA(GN
#FG' ?DO? C□D' AD>AM(' @?E' KDAL?LME' ?LNG' CFG' >DAJH' A?' CFG' DG?C
O?DN□H?M' LBC' □H' CFG' CG@KGD?@GHC' A?' CFG' □@KGCBAB ' .BO(□H F?@
CFGDG' □ ' □HGP□C?LMG' M□?H GD' F?C' ?' KADCD?□C' A?' GM> J□MGN' KD□NG' F?
CFG' KAGC' ND?J□H' A?' .BO(□H F?@' □H' ?MM' CF?C' OGHG' A'J' CFG' F?B' FCE
KGGD' >D C' N□ KM?E ' F□ ' DAB' F' OAHCG@KC' A?'=' BOF' ?' (GGOF'I' ?' ' AM GE
CFGH' CFDAJ ' ABC' F□ ' D?HNA@' ?MG ?C□AH ' ? ?□H C' F□ ' FAHG CE ' HG C
GHOABHCGD ' F□@' J□CF' ?H' GEG' =' >BMM' A?' N□ N?□H I' ?HN' □ ' O?DOGME' (GKC
>DACH' >AMA J□H ' F□@' CA' CFG' (□H ' C□A' = ABC' C?DG' F□@ I' ?HN' >□H?MME' M? FG
F□@ GM?' CA' CFG' BCCGD?HOG' A?' ?' CADDGHC' A?' JADN ' J□MG' F□ ' >DEGHN
GP□NGH□ME' CDG@LMG' @ADG' >AD' F□@' □H' CFG' OAH GQBGHOG ' A?' F□ ' LM□HN
F?CDGN' CF?H' CFGE' MAA (' J□CF' FAKG' CA' □C ' KAJGD' CA' □HSC□DG' CFG' @?H' JFA@
CFGE' GQB?MME' F?CG ' HN' FAJ' NAG ' ?MM' CF□ ' OMA G' W H R
H

/' I T9 7P' G' GLMIi%O' M9 PMOT'
2'MI' NHP' GHMO ' 7L ' JKU iQHM I +R

G' GG' CFG' OA@□H ' GHN' A?' CFG' D? F' ?HN' F?B' FCE' @?H ' F□ ' = HALMG'
LMAANI' J□MM' LG' DGO(AHGN' ? ' HAC□F□H ' □H' CFG' = LG ?D8 ' L A A (I' CFG'
=' LBCOFGD8 ' 0BD'I' J□MM' CG?D' F□@

m HP'OMP P' >JPPIP‡ ' MIN G 7 JNMA 9 N P+

" ' JNMA 9 NT' i'NHPI'O NH'L9MT'
HP'K JP9'GL NG'N ' IMIT' IPi%G' OPKMT'‡R'

DA@'CFG >□D C' OGHG' CA' CFG' M? C' CFG' ND?@?C□O' ?OC□AH' GG@ ' CA' KA□HC'
CA' CFG' ?L□N□H ' KDG' GHOG' A>'CF?C' KAJGD' JF□OF' JAD(
=' LBCOFGD8 ' 0BD'I' J□MM' CG?D' F□@

6'N P ' K JP9'GL NG'N ' IMIT' IPi%G' OPKMT+R

G' GG' CFG' =' GPGD' JF□DM□H ' JFGGM'I' SH' ?' BOOG □AH' A>' OAHCD? C ' A>'
D?HNGB0' ?HN' NGL? G@GHC' ?HN' GPGH' JFGH' CFG' ?OC□AH' □ ' OMA GN' JG'

>' CFG' ?CCG C' A>' . BO(□H F?@' F?N' LGGH' >AMMAJGN' LE' F□ ' ,' OA@□H ' >DA@' F□ ' ?DD?□ H@GHC I' JG' FABMN' F?PG' GGH' □HNGGN' CFG' = @□ GDEI' >AMMAJ□H ' BKAH' CFG' =' @□ FC□HG ' LBC' JG' FABMN' HAC' F?PG' GGH' CFG' @AP□H ' O?B G' A>' CF□ ' D?K□N' CD?H □C□AH' A>' >ADCBHG ' #FGDG' □C ' CFG' ?L AMBCG' (□H ' KDGSBN □H ' F□ ' P□OC□@' LG>ADG' G ?@□H?C□AH' R

E' 6'2' GN O' % NHP' 9P P9
1 7'M' 7J KHM Q%O' K !7POP MKT+R

. BC' ?H' □HCGDDBKC□AH' C?(G ' KM?OG ' #FG' QBGGH' OA@G ' □H' CFG' K□D□C A>' FAHG CE' ?HN' SB C□OG ' CA' DGKDG GHC' CA' CFG' (□H ' CF?C' F□ ' BLSGOC ' =' ?DG' □H' DG?C' D□GP?HOG I' * KAH' F□ ' @□H□ CGD' NAG ' CFG' (□H ' M?E' CFG' LM?@G ' ?HN' NG □DG ' CFG' D□GP?HOG' CA' LG' DGNDG GN ' #F□ ' MAA(' M□(G' GQB□CE' ?HN' @ANGD?C□AH' R

6' X P' I JGN' ! N' P!O' J ' GJAEPKNG' 7 I' J ' 9M G
! O' GN KU' NHP I ' !' J ' 99+R

#FG' QBGGH ' JFA' F? ' ALC?□HGN' CFG' DGNDG ' A>' CFG' BLSGOC 8 JDAH ' □ ' CA' = □C' LE I' ?HN' FG?D' CFG' OF?D G ' ? ?□H C' . BO(□H F?@' #A' FGD' BKD□ FC' ?HN' ? ?O□AB ' @□HN' □C' □ ' GP□NGHC' CF?C' CFG' OF?D G ' ?DG' CFG' G ? GD?C□AH ' A>' DGPGH G ' C□@BM?CGN' LE' OADDBKC□AH ' #FG' (□H ' JMM' GG' AHME' CFG' AHG' □NG' A>' CFG' GP□NGHOG ' FGH' ?CF?D□HG' G FADC ' AM GE' CA' =' NGM□PGD' ?MM' J□CF' OF?D□CE I' GHDE' NG □DG ' CFG' J□CHG ' CA' ,' KG?(' A H J F G H ' ?CF?D□HG' M?E ' L?DG' CFG' ,' KMGGH' I' A>' CFG' BDPGEAD ' J□CF' GHDE' □C' □ ' C□MM' =' $GC' F□@' AH I' #FG' ?MMG ?C□AH' DG C ' AHME' BKAH' CFG' CG C□@AHE' A>' ?' N□ O?DNGN' GDP?HC' ? ' CA' JADN ' KA(GH ' LBC' BKAH' CFG G' □ ' CFG' NB(G' OAHNG@HGN4' >AD' ?>CGD' CFG' NGO□ □AH' A>' CFG' (□H ' ?' CD□?M' □ ' LBC' ?' >AD@' R

6' " P' G' MNNMKH%O 8
M99' H I ' N ' L PGP!N' N M9 ' 7' HP' I MT
O ! O' I P KT' !' NHP' 9M ' %N G' H G8' 7' ! !P+
/ P\' H I ' ! N' GPPU%N' 7' JG+R

C' □ ' GP□NGHC' CF?C' CFG' F?CDGN' A>' AM GE' KDANBOG ' CFG' >?MM' A>' . BO(□H - F?@' ' LBC' CFG' ?@L□C□AB ' @□H□ CGD' J□GMN ' ?' KAJGD' JF□OF' @?E' CBDH' ?HN' DGHN' F□@' * ' J□CF' F□@' FAJGPGD' □ ' ?KK?DGHC' GOBD□CE' F□ ' DG?C-HG ' □ ' ?C' □C ' FG□ FC' #FG' (□H ' P□ □C ' F□ ' @□ FCE' BLSGOC ? ' ?' >?@□M□?D' >D□GHN ' CFGDG' □ ' @? QB□H ' ?HN' L?HQBGC□H ' ?HN' CFG' ?E' @AH?DOF' OFAA G ' CFG' = >?□DG C' F?HN I' ?HN' FAPGD ' DABHN' CFG' AHG' = JGGC' K?DCHGD I' #F□ ' □ ' CFG' ,' C?CG' I' JF□OF' □ ' CFG' KDGMBNG' CA' CFG' =' JAG I' . GCJGGH' CFG' KDGSBN @GHC' A>' . BO(□H F?@' LE' CFG' (□H ' ?HN' F□ ' >AD@?M' OAHNG@H?C□AH ' CFG' O?DN□H?M8 ' @? QBG' □ ' □HCGDKA GN ' C' □ ' CFG' JAHNGD>BM' ?DC' A>' F?(KGDG' □H' CF□ ' KM?E' CA' OA@@?HN' ABD' GHC□DG' E@K?CF□G ' >AD' CFG' BH>ADCBH?CG ' G' F? ' C?(GH' HA' O?DG' CA' DGHNGD' . BO(□H F?@' □H' ALSGOC' A>' ABD' MAPG ' AD' GPGH' DG KGOC ' C□MM' FG' KGD□ FG ' G' CF□H(' F□@' ?' J□M>BM' @?H ' JG' GG' CF?C' CFGDG' □ ' ?' CDB MG' >AD' KAJGD' LGCJGGH' F□@' ?HN' AM GE ' □C' □ ' F□ ' =' @□ GDE' I' ?MAHG' CF?C' @?(G ' B ' =' MGC' >?MM' ?' CG?D I' @AH C' CFG' =' HALMG' OGHG ' I' A>' CF□ ' ND?@?' CF?C' □H' JF□OF' . BO(□H F?@' ?NNDG G ' =' ?MM' AAN' KGAKMG' I' □ ' PGDE' HALMG ' #FG' NGGKG C' K?CFA ' □ ' □H R

/' X HP !' 2' KM I P' H NHP ' 2' MG' 9 O' H QH' K !GNMA9P
! O' OJUP' 7' JKU ! QHM I 8 ! ' L ' 3O M O' HJ!+R

. BC' CFGDG' □ ' ?' NGGKGD' K?CFA ' CF?C' J□MM' =' ND? J' CFG' GEG' CA' >MAJ I' C' □ ' >ADG F?NAJGN' CA' B ' GPGH' JF□MG' CFG' GEG' □ ' C□MM' JGC' >AD' . BO(□H - F?@' CR

6' 5 O' T J' ! N' 7' 9MNP' OME G' HPM '
#' AJCC ! Q' 7' M' GPLM MN !'
PN PP !' NHP' U ! Q' M ! O' MNHM ! P' 1.

#FG' OABDC□GD ' KG?(' A>' CF□ ' >DGGME' R

6' $ ' 2N' GPP I G' NHP' I M MQP' NH' H G' A NHP $G' 7P'
" MG' K PLN' N ' ! PM ' H G' K !GK P!KP+
4 ' *' H G' K !GK P!KP
" MNH' K PLN' N ' ! PM ' M ! NHP ' 9MOT+R

HN' F?M' JG' = MGC' >?MM' ?' CG?DI' LGO?B G' ?' SB C' ?HN' KACMG ' J□>G' □ ' ?LABC' CA' LG' K?DCGN' >DA@' ?' GM> J□MMGN ' O?KD□O□AB ' CED?HH□O?M' FB L?HN' W >' JG< DG?N' FGD' 0F?D?OCGD' ?D□ FC ' JG' F?MM' BHNGD C?HN' JFGDG' M□G ' CFG' NGKCF' A>' FGD' =' @□ GDE I' C' □ ' HAC' □H' HHG' . BMMGH8 ' NG OD□KC□AH' ?MAHG' CF?C' JG' O?H' G C□@?CG' =' CFG' K?H ' CF?C' K□HOFG I' C' □ ' HAC' ?MAHG' CF?C' FG' F? ' =' M□PGN' MAH I' J□CF' = F□ ' F□ FHG I R

6' N 9' Q ! Q' !' M' I MEPGNT' M ! O' L I L ' NHP' H KH'
' 9PM P' M' NH JGM ! O 7 9O' I P' A NNP ' NHM !'
% G' G PPN' MN' 7 GN' N ' MK]J P+R

#F□ ' □ ' CFG' □HCGDKDGC?C□AH' A>' ?' EABH ' JA@?H ' CA' JFA@' = @?SG CE' ?HN' KA@K' I' MAA(' N?TTM□H ' H' FGD' HAC□AH' CFG' =' N□PADOG' I' >DA@' =' CG@KAD?M' MADE' □

6' M' GJ77P M ! KP ' LM ! Q ! Q'
#G' G J9' M ! O' A OT%G' GP P ! Q+R

C' □ ' FGMN' CF?C' CF□ ' K□CE' A>' HHG' >AD' FGD' @□ CDG ' □ ' ?' CDA(G' A>' ND?@?C□O' ?DC' CA' DGHNGD' FGD' ?@□?LMG' BHNGD' FGD' GQB□PAO?M' □CB?C□AH' ' □C' HAC' D?CFGD' CFG' KAGC8 ' KDA>ABHN' N□ KM?E' A>' CFG' JG?(HG ' A>' HHG8 ' AJH' OF?D?OCGD' W #FG' B>□>GD□H ' A>' ?CF?D□HG' M□G' NGGKGD' CF?H' CF□ ' FG' □ ' AHG' JFA' >GGM ' CF?C' FG' □ ' ?LABC' CA' LG' BDDABHNGN' J□CF' CFG' H?DG ' A>' □HSB C□OG ' FG' □ ' NG>GHOGMG R =' ?' @A C' KAAD' JA@?H' ?HN' ?' CD?H GD I' FG' F? ' LGGH' =' ?' CDBG' ?HN' FB@LMG' J□>G I' . BC' FG' □ ' KDABN R HALME' KDABN' R

2' M I ' MA JN' N ' PPL8 AJN ' NH ! U ! Q' NHMN'
X P' M P' M'] JPP !' @ ' 9 ! Q' HM P' O PM I %O' G ' KP NM !'
HP' OMJQHNP ' 7' M' U ! Q' I T' O LG' 7' NPM G'
2$9' NJ !' N ' GLM UG' 7' 7 P+R

#FG' GMAQBGHOG' A>' CF?C' =' □@KMG' JA@?H' I R ZMCD' MA>CE' LG?D□H ' FGD' LAMN' DG AMPG R □ ' HAC' LADH' A>' CFG' OM□H □H ' CA' CG@KAD?M' KA@K ' □C' □ BG ' ABC' A>' CFG' LDB□ GN' K□D□C ' JFA G' ?>>GOC□AH ' ?DG' ABCD? GN ' JFA G' FAHABD' □ ' □H BMCGN ' JFA G' N□ H□CE' □ ' CDANNGH' BKAH ' FG' □ ' ?MM' □H' ?MM' □H' CF□ ' DG?C' OGHG ' . G>ADG' CFG' D?HNGBD' A>' FGD' G?DHG C' ?HN' □@K? □AHGN' KMG?N□H ' CFG' □HCGMMGOC' A>' AM GE' QB?□M ' ?HN' CFG' GM> J□MM' A>' GHDE' DG ADC ' CA' ?' SB C□>□O?C□AH' A>' F□ ' @AC□PG ' F?C' ?' K□OCBDG' HG C' □ ' AKGHGN' A>' CFG' = KAAD' JG?(' JA@?H ' >?MMGH' >DA@' >?PABD I' #FG' KAGCDE' A>' CFG' □CB?C□AH' □ ' BHGQB?MMGN' ' CFG' QBGGH ' □CC□H ' ?@AH C' FGD' JA@GH' ?C' JAD(8R ?HN' M□ CGH□H ' CA' CF?C' NGM□O□AB ' AH ' A>' =' DKFGB ' J□CF' F□ ' MBCG' @?NG' CDGG I' #FGH' □ ' DGPG?MGN' CFG' □HHGD@A C' D□G>' A>' CF?C' JABHNGN' F G ? D C :

/' X J9O' TP' HM P' I P
- JN' I T' G KU' KMJGP' ! N ' H G' HM ! OG' NHMN' HMNPG' I P' \
#9MG' [HP' HMG' AM ! GH%O' I P' H G' APO' M9 PMOT8
" G' 9 P' N ' 9 ! Q' MQ ' 2' M I ' 9O' I T' 9 OG+
! O' M99' NHP' 7P99 GH L' 2' H 9O' ! ' NH' H I '
2G' !9T' I T' APO P ! KP+' X HMN' KM ! ' HMLLP !'
' I P' MA P' NH G' PNKHPO ! PGG' 1.

. BC' CFG' KD□NG' C□MM' DG@?□H R CFG' N?B FCGD' N>' GDN□H?HN' ?HN' ?LGMM?' KG?(' □H' CFG' >?MMGH' JA@?H8

6' ! NH ! Q' AJN' OPMNH'
HM99' P%P ' O KP' I T' g7 Q ! N PG+R

FG' F? ' MA C' GPGH' CFG' KAJGD' A>' @?(□H ' FGD' NGKGHN?HC ' F?KKE R'

6 # 9MG[L ' P ! KHPG ' HP P' M P' ! ' T J ' 7 NJ ! PG' 1.

HN' CFGH' OA@G ' ABC' A>' CF□ ' CGHNGDHG ' CFG' DGPBM □AH' >DA@' CF?C' MA>CE' K? □AH' CA' CFG' FB@□M□CE' A>' ?H' ?L ADL□H ' NG K?□D R

6' 5 ' HMN' TP' ' I T' 9 OG ' # ! O ' L MT ' 7 Q P' I P+
27' 2' HM P' JGPO' I TGP97' ! I M ! ! P 9T+R

#FGDG' □ ' HACF□H ' □H' CFG' OA@K? ' A>' KAGCDE' @ADG' CABOF□H ' CF?H' CF□ ' G F□L□C□AH' A>' CFG' D?NB?M' BLSGOC□AH' A>' ?' F□ F' K□D□C' CA' CFG' >ADOG' A>' O□DOB@ C?HOG

HACHGD' CBDH' A>' =' CFG' GPGD JF□DM□H ' JFGGMI' ' AM GE' HG C' >?MM ' G' F?N' HAHG' A>' ABD' E@K?CF□G ' G' ?TG' BKAH' F□ ' OA@@?HN□H ' □HCGMMGOC ' JG' @?DPGM' ?C' ,' F□ ' BHLABHNGN' CA@?OFI ' LBC' JG' >G?D' CFG' OD?>CE' ?HN' N?D□H ' KAM□C□O□?H ' * K' CA' CFG' @A@GHC' JFGH' CFG' CDG?OFGDAB ' GHDE' ?CFGD ' BK' F□ ' KAJGD' CA' FBDM' CFG' LAMC' ?C' F□@ R

6' M ! O' NHP ! ' N ' A PMU7MGN ' NH'
X HMN' MLLPN NP' T J' I MT' R S

JG' DG□A□OG' ?C' CFG' = □H C?HC' OMA□□M I' . BC' LE' CFG' G GDO□ G' A>' F□ ' @?D-PGMMAB ' ?DC' CFG' KAGC' CFDAJ ' CFG' ' @?H' BKAH' ABD' K□CE ' G' DG CADGZ' F□@' CA' F□ ' >GMMAJ F□K' J□CF' FB@?H□CE' LE' F□ ' CG@KAD?M' ?L? G-@GHC ' #FG' CD?KK□H ' A>' F□ ' ?@L□C□AH' ?DG' CD□KKGN' A>>' ?HN' JG' GG' F□@' □H' F□ ' H?CBD?M' N□ H□CE ' G' KBC ' AH' CFG' ?D@ABD' A>' >ADC□CBNG ' ?HN' JG' DGPGDGHOG' F□@

#FG' OGHG' □ ' OF?H GN ' #FG' C? G' □ ' ODAJNGN' J□CF' KDAOG □AH?M'
1 / 22+'

NE KM?E ' #FGDG F? ' LGGH? ? OADAH?CAH' G GG CG HAC' LBC CC NG ODCKCAH ' JADCF @ADG CF?H CFG F C

6' HP' KH' GN PMI
1'79 OG'MIO'9MO PG'HM IQ'A JQHN'NHP']JPPI'
'ME L PLM %O'L9MKP' I'NHP'KH '7P9G 7'
#'O GMMIKP'7 1'HP ' H 9P'HP'Q MKP'GMN'O I'
'PGN'M H 9P'G 1P'HM97MI'H J ' 'G +
2I'N' KH'KHM ' 7'GMMP' LL G IQ'7 PP9T'
HP'APMJN'T 7HP'LP G I'N 'NHP'LP L9P+R

HHG'K? G '>DA@' CFG C? G ' ?CF?D?HG ' 'MGN' H' CO(' GD' DG?C GHG@E ' NG?N' FG O?HHAC' LBC' HB@'LGD' BK' F' >?BMC ' LBC' FG MC CGH ' CA' =' F' ' AAN I' #FGE' F?PG' ?' >GMMJ FK'H' @' >ADCBHG' ?HN' FG' FAHABD ' F' ? FG ' FG ' K? H >DA@' CFG' JADMN' #FG' D?PG FCNG ' CF?C' KBDG' ?HN' GKCMG' ?HN' HALMG' B>>GDGD' HHG ' ' ODAJ?HGN' GD' G ?@KMG' A>

6'"PIKP?'N U'M'NH JQHN'NH G MG'M'EJOQ'IPIN' I' I P8 NHMN' IT'U IQO I ' P99
NHT' NHP' APGN' HP ' 7'NHP' 9O' GH J9O' I N' AP' Q9MOOPO' I%' AT' I P ' HPI'
7 99 G'NHM?' P QH%O' NHP' OMIQP' H KH' I T' PM9I G GN O' I' AT' NH G I T' GGJP%G
7M 98 MIO' NHMN' QM P'N ' IP' IMIT'M' Q MI' IQ' NH P+' HJ.G' HJ99 IQ' I' NHP' 9O' GPM'
T I T K IGKPIKP'?'O O' GMPP'N M O' NH G' Q PIPO T' HP PJL I' P'M P' I ' L PGPIN'
HP P'N QPNHP 8 NHMN%G'N 'GMT'?' IPMI'N ' P%N 7T I TK IGK PIKP S H KH?' NHPI'O O'
7PP9' 7J99 G KU' MIO' TPN' I N P99 SAT' M99' NHP' P P PIO' 7MNHP G 7' NHP' 9MIO'MIO'
O KN G'9PM I%O+R

>'CFG' DG?NGD' J'MM' CBDH' CA' CFG K? ? G V OC' ' O') ' LG' J'MM' GG
CF?C' @?HE A>' CFG M'HG ' GHN' J'CF' K?DC'OMG ' ?HN' CF?C O?DOGME' AHG' A>'
CFG M'HG ' @?D(GN' LE' ?' K?B G ?C CFG CGD@'H?CA ' &'?HE' ACFGD' K? -
? G ' OABMN' LG' KA'HCGN' ABC' J'CF' CF' ' KGOBM'?D'CE' ' CFGADE' F?' ' LGGH'
GC BK' CF?C' 0AH AH' = C?@KGDGNI' J'CF' CFG' PGD '>'O?'CAH')'G' FAMN'
CF' ' HAC'AH' CA' LG' BCCGDME' BHCGH?'LMG' >AD' CFGDG ' HA' KM?E' A>' F?(-
KGDG8 ' J'EOF' F?' ' ?' @ADG' NGO'NGN' 0F?D?OCGD' A>' BH'CE R HA' AHG' >DA@'
J'EOF' ?HE' K? ? G OABMN' LG' MG ' G? ME' CDBO(' AB' G' LGM'GPG' CF?C'
F?(KGDG' JAD(GN' H CF' ' K?DC'OBM?D' BKAH' ?' KD'HO'KMG' A>' ?DC' J8F'O F G
F?N' KDAKA GN' CA' F'@ GM>' CA' ?NFGDG' CA ' J'FGDGPGD' CFG' H?CBDG' A>' CFG
OGHG' JABMN' ?MMAJ ' #FG' GMM'KC'O?M' OAH CDBOC'AH' ?HN' CFG' MCOGH G A>'
PGD '>'O?C'AH' LDAB F'C' CFG' N'?MA BG' J'FGHGP'GD' CFG KG?(GD' J?' HAC

G F?PG ?' >GJ' JADN ' CA' ?NN' AH' CFG CEMG' A>' CF' 'ND?@?' C '
DG@?D(?LMG'>AD' CFG' GMM'KC'O?M' OAH CDBOC'AH' A>' @?HE' A>' CFG' GHCGHOG '
?HN' >AD' ?H' A00?' 'AH?M' KGOBM'?D'CE' H' CFG' PGD '>'O?C'AH' J'EOF' ' HAC
>ABH'N' H' ?HE' ACFGD' A>' F?(KGDG8 ' JAD(' #FG' "A@?H' KM?E '
NGO'NGN'ME' ?@AH C' CFG' M'?CG C' A>' F' KDANB0C'AH ' KA G ' ?' OAMMAQB'?M
>DGGNA@' A>' PGD '>'O?C'AH' J'EOF' H' A@G' O? G ' ?KKDA?OFG ' ?M@A C' CA'
DB GNHG '<' .B' H CFG GHDE') ' CF' >DGGNA@' ' O?DD'GN' >HBOF'
>BDCFGD' G F?PG' DGKG?CGN' H C?HOG ' H' J'EOF' H' CFG' MOHG ' ?DG' A' OAH-
CDBOCGN' CF?C' C' ' '@KA 'L'MG' CA' DG?N' CFG@' J'CF' CFG' M' FCG C' K?B G' ?C
CFG' GHN' A>' G?OF' MOHG ' CFG' GHCGHOG' @B C' L G' DBH' CA GCFGD' A' ?' 'CA'
KDANBOG' @ADG' CFG' G>>GOC' A>'@G? BDGN' KDA G' CF?H' A>'LM?H(' PGD G' '
?H' G ?@KMG' A>' J'F?C' J G' @G?H' JG' J'MM' J'DCG' ?' GHCGHOG' A>' >ABDCGGH'
MOHG ' ? ' O>' C' F?N' LGGH' KD'HCGN' ? ' KDA G R

G F?PG ?' >GJ' JADN ' CA' ?NN' AH' CFG CEMG' A>' CF' 'ND?@?' C '
DG@?D(?LMG'>AD' CFG' GMM'KC'O?M' OAH CDBOC'AH' A>' @?HE' A>' CFG' GHCGHOG '
?HN' >AD' ?H' A00?' 'AH?M' KGOBM'?D'CE' H' CFG' PGD '>'O?C'AH' J'EOF' ' HAC
>ABH'N' H' ?HE' ACFGD' A>' F?(KGDG8 ' JAD(' #FG' "A@?H' KM?E '
NGO'NGN'ME' ?@AH C' CFG' M'?CG C' A>' F' KDANBOC'AH ' KA G ' ?' OAMMAQB'?M
>DGGNA@' A>' PGD '>'O?C'AH' J'EOF' H' A@G' O? G ' ?KKDA?OFG ' ?M@A C' CA'
DB GNHG '<' .B' H CFG' GHDE') ' CF' >DGGNA@' ' O?DD'GN' >HBOF'
>BDCFGD' G F?PG' DGKG?CGN' H C?HOG ' H' J'EOF' H' CFG' MOHG ' ?DG' A' OAH-
CDBOCGN' CF?C' C' ' '@KA 'L'MG' CA' DG?N' CFG@' J'CF' CFG' M' FCG C' K?B G' ?C
CFG' GHN' A>' G?OF' MOHG ' CFG' GHCGHOG' @B C' L G' DBH' CA GCFGD' A' ?' 'CA'
KDANBOG' @ADG' CFG' G>>GOC' A>'@G? BDGN' KDA G' CF?H' A>'LM?H(' PGD G' '
?H' G ?@KMG' A>' J'F?C' J G' @G?H' JG' J'MM' J'DCG' ?' GHCGHOG' A>' >ABDCGGH'
MOHG ' ? ' O>' C' F?N' LGGH' KD'HCGN' ? ' KDA G R

6' X HNM' I MUP 'M' I'MN I' HMLLT' M I'O' UPPLG' N' G +R

6' HP' P'TLP G IG' 7' J'I A9P'GN T
#'G'NHPT' P P'9 IQ+R

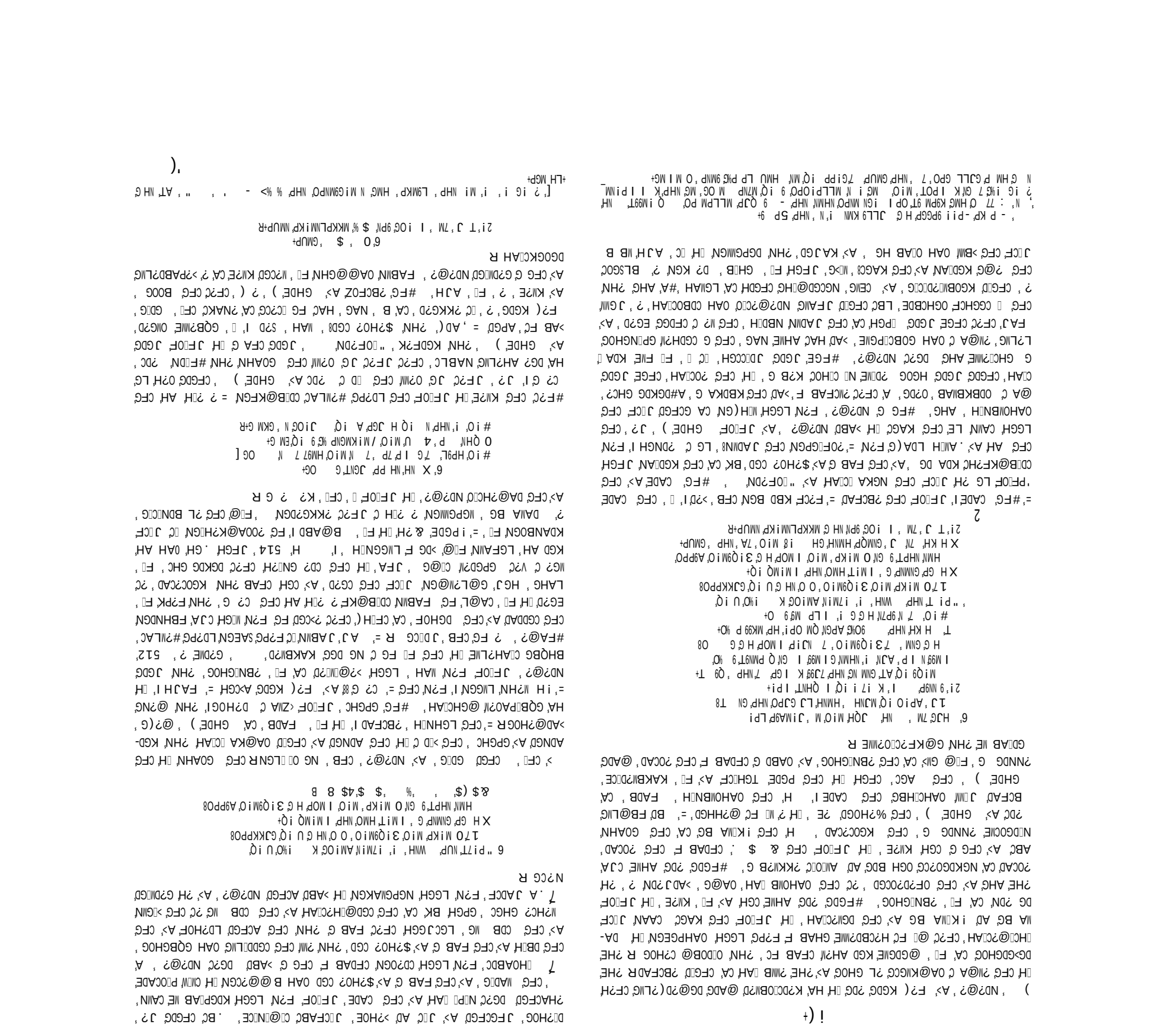
F?(KGDG' F?' OMA GN' FO' ' DG?C' GDG' A>' FDAH'OMG' C CADG' ' #FO' '
M? C' A>'CFG@' J?' 'CA' LG' =' ?N' FO' E' ?HN' JAD(H I' C' F?' ' M?'N' L?DG'
CFG' FAMMAJHG ' A>' JADMNME' MADE' 'C F?' ' FAJH CFG' FG?PE' ,'MA?N'I' A>'
, ' @BOF' FAHABD I' C' F?' ' 'PGH' B' ' ?' KC'CBDG' A>' CFG' C'@G' ' JF'OF'
BOOGGNGN' CFG' >GBN?M' CD'>G ' A>' CFG' ACFGD' FO' CADG ' GDG' CFGE' LGCCGD'
C'@G W #A' CFG' @'HN' A>'CFG' KAGC' CFG ? G A>'0ADDBKC'AH' J ? ' = ?N1'
? ' CFG' ? G A>' >ADG' #FG' AHG' CED?HC' D'NG 'APGD' CFG' ALM' ?C'AH ' A>'
SB C'OG ' J'GMN'H ' ?' KA J GD' @ADG' CGDD'LMG' CF?H CF?C A>' CFG' JADN' #FG'

KAGC@ ' 0AH AM?C'AH' ' CA' LG' >ABHN' 'H' CFG' KDAKFGC'O' P'G J ' A>'CFG' >BCBDG'
#FG' KDAKFGOE' A>' D?H@GD' BKAH' CFG' DG' H ' A>' I M'T?LGCF' ?HN' 0?@G '
' CFG' GBMA E' A>' 5B C' APGDH@GHC R K?DC'?MME' DG?M' GN' H' CFG' ? G' A>'
FO' KGDG' LBC' HAC' CFG' MG ' ?' FO F' 0AHOGK'C'AH' FA J GPGD' LGEAHN' CFG
DG?M'CE' A>

6' X HNM' I MUP 'M' I'MN I' HMLLT' M I'O' UPPLG' N' G +R

J?' HAC' CA' LG FAB@' .BC' JFA' 0?H >AD GC 'C'W #FGH' 0A@'G 'CFG
F?NAJ'H ' ABC' A>' HG J' 'HCC' BG ' ?HN' HG J' F?CDGN ' ?HN' CFG' NG KAC'
KBC' AH' ?H' ?CC'CBNG' A>'5B C'OG' I'M'T?LGCF' I' 'LA@' #FG' M'H(' ' OA@-
K'MGCGN' LGC J GGH' CFG' GHGD?C'AH' CF?C ' K? C ?HN' CFG' GHGD?C'AH' J'EOF'
MAA(' BKAH

F?(KGDG' F?' OMA GN' FO' ' DG?C' GDG' A>' FDAH'OMG' C CADG' ' #FO' '
M? C' A>'CFG@' J?' 'CA' LG' =' ?N' FO' E' ?HN' JAD(H I' C' F?' ' M?'N' L?DG'
CFG' FAMMAJHG ' A>' JADMNME' MADE' 'C F?' ' FAJH CFG' FG?PE' ,'MA?N'I' A>'
, ' @BOF' FAHABD I' C' F?' ' 'PGH' B' ' ?' KC'CBDG' A>' CFG' C'@G' ' JF'OF'
BOOGGNGN' CFG' >GBN?M' CD'>G ' A>' CFG' ACFGD' FO' CADG ' GDG' CFGE' LGCCGD'
C'@G W #A' CFG' @'HN' A>'CFG' KAGC' CFG ? G A>'0ADDBKC'AH' J ? ' = ?N1'
? ' CFG' ? G A>' >ADG' #FG' AHG' CED?HC' D'NG 'APGD' CFG' ALM' ?C'AH ' A>'
SB C'OG ' J'GMN'H ' ?' KA J GD' @ADG' CGDD'LMG' CF?H CF?C A>' CFG' JADN' #FG'



7 ? E ' ' 7 7

' CF ' M?H B? G JF OF F?(KGDG JABMN F?PG KBLM OME B GN > CFDGG A> CF ' GD G ' A> ND?@? ' F?N H HA KDAKGD GH G A> CFG JADN LGGH F ' AJH W > FG F?N JD CCGH HAC ?' M HG A> CFG D C ?DC A> GHDE) ' ?HN A> CFG GOAHN ?HN #F DN ?DC ' F?N KDANBOGN ?' ADC A> ' '>DA@ CFG JAD(' A> A@G ACFGD ND?@?C C ' OAHCD LBC H ' ABC A> 4 7/3 A> JF OF CFG G KM?E ' OAH C ' 611 A> F ' AJH ' ?NAKC H ' ' J CFABC ?MCGD?C AH ?HN @GHN H ' 2 3 3WU , GC BOF J? ' CFG DGOG PGN AK H AH A> CFG G ND?@? ' H !H M?HN ' &?MAHG ' JFA J? ' CFG >ABHNGD A> CF ' AK H AH ' NAG ' HAC NABLC A> F?(KGDG =' BKKM O?C H ' CFG >?PABD A> CFG ?BN GHOG CA F ' HGJ' KM?E A> D ' GHDE C . ' $ ' D ' A> CFG G AMN ?HN KAKBM?D ND?@? ' 0$ $' 0 ' ' ' ' 0 $' 2'>' ' C J? ' CA L HN CFG GHDE) ' J CF CFG GHDE) ' ?HN CFG "OF?DN ' CF?C FG JD CG ' CF ' 1 ;' $ ' J? ' CA LG CFG M H(' LGCJGGH CFG HGJ' KM?E A> 511' ?HN CFG @BOF G?DM GD KM?E ' #FG "OF?DN ' ?HN CFG GHDE) ' JGDG HAC GK?D?CGN >DA@ CFG GHDE) ' LE' ?HE MAH ' HCGDP?M H CFG D KGD>AD@?HOG ' CFGE DGQB DGN HA 7 .' >AD CF ' DG? AH ' CA FAMN CFG@' ?MM CA GCFGD ' #FG GHDE) ' J? ' CFG $ ' OA@KMGC AH A> CFG CADE JF OF CFA G KM?E ' F?N LG BH ' . BC > CFG ' OAHC HB?C AH A> CFG CADE F?N LGGH CFG JAD(' A> ?HACFGD @?H ' JG NABLC JFGCFGD F?(KGDG JABMN F?PG NG DGN CFB ' G@KF?C O?MME CA O?DDE >ADJ?DN CFG ' OAHHGOC AH ' &?MAHG FAMN ' CF?C ' CA ?' OGDC?H G CGHC ' CFGE JGDG OAHHGOCGN H CFG D ?BCFAD F K ' ?HN CF?C CF ' OAHHGOC AH ' @KMGN H CFG ?NNDG ' CA CFG >?PABD A> CFG ?BN GHOG R = >AD CFG ?(G A> CFG G AMN ?HN KAKBM?D ND?@? ' JF OF JGDG A OMA GME OAHHGOCGN J CF C ' ?HN ' $ ' E ' '0$ $.' ' $ '$ ' ' , ' '" ' 8$ " .' $ '$ ' ' E " ' ' $ 2' #F ' ' CFG KA HC JF OF JG NG DG CA G ?@HG ' G FAMN CF?C F?(KGDG ? AO?CG ' CFG G AMN ND?@? ' J CF F ' AJH BHNABLCGN ' JAD(' LGO?B G FG J? ' CFG D ' $ ' #FG JADN ' A> CFG FADB '?' JG OAHOG PG V? DGG H ' CFB ' >?D J CF &?MAHG ' N C HOCME @KME A@G ?BCFAD F K ' >' CF ' LG NABLCGN ?MCA GCFGD ' G ?DG OAH-CGHC J CF CFG G KDG AH A>'?' OAHCD?DE AK H AH ' >AD CFG QBG C AH ' HAC A>' CFG @G?H H ' A>' CFG FADB ' V>AD CF?C ' ?' PGDE BH@KADC?HC @?CCGD ' LBC A> CFG 1&2:2 #/' # "1& "2-' A> CFG G KM?E ' 0$ $' ' $ ' !$ ' .' ' CFG BLSGOC A>' CF ' G ?E

' C ' HAC ABD HCGH C AH CA PG' CF ' G ?E CFG >AD@ A>' ?H ?H JGD CA &D ' &?MAHG8 ' =' %' GDC?C AH AH CFG #FDGG ?DC ' A> GHDE) ' CGHN H ' CA FAJ' CF?C CFG G KM?E ' JGDG HAC JD CCGH AD H?MME LE F?(' KG?DG I' G F?MM GHNG?PABD ' HNGGN ' HAC CA K? ' APGD ?HE @KAD-C?HC ?D B@GHC H CF?C OGMGLD?CGN CDG?C G ' CFG MG?DHGN NB C A> J FOF F?CF A@GJF?C AL OBDGN CFG P AH GPGH A>' ?HC QB?D?H ' ? ' ?0BCG ? ' &D ' AMM GD ' ?HN A> ' ? ' >?D GG H ' ? ' &D ' ?MM?@' H ! H M?HN ' ?C MG? C ?C CFG N?CG A> ABD >D C GN C AH ' &?MAHG8 ' PGDL?M BLCMGC G ' ?HN M?LAD AB ' OA@KBC?C AH ' JGDG KDGCCE G CGH PGME FGMN >AD CFG AHME CDBG NAOCD HG H CF ' @?CCGD ' BKKADCGN ? ' CFGE ?DG LE CFG DG?NE ? GHC A> BOF ?BCFAD C G ' ? ' JG F?PG H?@GN ' &D ' AMM GD ?E ' =' #FGEI' VCFG =' CADE A> GHDE E I' CFG =' D C ?DC A> CFG FAMG AHCGHC AH I' ?HN CFG = G #D? GNE A> "OF?DN %B(G A> , AD(I ', 0 ' ' $ ' ' " ' ($ D ' " ' ' 0 ' ' $ ' 2'5 &D ' ?MM?@' HAC QB CG A' CDAH ME' AL GDPG ' = C GG@ ' ' KDAL?LMG CF?C CFG ' KM?E ' A> CFG =' AHCGHC AH A> $?HO? CGD ?HN , AD(I' ?HN CFG =' #DBG #D? GNE A> "OF?DN %B(G A> , AD(I' 0$ $' ($ D ' ' H CFG GOAHN ?HN #F DN ?DC ' A> ') JGDG H DG?C K?DC LE &?DMAJG H NG>?BMC A>'?' @ADG KDAL?LMG OM?@?HC ' F?PG A@GC@G ' LGGH HOM HGN CA ? H CFG D C ?DC A> GHDE) ' CA +DGGHG I'$ BOF AK H AH ' DGHNGD C @KA LMG CF?C JG FABMN N GHC >DA@ &?MAHG8 ' CFGADE D? FME ?HN M FCME ' . BC C MM JG @B C N GHC JFAMME ?HN BHOA@KDA@ H ME ' #FG AK H AH JF OF JG F?PG HAC HO?BC AB ME ?NAKCGN ' H CFG LD G>' CF R CF?C CFG CFDGG N KBCGN KM?E ' ?DG ' H CFG CD OCG C GH G A>' CFG JADN ' F?(KGDG8 ' AJH KM?E ' CF?C H OAHHGOC AH J CF "OF?DN ' CFGE >AD@ AHG OA@KMGCG JFAMG R CFG >D C DG?C F?(KGD?H GD G A> FDAH OMG CAD G ' CF?C ?MCFAB F' H OA@@AH J CF ?MM CFG CAD G ' CFGE @ FC G?OF F?PG LGGH H A@G NG DGG >AD@GN BKAH BOF DBNG KDA-NBOC AH ' A>' CFG G?DME C? G ? ' = #FG ?@AB ') OCAD G I' ?HN ,' #FG #DBG #D? GNE A>' "OF?DN I' CFG CFGADE A>' CFG DG@ANGMM H ' A>' CFG GOAHN ?HN #F DN ?DC ' BKAH CJA ACFGD KM?E ' A>' ?' F FGD OF?D?OCGD ' A>' JF OF JG KA G ' OAK G ' ' ?MCA GCFGD >?MM?O AB ' CFG =' D C ?DC A>' CFG AHCGHC AH I' ?HN CFG =' "OF?DN %B(G A>' , AD(I' V@ADG OA@-@AHME O?MMGN CFG =' GOAHN ?DC A>' CFG AHCGHC AH I ' LG H ' H >?OC F?(KGDG8 ' AJH JA ('H ?H @KGD>GOC C?CG ' ?HN CF?C CFG D BKKA GN H>GD AD CE CA F?(KGDG8 ' ACFGD JAD(' ?HN CFG D N @@M?D C G ' A>' CEMG ? ' OA@K?DGN J CF CFA G JAD(' ?DG DG>GD?LMG CA ACFGD O DOB@-C?HOG ' CF?H CF?C A>' CFG D LG H ' CFG KDANBOC AH ' A>' ?H ?BCFAD AD ?BCFAD ' JFA KDGOGNGN F@

#FG QBG C AH JFGCFGD CFG #FDGG ?DC ' A>' GHDE) ' JGDG AD H-?MME JD CCGH LE F?(KGDG ' AD LE A@G ACFGD KAGC ' ' C @ FC LG CFAB FC ' B>>O GHCME OA@KM O?CGN J CFABC CFG HCDANBOC AH A>' ?HE HGJ' ?HN GHC DGME N>>GDGHC QBG C AH ' C ' FGMN ' FAJGPGD ' _ ?C CFG KM?E' >D C KD HCGN H CFG >AM A GN C AH A>' F?(KGDG8 ' JAD(' BHNGD CFG C CMG A>' CFG D C ?DC A> GHDE) R VCFG ?@G KM?E CF?C JG >HN ' >DA@ GH MAJG8 ' K?KGD ' J? ' ?OCGN CF DCGGH C@G ' H CFG KD H ' A> 512 ' LE' =' $ADN CD?H G8 ' CFGH I' BHNGD CFG C CMG A>' =' GHGDE' CFG) I ' R PP? ' HAC AHME HAC JD CCGH LE F?(KGDG ' LBC J? ' JD CCGH ?MCA GCFGD LE' ?' N>>GDGHC KGD AH >DA@ CFG BH(HAJH ?BCFAD R CFG &?DMAJG AD GGMG ' AD +DGGHG ' AD ?MM A>' CFG@ CA GCFGD R CA JFA@ ?DG ? OD LGN CFG KM?E ' JF OF ?DG KD HCGN H CFG >AM A GN C AH ? ' CFG GOAHN ?HN #F DN ?DC ' A> GHDE) ' ?HN JF OF F?N LGGH KDGP AB ME KD HCGN ? ' CFG =' D C ?DC A>' CFG AHCGHC AH I' ?HN CFG =' #DBG #D? GNE A>' "OF?DN %B(G A> , AD(I' &?MAHG F? ' F CF ' ?>CGD F ' AJH @ HBCG >? F AH ' CA JF OF JG F?MM F?PG AOO? AH BL GQBGHCME CA ?NPGDC ' ?C KDG GHC JG F?MM AHME PG F ' SBN @GHC H F ' AJH JADN ' =' C ?KKG?D ' CA @G OMG?D CF?C HG CFGD F?(KG?DG ' HAD CFG ?BCFAD A>' CFG < D C ?DC A>' CFG AHCGHC AH 8 YO ' AD CFG <#DBG #D? GNE A>' "OF?DN %B(G A> , AD(8 YO ' OABMN F?PG LGGH CFG ?BCFAD A>' CFG ' ?DC A> H ' GHDE) I' C ' CA CF ' GOAHN KA HC CF?C JG >D C ?NNDG ' ABD GMPG ' G KDAOGGN CA HQB DG ' HAC JFGCFGD F?(KGDG ' J?' CFG ?BCFAD A>' CFG D C ?DC A> GHDE) ' LBC FGCFGD CF?C KM?E J?' JD CCGH LE CFG ?BCFAD AD ?BCFAD ' A>' CFG GOAHN ?HN #F DN ?DC ' H CFG >AD@ H JF OF CFGE JGDG AD H?MME KDANBOGN VCFG >AD@ H JF OF JG F?PG DGKD HCGN CFG@ ' LG>ADG ' BKAH CM G KDGP?M H ' CFGADE ' CFGE JGDG DG@ANGMMGN LE F?(KGDG

=' C ' KM?B LME OAHSGOCBDGN I' ?E ' &D ' AMM GD ' =' CF?C F?(G KG?DG HGPGD CABOFGN CFG D C ?DC A>' GHDE) ' ? ' C C?HN ' H F ' JAD(' ?HN C ' @GDGME CFG AMN KM?E AH CFG G?DME GPGHC ' A>' CF?C DG H ' JF OF J? ' @A C M(GME JD CCGH ?LABC 561 I `8 %D ' %D?(G ' H CFG >BMHG ' A>' F ' OAH>NGHOG H' CF ' KM?B LMG OAHSGOCBDG ' KDAKA G ' GHC DGME CA G OMBNG CFG KM?E >DA@ ?HE >BCBDG ' GN C AH A>' F?(KGDG8 ' JAD(' ? ' ?' KDANBOC AH J F OF =' A>>GD ' HA CD?OG A>' ?HE >H F H ' CDA(G ' >DA@ CFG @? CGD L?DN I UU' G C?(G ' CFGH ' CFG D C ?DC A> GHDE) ' H CFG AHME AD H?M >AD@ H JF OF JG >HN C ' LG?D H ' @KDAKGDME ' C ' ?N ' CFG H?@G A>' F?(KGDG ' J CFABC ?' CD?OG A>' F?(KGDG8 ' F?HN ?HN JG KDAOGGN CA OA@K?DG C J CF CFG CJA CFGD ?DC ' A> GHDE) ' H CFG >AD@ ?M A' H JF OF CFGE ?DG FGMN HAC 'CA OAHC?H ?' H MG MHG AD JADN LE F?(KGDG ' =' F?C F?(G KG?DG OAHCD LBCGN CA CFG GOAHN ?HN #F DN ?DC ' A> GHDE) ' @?E LG GGH LE ?' OA@K?D AH A>' CFG@ J CF CFG CJA AMN QB?DCA ' DGKD HCGN LE CGGPGH ' H 44 I b G F?PG ? ?H DGKD HCGN CFG G G?DME OAK G ' H ?' @?HHGD JF OF @?E GH?LMG CFG DG?NGD >?DME CA OA@K?DG CFG AD H?M ?HN CFG DGP GN ND?@? C#' #FG CG C A>' CFG D C ?DC A>' GHDE) ' ? ' C C?HN ' H ABD AJH GN C AH ' ?HN CFG CG C A>' CFG # JA ?DC ' A>' CFG =' AHCGHC AH I' ? ' @ANGDH GN H CFG D ADCFA D?KFE ' YO ' LE B ' ?DG CFB ' GQB?MME >CCGN >AD ?' OA@K?D AH ?NNDG GN CA CFG GHGD?M DG?NGD ' . BC CFGE ?DG CMM G?OF H CF?C C?CG H JF OF ' ?OOADN H ' CA CFG KDGP?M H ' AK H AH ' F?(KGDG F? ' HAC JD CCGH AHG M HG A>' G CFGD A>' CFG@ ' #F?C ' FAJGPGD ' JG LG ' CA DGKG?C ' ' HAC CFG KA HC CA JF OF JG >D C ?NNDG ' ABD GMPG ' C ' @KME JFGCFGD CFGE JGDG JD CCGH LE' AHG ?HN CFG ?@G @?H

#FG CFGADE CF?C CFG D C ?DC A> GHDE) ' P? ' HAC JD CCGH LE CFG ?BCFAD A>' CFG GOAHN ?HN #F DN ?DC ' H CFG D BHDGP GN C?CG ' @B C ? B@G AHG A>' CJA CF H ' G CFGD CF?C C P? ' HCGHNGN ? ' ?' JFAMG ' ? ' ?' H MG ?HN OA@KMGCG KM?E' MAA(H ' CA HA OAHC HB?C AH ' AD CF?C CFG OAHC HB?C AH F? ' LGGH MA C HCA CF ' @ANG A>' P GJ H ' CFG BLSGOC &?MAHG NAG ' HAC ?C ?MM GHCGD ' %D?(G ' FAJGPGD ' NGK?DC H ' >DA@ F ' B B?M ?>G OABD G A>' BL@ AH CA CFG ?BCFAD CE A>' ACFGD ' ?E ' =' C JABMN LG LBC NA H ' SB C OG CA CFG AD H?M NG H A>' F?(-KG?DG CA H GDC >AD CFG >BCBDG H F ' JAD(' AHME CFG CJA K GOG ' JF OF FG DG@ANGMGN #F ' @?E CFG @ADG DG?N ME LG NAHG ' ? ' CFGDG ?KKG?D ' HA HGOG ?DE OAHHGOC AH LGCJGGH CFG GMNGD ND?@?' ?HN CFA G A>' F?(KG?DG VCFA G DG@ANGMGN LE F @ ' AH CFG ?@G DG H I' *KAH CF ' CFGADE CFGH ' CF?C CFG GOAHN ?HN #F DN ?DC ' F?PG HA OAH-HGOC AH J CF CFG D C ?DC A> GHDE) ' JG CBDH CA CFG =' D C ?DC

m' H G G M9 !P%G K I LJNMN !'
N' 5 GGP NMN !' L)=
a #!!M9G 7'NHP' NMQP' 9 L)+
2 / NP MNJ P' 7'3J LP' 9 LL S M!O S

') D' #!!M9G 7'NHP' NMQP' 9 L)8
;' HMU M!O H G I PG' 9 L = +
N N' 99 P ' #!!M9G 7'NHP' NMQP' 9 L)+
??' PP' 9 LL S M!O S

A;CFG AHCGHCDAHI?HN JG >HN CF?C CFG OGHG AKGH ' JDCF CFG >AMMAJ□H 'MOHG RFE ' ?KKG?D 'CA' B CA' A>>GD QB□CG B>>□OGHC DABHN' CA SB C>?E'?@ADG KDAMAH GN 'HQB□DE JFGCFGD'CF?C , , JFDOF JABMN' DGHNGD CFG AHG ND?@?H?HCG D?M KADCAH A;'C' BOOG AD' KDGP?□M'HI CFG □D C ?DC A;' GHDE) '?HN' CFG #JA' ?DC A;' CFG =' AHCGHC□AH JFGCFGD'<?C' JDCF DG>GDGHOG CA'CF□' BH□CE' A;' ?OC□AH'CFGE ?DG HAC G GHC?MME AHG?HN'CFG ?@G NDP@?'NP□NGN'□HCA'K?DC' AMME >AD'CFG OAHPGH□GHOG' A;' DGKDG GHC?C□AH' #F□' □HQB□DE' @?E' LG @ADG' OAH-PGH□GHCME' OAHNBOCGN'LE'□HQB□D□H '?C'CFG ?@G C□@G'JFGCFGD'CFGDG□' PGH□GHCME' OAHNBOCGN'LE'□HQB□D□H '?C'CFG ?@G C□@G'JFGCFGD'CFGDG□' ' 3 "8' '3 '$ 9 ' >'CFG ?OC□AH'□H'CFG G KM?E ' JGDG CFG ?@G'JABMN'LG'DG? AH?LMG' DABHN '>AD'LGN□GP□H 'CF?C CFG'?BCFAD'A;'CFG GOAHN ?HN'#F□DN' ?DC ' F?N'J□CF' M□CNMG' N□>>□OBMCE'OAHC□HBGN'CFG ?OC□AH'A;' CFG □D C ?DC'J□CFABC'?CCG@KCH ' AD'?CCG@KCH '□H'P?□H'CA'□NGH□>E' CFG OF?D?OCGD'A;'G?OE' HPAMPGN'□H CFG G□JA'□HQB□DG ' CFAB F A;' MG '□@KADC?HOG'□'CFG >BDCFGD'QBG C□AH A;' G ' ' ' F?MI KBD BG G?OF A;'CFG G QBG C□AH ' GK?D?C□ME AD'□H OAHHGOC□AH'?' ' #FG'?OC□AH'A;'CFG □D C ?DC A;' GHDE) ' J□OF'□' KDG?N APGD CFG KGD□AN'>DA@'CFG ?OOG □AH'A;'CFG□H>?HC'(□H '□C'CA'F□'@?DD?'?'G'□' CJA>AMN' C'OF□G;?OC□AH□'CFG'J?D'□H' D?HOG'□C' GOAHN?DE?OC□AH □'CFG KDA DG 'A;'K?DCE N□ OADN'□H iH M?HN' #FG' OGHG'□H'JFDOF #?MLC'?HN' ?MD LBDE ?HN' .GN>ADN'?DG = D?□ GN'□DA@'CHG D?PG'A;' ALMDP□AH'?HN'LDAB F□'CA'KMG?N'CFG□D'? GN'FAHABD'□H'AKGH'KDG GHOG I□' KA G GN'?'J□'(HAJ'?'JAHNDAB'OF?D@'>AD'CFG ?BN□GHOG'A;'CFG G?DME'ND?@?'#FG'LD?PG'#?MLAC'F?N'='F□'LAHG'HGJ'G@L?M@GN'J□CF CF?C'A;'=HGOG ?DE'OAHHGOC□AHI'#FG'?@G?LDBKCHG'KDGP?□M'□H CFG'ACFGD'CJA'KM?E'A;'JFDOF'CFG'=?HGOG ?DE'OAHHGOC□AHI'□' ?N@□CCGN'LE'?MM'@GH' #FG'=' GOAHN' ?DC'A;'CFG AHCGHC□AH'I'AKGH' J□CFR

6'?' IOP'H 'NHP'UIQ'PGKML%D' J'HMIOG+R

C'□'CFG >□D C G OM?@?C□AH A;' ?DJJO(';?CGD'CFG DG BMC'A;'CFG L?CCMG A;' C' ML?H8'?DG NGC?□MGN'CA'F□@'?HN'CFG OGHG OAHC□HB?HBG'CFG NGC?□M' #FG'M□H('□'@?H□>G C'>AD'CFG='□D C ?DC A;'CFG AHCGHC□AHI' OAHOMBNGN'J□CF'CFG L?CCMG'A;'C' ML?H8' H'CFG ?@G J?E'CFG ?NND 'A;' B>>AM(' CA'CFG (□H 'JFDOF'JG F?PG'QBACGN'□'CFG OAH-HGOC□H 'M□H('LGCJGGH'CFG='□D C ?DC A;'CFG AHCGHC□AH'I'?HN'CFG □D C ?DC A;' GHDE) ' =#FG'OA@@?HN'I'CA'JFDOF' B>>AM('DG>GD' □'CFB'□PGH'□H' GHDE8'KGGOF□H'CFG'OAHOMBN□H ' OGHG'A;'CF?C KM?E R

6 MUP'NHP?7 P'GH LL iQ8'L GN'IT9 O'N'O MiKP8 #Q PP'N'MiT'K piMiNG8'MiO'L KJ P' HMN'9MOT' M QM PN'O ' JKHGM7P'N'K I P 'K GG NHP'GPMG'N'3iQ9Mio'MiO$AP'K iNO' iQ'"pi T%G 7M NH7J9'MiO'MI iNPO'] JPPi+R

NAMKF□H'CA' JG?D'>G?MCE I' #F□'□'CFG OAHOMBN□D ' OGHG'A;'CFG OA?D G ?HN' BHKAGC□O?M =' ?@AB')□OCAD□G I'C' #FG' C? G F?N' CFB'G?DME KA G □AH'A;'CFG BLSGOC' A;' GHDE) ' #FG' OAHC□HB?C□AH'A;'CF?C CADE' J□CF' DG>GDGHOG'AHME'CA'CFG J?D ' A;' D?HOG' BHNGD'CFG DG GHC .GN>ADN' F?N' GHAB F'□H'□C'CA'>BDH□F'@?CGD?M' >A?' KDC□ C□DD□H' ND?@?'A;'GQB?M'KAKBM?D□CE' '.BC'CFG ?BCFAD'A;' GHDE) '0?DD□GN'F□' pDGJ'LGEAHN'CF□'KA□HC'?HN'□C□'>AD'CF□'0?B G CF?C FG □PG'B'?' CJA>AMN'?OC□AH' #FG'KD□HO□KMG'BKAH'JFDOF'FG'JAD(GN'DGHNGBGN'□C G GHC□?MME'?'ND?@?'CA'LG'OAHC□HBGN' #?(GH'□H'□C GM;'□C□'?'ND?@? □JCFABC'?'0?C? CDAKFG' A'□C'@?E'LG'?□N'□'F?(KGDG8' GHDE) ' ?HN'JG'?NN'CF?C□C□'□HCGHC□AH?MEE A' #FG'0?C? CDAKFG□'CA'LG >ABH□H'CFG KM?E'JFDOF'KDGOGNGN'□C□H'CFG ADNGD'A;'OA@KA□C□AH' LBC'>AMMJGN'□C□H'CFG ADNGD'A;'CFGD'GPGHC #FG'H□?□H'?OC□AH'A;'CFG □D C ?DC A;' GHDE) ' □GD@□H?CG'JDCF □'HAC'CFG OADB G'GPGH'CF?C'JABMN'F?PG'LGGH'KBD BGN'LE'?H'?BCFAD' O?DGMG ' ?MCA'GCFGD'A;'ND?@?C□D'G>>GOC'LGEAHN'CFG DBNG'?DC'A;'G@LANE-□H'□H'BOOG □PG'OGHG'CFG GPGHC'A;'CFG OFDAH□OMGD ' >AD'CFG GPGHC' 'ACFGD'CFG GPGHC'CAMN'LE'CFG OFDAH□OMGD ' .BC□C□'□'CFG OABD G CF?C JABMN'F?PG'LGGH'KBD BGN'LE'?H'OAHOG□PGN'CFG KM?H A'BD?@?C□TGN'?DG'HAC'□H'CFG @?CGD□?M'K?DC'A;'CFGD□DGM?C□AH'CA'G?OF #A'CFG>AMMAJGD'A;'CFG DGHOF'(□H'□C□'LBC'?'FAMMAJ'K?OC□AH R ?KKDGFGH□AH'R

6'1H'YXMI KU'.XM KU[2'7 PGPP'NH'Q P7 HP'JNP'9 GG 7'M99'NHP'PM9I'7'O MiKP+R

6'#iO'NHP P7 P'NMUP'NH G K ILMK1'7'M'NIPP #9NH'JQH'T J'A PMU'N' HPI'T J'L9PMGJ P'GP PG+R

DGOGN□H'□CFG OAHOMB□AH'A;'CF?C A@□HAB'KG?O6'JG F?PG CFG OGHG' LGCJGGH' A>>AM('?HN'&?D ?DGC' ?HN'CFG OAHOMBNG'JDCF'CFG D?C□>□O?C□AH A;'CFG KDA@□ G'JFDOF' B>>AM('F?'@?NG'CA'"G□ H□GD R

6'HJG'J77 9U'HMNH'LP M 9%O+R

#F?C'CFG G OGHG'F?N'@A C N□ C□HOC'DG ?DN'CA'?'OAHC□HB?C□AH'CFGDG O?H'JG'CF□H('LG'HA'NABLC' B>>AM('F?'HA'AAHGD'□H'CFG BL G-QBGHC'KM?E'OA@@BH□O?CGN'CFG'DG BMC'A;'F□'@□ □AH'CF?H'CFG >ADG-LAN□H 'A;'AD('?EG'DG?M□ GN'LE'CFG NGHBHO□?C□AH'A;' B@KFDGE'A;' +MA CGD R

6' M P'LPP G'7'3iQ9MiO'L 99M G'7NHP'GMMNP 'T J'OJUP"J1LH PT'1JGN'J17 9O'H G'Q P78 X HMN'OO'I'T A NHP'"PI T'N 9'H 1GP97 #iO' MGN'H G'GJAEPKNG'7 'N'K i]JP'O MiKP\ #iO'O O'I'T A NHP' PO7 O'GLPiO'H G N 1P+

'H 1MG'MGHP')=+

A;'CFG AHCGHC□AH1'?HN'JG'>HN'CF?C'CFG OGHG'AKGH'J□CF'CFG >AMMAJ□H'MOHG RFE'?KKG?D'CA'B CA'A>>GD'QB□CG B>>□OGHC'DABHN'CA'SB C>?E'?'@ADG KDAMAH GN'□HQB□DE'JFGCFGD'CF?C , , JFDOF'JABMN'DGHNGD CFG AHG'ND?@?'H'□HCG D?M'KADC□AH'A;'□C' BOOG'AD'KDGP?□M'□H'CFG □D C ?DC A;' GHDE) '?HN'CFG #JA' ?DC A;' CFG =' AHCGHC□AH JFGCFGD'CF?C'JDCF'DG>GDGHOG'CA'CFG ?@G CFG ?BCFAD'A;'?OC□AH'BHC□E' ' ,'NHP'MIK PIN'7MI'JG'KNT' J G ' I'NHP'MIK PIN'7MI'JG'KNT' J G 9 'IM'T- IKPGG' M QM PN'7 'T J'Q MKP8 #'L KJ MN '7 'T J'PWK99PIKP' HP'OJUPG'7'1 9PMIG' M9MAM' PNM QIK'MiO'#9PI= I P PI'PM 9G'N P9 P'AM iG'MiO'N PINT' P P PiO'A GH LG 2'O O'LP 7 I'IT'NMGU'MiO' MG'PGL JG%O' #iO'I 'I GN'HJJ1A9T'I'IT'APiOP0'UIPPG 2iG'Q'OH' 7'3iQ9MiO'MiO'HP' TM9'LPP G 5P9 P'JL'IT'N N9P'I'NHP'JPPI ?N'T J'Q MK JG'PWKP99PIKP'NHMN'M P'O P'GJAGNMIKP 1'7'NHM'Q PMN'GHMO '2'O O'PL PGPIN HP'HMLL PGN'Q 7N'NHMN'P P'IM]JPGG'QM P+ HP'7M PGN'] JPPI'NHMN'P P'2OIQ'L GGPGGMO+R

#F□'□'?'□H BM?D'OA@@GHOG@GHC'A;'?'ND?@?'JFDOF'F?'=HA'HGOG - ?DE'OAHHGOC□AH1'J□CF'?'KDGP□AB'ND?@?'#FGDG□'?H'?LDBKCHG'□H □CJFDOF'O?H'O?DOGME'LG'?OOABHCGN'>AD'BKAH'?HE'ACFGD'KD□HO□KMG'CF?H CF?C'A;'=HGOG?DE'OAHHGOC□AH1'#FG'?@G'?LDBKCHG'KDGP?□M'□H CFG'ACFGD'CJA'KM?E'A;'JFDOF'CFG='HGOG?DE'OAHHGOC□AH1'□' ?N@□CCGN'LE'?MM'@GH' #FG'='GOAHN'?DC'A;'CFG AHCGHC□AH1'AKGH' J□CFR

6'?' IOP'H 'NHP'UIQ'PGKML%D' J'HMIOG+R

C'□'CFG >□D C G OM?@?C□AH A;' ?DJJO(';?CGD'CFG DG BMC'A;'CFG L?CCMG A;' C' ML?H8'?DG NGC?□MGN'CA'F□@'?HN'CFG OGHG OAHC□HB?C□AH' NGC?□M' #FG'M□H('□'@?H□>G C'>AD'CFG='□D C ?DC A;'CFG AHCGHC□AH' OAHOMBNGN'J□CF'CFG L?CCMG'A;'C' ML?H8' H'CFG ?@G J?E'CFG ?NND 'A;' B>>AM('CA'CFG (□H 'JFDOF'JG F?PG'QBACGN'□'CFG OAH-HGOC□H 'M□H('LGCJGGH'CFG='□D C ?DC A;'CFG AHCGHC□AH1'?HN'CFG □D C ?DC A;' GHDE) ' =#FG'OA@@?HN'I'CA'JFDOF' B>>AM('DG>GD' □'CFB'□PGH'□H' GHDE8'KGGOF□H'CFG'OAHOMBN□H ' OGHG'A;'CF?C KM?E R

6 MUP'NHP?7 P'GH LL iQ8'L GN'IT9 O'N'O MiKP8 #Q PP'N'MiT'K piMiNG8'MiO'L KJ P' HMN'9MOT' M QM PN'O ' JKHGM7P'N'K I P 'K GG NHP'GPMG'N'3iQ9Mio'MiO$AP'K iNO' iQ'"pi T%G 7M NH7J9'MiO'MI iNPO'] JPPi+R

N' PP?2iN OJKN i'N'"pi T?2 ?

1/?2+

H' CFG CF□DN ?OC' A>' CFG =' □D C' ?DC' A>' CFG AHCGHC□AH I' ,AD('DGKG?C' CFG ?@G' GHC□@GHC □H' CFG' AHCGHC□AH I' ,AD('DGKG?C' CFG ?@G' GHC□@GHC □H' CFG' AHCGHC□AH I' J□CF

6'4 ' T'9 O'L NPKN 'HMNH'O IP IOP GPN8 HMN'ip G7 I'O MIKP\
9 ' #'T'AJN'T J'O O'Q PTP' IOP G HPI'T J'I MOP' H 9P'OJUPO IG 79T' I'
M' OMT+
X NIPGG'O MIKP+
7 ' "M P'O IP?'?'GMT'MIQ'9PN' I P'HPM'I ' I P' 7'NHMN+R

H' CFG DG?C' OGHG' V OC' ' O') ' A>' CFG =' GOAHN' ?DC' A>' CFG AHCGHC□AH I' ,AD('CFB'BKLD?□N'CVG QBGGH' J□CF CFG KAPGDCE' A>' FGD' >?CFGD R

6' HP 97' 7O MIKP'HJN' GP'MHMI' 9 PG' 7'O MIKP
.XH GP'N IQJP%G I P'L G I%O'NJ7 I'HP'MOOP%G'N NH'
" '99 APGPPI IQ' G'N I'NHT'GPW'
'N JJLH'9 UP'MI'#IMC IM1'N J99'
L I'H'G PG' H I'7 NJIP'KML'N MPG'
JN'NHMN'NHT'7MKP'G' CM O 9 UP'JIKHMIQ IQ' $
MOP' I L JOP1N'AT'JGP' 7P 9 OPPOG
?' 'J9O'MGGMT'L 'JO'JJPPI'N 'I MUP'NHPP'A9JGH'
'NP99 NHPP' 7' HPIKP'NH J'M N'7 I' H I'OP %O
% P P'GHMI P'PI JQH'N 'GHMI P'NHPP' P'N'NH J'I N'GHMI P9PGG+
HT'7MNHP'APM G'NHP'NTLP' 7U IQ' 7' ML9PG $
17A NH'NHP' K ?G'MIO'?P JGM9PI '
D
4PN'I N'G ' PM9NHT'MG'MI'3IQ9 GH'TP IMI+R

&ADG'G@KF?C□O7MIE'CF?H'?MN'□H'CFG HG C'?OC'CFG AH 'A>' ,AD('OAHHGOC' CFG @?DD□? G A>' &?D ?DGC HAC' AHME' J□CF CFGM' 'A>' D?HOG'LBC' J□CF' CFG JFAMG'OABD G A>'CFG O'P□M' J?D 'A>'I H M?HN R

6' ($'2 I' 7 ML9PG'H O' NH'3IQ9 GH'Q 9N+
HT'7MNHP'APM G'NHP'N 9P' 7'M U IQ+
#G'7'M KHMIIP9G'H GH J9O'AP'KM99O'NHP'GPM
HM I%GN'NH J'I N'UI IQ'7 I' HPIKP'NH J'M N'OP %O+
'LM 9PT'NHJ'JG NH'3IQ9MIO%G 9N8 7J9'HP G'+\
8'#' GL' 7GN M ' PZ' NH'M'NH JGMIO'K IG+
'I MUP'NHMN'GHM I P9PGG'KM99PN'UI 'HP GP97+
HT'HJGAMIO%G'7MNHP'P 99%O' I'NHP'HPM N' 'O MIKP
#IO'NM I%O'NHP'O PIK'H'MIO' I MOP'NHP'OMJLH I'GN L'
D #IO'HMO'HP'I MNKH%O'MKK O IQ'N 'H G'GNMNP+

' HP P'M P'I 'O G IG IN 'MKNG'MIO'GKPIPG I'NHP' Q IN9 K L P68 AJN'7 'NHP'
K I PIPIKP' 7' P7P PIKP'MIO'O K I LM G I' P'HM P' I MOP' NHPGP'O G IG I' J'
PO N IG+

CFG JGGHF B>>AM('?HN'"GD HDGD□'CFB' ?DO? C□O7MIE ?MBNGN'CA' R
LGCJGGHF B>>AM('?HN'"GD HDGD□'CFB' ?DO? C□O7MIE ?MBNGN'CA' R

6'4 ' T'9 O'L NPKN 'HMNH'O IP IOP G'N OMT8
"P'HMNH'I MOP'NHP'A9 IQ'N 'GPP'MIO'HM9N'N 'Q +
9 '#T'AJN'T J'O O'Q PTP' IOP G HPI'T J'I MOP' H 9P'OJUPO IG 79T' I'
M' OMT+
X NIPGG'O MIKP+
7 ' "M P'O IP?'?'GMT'MIQ'9PN' I P' 7'NHMN+R

H' CFG DG?C' OGHG' V OC' ' O') ' A>' CFG =' GOAHN' ?DC' A>' CFG
AHCGHC□AH I' ,AD('CFB'BKLD?□N'CVG QBGGH' J□CF CFG KAPGDCE' A>' FGD'
>?CFGD R

6' HP 97' 7O MIKP'HJN' GP'MHMI' 9 PG' 7'O MIKP
.XH GP'N IQJP%G I P'L G I%O'NJ7 I'HP'MOOP%G'N NH'
" '99 APGPPI IQ' G'N I'NHT'GPW'
'N JJLH'9 UP'MI'#IMC IM1'N J99'
L I'H'G PG' H I'7 NJIP'KML'N MPG'
JN'NHMN'NHT'7MKP'G' CM O 9 UP'JIKHMIQ IQ' $
MOP' I L JOP1N'AT'JGP' 7P 9 OPPOG
?' 'J9O'MGGMT'L 'JO'JJPPI'N 'I MUP'NHPP'A9JGH'
'NP99 NHPP' 7' HPIKP'NH J'M N'7 I' H I'OP %O
% P P'GHMI P'PI JQH'N 'GHMI P'NHPP' P'N'NH J'I N'GHMI P9PGG+
HT'7MNHP'APM G'NHP'NTLP' 7U IQ' 7' ML9PG $
17A NH'NHP' K ?G'MIO'?P JGM9PI '
D
4PN'I N'G ' PM9NHT'MG'MI'3IQ9 GH'TP IMI+R

&ADG'G@KF?C□O7MIE'CF?H'?MN'□H'CFG HG C'?OC'CFG AH 'A>' ,AD('OAHHGOC'
CFG @?DD□? G A>' &?D ?DGC HAC' AHME' J□CF CFG' MA ' A>' D?HOG'LBC' J□CF'
CFG JFAMG'OABD G A>'CFG O'P□M' J?D 'A>'I H M?HN R

6' ($'2 I' 7 ML9PG'H O' NH'3IQ9 GH'Q 9N+
HT'7MNHP'APM G'NHP'N 9P' 7'M U IQ+
#G'7'M KHMIIP9G'H GH J9O'AP'KM99O'NHP'GPM
HM I%GN'NH J'I N'UI IQ'7 I' HPIKP'NH J'M N'OP %O+
'LM 9PT'NHJ'JG NH'3IQ9MIO%G 9N8 7J9'HP G'+\
8'#' GL' 7GN M ' PZ' NH'M'NH JGMIO'K IG+
'I MUP'NHMN'GHM I P9PGG'KM99PN'UI 'HP GP97+
HT'HJGAMIO%G'7MNHP'P 99%O' I'NHP'HPM N' 'O MIKP
#IO'NM I%O'NHP'O PIK'H'MIO' I MOP'NHP'OMJLH I'GN L'
D #IO'HMO'HP'I MNKH%O'MKK O IQ'N 'H G'GNMNP+

' HP P'M P'I 'O G IG IN 'MKNG'MIO'GKPIPG I'NHP' Q IN9 K L P68 AJN'7 'NHP'
K I PIPIKP' 7' P7P PIKP'MIO'O K I LM G I' P'HM P' I MOP' NHPGP'O G IG I' J'
PO N IG+

G' HAJ' KDAOGGN' CA' CFG GOAHN?DE' ?OC□AH' A>' CFG □D C' ?DC' A>'
□C ?KKG?D 'CA'B 'CFG BH□CE A>' ?OC□AH' ?HN' A>'OF?D?OCGD□T?C□AH'□H' CF□ 'KM?E'
?HN' CFG #J N' ?DC' A>' CFG =' AHCGHC□AH'I'□ ' A' @?H>G C' CF?C' JG
□HOBD' CFG' D□ (' A>' ?CCG@KC□H 'CA' KDAPG' J F?C□ ' GM> GP□NGHC' C□ ' C□M'
FAJGPGD' HGOG ?DE'CF?C' JG' FABMN' 0AHNBOC' CF□ ' □H□SB□DE' GPGH' J□CF
CFG N?H GD' A>'LG□H 'CGN□AB 'LE'DG BM?D'?NP?HOG ' 8 c

#FG' QB?DDGM' A>' +MA CGD' ?HN' .G?B>ADC' 0A@@GHOG' GPGH' APGD' CFG
L□GD' G S?D I' H' CFG CF□DN OGHG' CFG□D F?CDGN' LDG?('ABC' □HCA' AKGH'
CF□DN' ?OC' CGD@□H?CG 'CFG' QB?DDGM' ? ' >?D' ? ' □C KDAOGGN ' □H' CFG □D C'
?DC' A>' GHDE') ' ?H' JG' □@? □HG' CF?C' □>' CF□ ' K M?E' F?N' LGGH

4 ' ' 5' ' ' ' "2' K'2+

6'4 ' PPN' J77 9U'H P'NHPP'HPIK'P'N '0 MIKP
O ' 7'NHP'U IQ'O 'K IP'NH J'GJ'P I JGN'O P+
4 ' #IO' 7'2'Q '2'KMII N'9 P' AJN'HP P'N '0 P
X HMN' P P' N' P9GP+
JN'9 UP' M' L9PMGMI N'G9J I AP ' I'NHT'9ML'\
"P P'K J9O'2'A PMNHP' I T' G J9' IN 'NHP'M +
#G I 9O'MIO'QP1N9P'MG'NHP'IP A I'AMAP+
HMN'O PG NH' I NHP %G'OJQ'APN ppi'H G'9 LG+
X HP P'7 I'I T'@NHT'G QHN'2'GH J9O'AP' MQ IQ' I MO+
#IO'KM99'7 'NHPP'N'K9 GP' I IP'PTPG+
1 ' NH'NHT'9 LG N 'GN L' I T'OT IQ' G J9+
HMN'2$ I QHN'A PMNHP' N'G ' IN 'NHT'A OT+
#IO'NHPI'N'9 %O' I'G PPN'39TG JI+
T'NHPP' N'O P' P P'AJN' N'O P' I'EPGN8
O I'NPP' N'O P' P P'N IPIN' I P' NMPI'OPMNH
1H'9PN' I P'GNMT'AP7M99' HMN' I MT'AP7M99+
: ' ' I QHN%GN'NH J'GNMT' NH'GM7PNT' 7'NHT'9 7P+
HPI'GH J9O'GN'NH J'GNMT8 AJN'HPM PIG'OPIT' N
#IO'NHP P7 P'Q 'AJN'H LP'P P'9 MQ'N 'AP' PLPM9%O+
4 '2'Q +D
: ' #IO'NMJP' I T'HPM N' NH'NHPP+ 4$ ') %% %'$
4 ' #'EP P9'9 KJ%O' IN 'NHP' 7J99%N' KMGJ+
HMN'P P'TPN'K I%O'N'NH I%O' 7 NH+
HJ6'9 UP'M'GL9 NNPO' AM U'G 'GJIOP' P'8
H G' MT'7M99 2'N 'OPMNH+ S' J '001/ +
: ' H G MT'7 'I P+'$ J '9(A

6'4 ' P' HMN'NH J' 9N'NH J'M N' I T'L G IP ‡ ' 5 D %' '$,
K'7M PGN'APMJJT'O 'I N'7PM 'I '79T8
O '2' 99'N J1KH'NHPP'AJN' NH' P P PIN'HMIOG+
'U GG'NHP6P'7 IQP G) %% '$, '" OL'7 'PNP IN9'LPMKP+
#IO'9NT'NHP1'QPIN9T' I'NHT'NPIOP 'G OP+
X H 'M N'NH J'\' GNT'NHMN'2' I MT'H I J'NHPP+
HP'U IQ' 7' ML9P'G'8 H G P%P'NH J'M N+
4 ' #I'PM 9'2'M1 'MIO' J77 9U%'I'2'KM99O+
H J'M N'M99 NNPO'N 'AP'NM%PI'ATT IP'
P'I N' 77PIOP0'IMNJ P%G' I MK9P+
4PN'7'NH G'GP 9P'JGMQP' IKP' 77PIO+
: 'MIO'AP'7 PP'MQM I'MG' J77 9U%G'7 PIO+ 4$ ' %' 8 2' %'
1 'GNMT[S2'HM P' I' L P,'N,'9PN'HP 'LMGG
T'HMIO' J9O'7 PP'HP 'AJN' I T'HPM N'GMTGDI +
#G'L9MTG'NHP'GJI'JL I'NHP'Q9MGGT'GN PM I G

I9 I'G'MI NHP'K JINP 7P'NPO' APM I
'GPP I G'NH G'Q QP JG'APMJNT'N ' I IP'PTPG+R

4 ' ' 5' ' ' ' "2' K'2+

6' : ' ppN' J77 9U'H P'NHPP'HPIK'P'N '0 MIKP
O ' 7'NHP'U IQ'O 'K IP'NH J'GJ'P I JGN'O P+
4 ' #IO' 7'2'Q '2'KMII N'9 P' AJN'HP P'N '0 P
X HMN' P P' N' P9GP+
JN'9 UP' M' L9PMGMI N'G9J I AP ' I'NHT'9ML'\
"P P'K J9O'2'A PMNHP' I T' G J9' IN 'NHP'M +
#G I 9O'MIO'QP1N9P'MG'NHP'IP A I'AMAP+
HMN'O PG NH' I NHP %G'OJQ'APN PPI'H G'9 LG+
X HP P'7 I'I T'@NHT'G QHN'2'GH J9O'AP' MQ IQ' I MO+
#IO'KM99'7 'NHPP'N'K9 GP' I IP'PTPG+
1 ' NH'NHT'9 LG N 'GN L' I T'OT IQ' G J9+
HMN'2$ I QHN' A PMNHP' N'G ' IN 'NHT'A OT+
#IO'NHPI'N'9 %O' I'G PPN'3 9TG JI+
T'NHPP' N'O P' P P'AJN' N'O P' I'EPGN8
O I'NPP' N'O P' P P'N IPIN' I P' NMPI'OPMNH
1H'9PN' I P'GNMT'AP7M99' HMN' I MT'AP7M99+
: ' ' I QHN%GN'NH J'GNMT' NH'GM7PNT' 7'NHT'9 7P+
HPI'GH J9O'GN'NH J'GNMT8 AJN'HPM PIG'OPIT' N
#IO'NHP P7 P'Q 'AJN'H LP'P P'9 MQ'N 'AP' PLPM9%O+
4 '2'Q +D
: ' #IO'NMJP' I T'HPM N' NH'NHPP+ 4$ ') %% %'$
4 ' #'EP P9'9 KJ%O' IN 'NHP' 7J99%N' KMGJ+
HMN'P P'TPN'K I%O'N'NH I%O' 7 NH+
HJ6'9 UP'M'GL9 NNPO' AM U'G 'GJIOP' P'8
H G' MT'7M99 2'N 'OPMNH+ S' J '001/ +
: ' H G MT'7 'I P+'$ J '9(A

G' HAJ' KDAOGGN' CA' CFG GOAHN?DE' ?OC□AH' A>' CFG □D C' ?DC' A>'
□C ?KKG?D 'CA'B 'CFG BH□CE A>' ?OC□AH' ?HN' A>'OF?D?OCGD□T?C□AH'□H' CF□ 'KM?E'
?HN' CFG #J N' ?DC' A>' CFG =' AHCGHC□AH'I'□ ' A' @?H>G C' CF?C' JG
□HOBD' CFG' D□ (' A>' ?CCG@KC□H 'CA' KDAPG' J F?C□ ' GM> GP□NGHC' C□ ' C□M'
FAJGPGD' HGOG ?DE'CF?C' JG' FABMN' 0AHNBOC' CF□ ' □H□SB□DE' GPGH' J□CF
CFG N?H GD' A>'LG□H 'CGN□AB 'LE'DG BM?D'?NP?HOG ' 8 c

#FG' QB?DDGM' A>' +MA CGD' ?HN' .G?B>ADC' 0A@@GHOG' GPGH' APGD' CFG
L□GD' G S?D I' H' CFG CF□DN OGHG' CFG□D F?CDGN' LDG?('ABC' □HCA' AKGH'
CF□DN' ?OC' CGD@□H?CG 'CFG' QB?DDGM' ? ' >?D' ? ' □C KDAOGGN ' □H' CFG □D C'
?DC' A>' GHDE') ' ?H' JG' □@? □HG' CF?C' □>' CF□ ' K M?E' F?N' LGGH

4 ' ' 5' ' ' ' "2' K'2+

6' : ' ppN' J77 9U'H P'NHPP'HPIK'P'N '0 MIKP
O ' 7'NHP'U IQ'O 'K IP'NH J'GJ'P I JGN'O P+
4 ' #IO' 7'2'Q '2'KMII N'9 P' AJN'HP P'N '0 P
X HMN' P P' N' P9GP+
JN'9 UP' M' L9PMGMI N' G9J I AP ' I'NHT'9ML'\
"P P'K J9O'2'A PMNHP' I T' G J9' IN 'NHP'M +
#G I 9O'MIO'QP1N9P'MG'NHP'IP A I'AMAP+
HMN'O PG NH' I NHP %G'OJQ'APN PPI'H G'9 LG+
X HP P'7 I'I T'@NHT'G QHN'2'GH J9O'AP' MQ IQ' I MO+
#IO'KM99'7 'NHPP'N'K9 GP' I IP'PTPG+
1 ' NH'NHT'9 LG N 'GN L' I T'OT IQ' G J9+
HMN'2$ I QHN' A PMNHP' N'G ' IN 'NHT'A OT+
#IO'NHPI'N'9 %O' I'G PPN'3 9TG JI+
T'NHPP' N'O P' P P'AJN' N'O P' I'EPGN8
O I'NPP' N'O P' P P'N IPIN' I P' NMPI'OPMNH
1H'9PN' I P'GNMT'AP7M99' HMN' I MT'AP7M99+
: ' ' I QHN%GN'NH J'GNMT' NH'GM7PNT' 7'NHT'9 7P+
HPI'GH J9O'GN'NH J'GNMT8 AJN'HPM PIG'OPIT' N
#IO'NHP P7 P'Q 'AJN'H LP'P P'9 MQ'N 'AP' PLPM9%O+
4 '2'Q +D
: ' #IO'NMJP' I T'HPM N' NH'NHPP+ 4$ ') %% %'$
4 ' #'EP P9'9 KJ%O' IN 'NHP' 7J99%N' KMGJ+
HMN'P P'TPN'K I%O'N'NH I%O' 7 NH+
HJ6'9 UP'M'GL9 NNPO' AM U'G 'GJIOP' P'8
H G' MT'7M99 2'N 'OPMNH+ S' J '001/ +
: ' H G MT'7 'I P+'$ J '9(A

G' HAJ' KDAOGGN' CA' CFG GOAHN?DE' ?OC□AH' A>' CFG □D C' ?DC' A>'
□C ?KKG?D 'CA'B 'CFG BH□CE A>' ?OC□AH' ?HN' A>'OF?D?OCGD□T?C□AH'□H' CF□ 'KM?E'
?HN' CFG #J N' ?DC' A>' CFG =' AHCGHC□AH'I'□ ' A' @?H>G C' CF?C' JG
□HOBD' CFG' D□ (' A>' ?CCG@KC□H 'CA' KDAPG' J F?C□ ' GM> GP□NGHC' C□ ' C□M'
FAJGPGD' HGOG ?DE'CF?C' JG' FABMN' 0AHNBOC' CF□ ' □H□SB□DE' GPGH' J□CF
CFG N?H GD' A>'LG□H 'CGN□AB 'LE'DG BM?D'?NP?HOG ' 8 c

#FG' QB?DDGM' A>' +MA CGD' ?HN' .G?B>ADC' 0A@@GHOG' GPGH' APGD' CFG
L□GD' G S?D I' H' CFG CF□DN OGHG' CFG□D F?CDGN' LDG?('ABC' □HCA' AKGH'
CF□DN' ?OC' CGD@□H?CG 'CFG' QB?DDGM' ? ' >?D' ? ' □C KDAOGGN ' □H' CFG □D C'
?DC' A>' GHDE') ' ?H' JG' □@? □HG' CF?C' □>' CF□ ' K M?E' F?N' LGGH

4 ' ' 5' ' ' ' "2' K'2+

6' : ' ppN' J77 9U'H P'NHPP'HPIK'P'N '0 MIKP
O ' 7'NHP'U IQ'O 'K IP'NH J'GJ'P I JGN'O P+
4 ' #IO' 7'2'Q '2'KMII N'9 P' AJN'HP P'N '0 P
X HMN' P P' N' P9GP+
JN'9 UP' M' L9PMGMI N' G9J I AP ' I'NHT'9ML'\
"P P'K J9O'2'A PMNHP' I T' G J9' IN 'NHP'M +
#G I 9O'MIO'QP1N9P'MG'NHP'IP A I'AMAP+
HMN'O PG NH' I NHP %G'OJQ'APN PPI'H G'9 LG+
X HP P'7 I'I T'@NHT'G QHN'2'GH J9O'AP' MQ IQ' I MO+
#IO'KM99'7 'NHPP'N'K9 GP' I IP'PTPG+
1 ' NH'NHT'9 LG N 'GN L' I T'OT IQ' G J9+
HMN'2$ I QHN' A PMNHP' N'G ' IN 'NHT'A OT+
#IO'NHPI'N'9 %O' I'G PPN'3 9TG JI+
T'NHPP' N'O P' P P'AJN' N'O P' I'EPGN8
O I'NPP' N'O P' P P'N IPIN' I P' NMPI'OPMNH
1H'9PN' I P'GNMT'AP7M99' HMN' I MT'AP7M99+
: ' ' I QHN%GN'NH J'GNMT' NH'GM7PNT' 7'NHT'9 7P+
HPI'GH J9O'GN'NH J'GNMT8 AJN'HPM PIG'OPIT' N
#IO'NHP P7 P'Q 'AJN'H LP'P P'9 MQ'N 'AP' PLPM9%O+
4 '2'Q +D
: ' #IO'NMJP' I T'HPM N' NH'NHPP+ 4$ ') %% %'$
4 ' #'EP P9'9 KJ%O' IN 'NHP' 7J99%N' KMGJ+
HMN'P P'TPN'K I%O'N'NH I%O' 7 NH+
HJ6'9 UP'M'GL9 NNPO' AM U'G 'GJIOP' P'8
H G' MT'7M99 2'N 'OPMNH+ S' J '001/ +
: ' H G MT'7 'I P+'$ J '9(A

JDCCGH J□CFABC DG ?DN' CA' ?' OAHC□HB?C□AH' CF□ 'K?DC A>' CFG ?OC□AH' JABMN' F?PG' CFB 'CGD@H?CGN'W i GCGD' H' CF□' OGHG ?HC□OK?CG ' CFG OAH G-QBGHOG 'A>' CFG G N□ GH □AH ' .BC' □C □ 'H' CFG =' □D C ?DC A>' CFG AHCGH□AH'I' CF?C CFGE ?DG O?DD□GN' >AD P?DN CA' ?' O?C? CDAKFG' $GC'B' 0A@K?DG' KADC□AH 'A>' CFG OGHG' H' CFG K?DN□?@GHC FAB G' H' CFG □D C ?DC A>' GHDE') '?HN' CFG OGHG' ?C C' ML?H8 'H' CFG =' □D C ?DC A>' CFG AHCGH□AH'IR

4 8 ' 5' % ' 2+' '222+' K+' 2+

6' &. ' !%GN' NH' JI' NH'OPPL'L P lPO NMNPO'9 ipG
X NH' NNPI'LM!LH9PNG'GNJO JG9T'OP G%O
"J!LH PT' 7' :9 GNP'\' 7'NH J'KMIGN'MKKJGP+
1 'MJ'QH' iNPO%GN'N '9MT'JIN 'IT'KHM QP+
5 ' N' NH JN' i pin i'GJOOPi9T8
#G'2' NH'GJOOPi9MiO'PWP!L M9 GLPPKH'
-J L GP'N 'MIG p' HMN'NH J'KMiGN' AEPKN+
5' ' #!'2'i N'L NPKN 'GMJKT'L pGN'\
&. ' #iO'M!'2'i N'M'L p9MNP' 7'NHP'KHJ KH'\
5' ' pGJ!LNJ JG'L pGN[NH G'L9MKP'K !!MiOG IT'LMN piKP+
1 'NH 'J'GH J9OG%'7 iO'NH J'HMGN'O GH i J %O' !P' ,
H !U'i N'M9NH JQH' i' N iQ'2'L p7P %O'
HP'IMiip' 7' $2' ' ' %'(%
$ ' $ ' '$ ' G #' ' ' ' ' ,
" ' N' $ %' $ ' $ ' ' 2'- 'C
#'L P9MNP8 GJKH' G'NHT'MJOMK JG' K? POiPGG
HT' 8 #'LPGN 7P JC'MiO'O GGPiN JG'L MiUG+
#G' p T i7MiNG'L MNN9P' 7'N9 T'L OP+
H J'M N'M I GN'LPi K JG'JGJ p 8
O L M O'AT'iNJJ p'dipIT'N 'LPMKP8
/MGK JG' MiN i'I P'NHMI' P99 APGPPI G
#'IMI' 7'NHT'L 7PGG i'MiO'OPQ pP8
#iO'7 'NHT'N PMKHP T' HMN%G I P' IMI 7PGN'1
2i'NHMN'NH J'9M O% N M'N ML'N 'NMUP'IT'9 7P
#G' P99'MN'/ iO i'A OQP'MG'MN'NHP' p'\
P6 OP'?'2M'7PM'!P' 7'NHT'NH JQHNG' p P'G 7MPO
HP'U!Q'NHT'G p p QI' G i N']J NP'PWPILN'
'O I'pi JG' I M9 KP' 7'NHT G P99 iQ'HPM N+
& ' :9 GNP '2'O 'OP7T'NHPP+' / OG' JKHGM7P'
'Q P'IP'HPM !Q' HMN'2'GHM99' PL9T+' ,
27'2' p P'K PN JG'M1A N JG' 'LP p GP
#G'HP' 99'HM P'IM'H 'MI'2'G 'L ' \
1 'H ' HMLG N'2'GPPU i N' 'MO MiKP'
1 ' M GP' ITGP97'AJN'UPPL'IT' iNPO'KM99 iQ'1
H

9 ' 5M P'\ 2'NP99'NHPP'L PGN
-9MiNMQPiPNG'K J9O'ip P'A U'NHP'OM P+
' 2'M1'-9MiNMQPiP1N'MG P99'MG'NH J+
#iO'G i'N'? Hi' 7':MJiN+
9 ' ?i'AMGNM OT+
' ?'GK i'NHT' OG+
9 ' MUP'JL'i '7MKN JG'iJ1AP G+
JN'p pi' i'NH iP' i'LP G i'lPPN'I P'MN'NHP'PMGN'piO' 7'NHP'Q P+
' "p p%G IT'HMiO'2' 99+
7 ' XHT'H 'i '9 OG'O
' OM NH'K JG i':9 GNP
"MO'i N'T J'IM!'KMGN' 77G'G i' P'HMO'HMO'
P'GL N'N OMT+ IP' NH'NHT'G O'MiO'AJKU9P +
9 ' :' O%G I NHP 'L PGN+'2%9J GHM P'T J'K i+
' - NPKN 'L NPK'N'HTGP97' P99+R

' CFGDG OD' □' CFGDG HAC' BH□CE' A>' ?OC□AH' H' CFG G OGHG ' A>' CJA' N□>>GDGHC'KM?E '\W ' CFGDG HAC' BH□CE' A>' OF?D?OCGD□T?C□AH'\W ' CFGDG HAC' □NGH□C□E' A>' @?HHGD'\W #FG' ?H DE' K? □AH ' J F□OF'□H' CFG □D C ?DC' A>' GHDE') ' ?DG' BHDG CD?□HGN' GPGH' LE' CFG □@@GN□?CG' KDG-GHOG' A>' >BHGDG?\W AM@@H□CE' ?DG' AHME' CGD@□H?CGN' H' CFG =' □D C ?DC' A>' CFG AHCGH□AH1' LE' CFG @BDNGD' A>' +MA CGD' ?HN' CFG' CGDD□LM@' NG?CF-LGN' A>' .G?B>?ADC

H' CFG @G?HJF□MG' HABD□ FGN' LE' CFG G' N□ GH □AH '?' >□GDOGD' OAHCG C □'?LABC' CA' LG □H' JFA G' O?C? CDAKFG' □ ' >?D' N□ C?HC' #FG' OGHG' □H CFG #G@KMG' ?DNGH' A>' CFG □D C ?DC' A>' GHDE) ' □ ' CFG' OMABN' LG>ADG'CFG CAD@' AHHGOCGN' J□CF' CFG >BCBDG' OAHNBOC' A>' CFG CADE' □C' □' CFDAJH' CFB 'G?DME' □HCA' CFG GD□G ' A>' KM?E ' J□CF' JAHNGD>BN' ND?@?C□D' (□MM' C?HN□H 'LE'□C GM>' □C F?'HA'□ BG'LBC'□H' CFG QB?DDGM' A>')GDHAH'?HN' .? GCC'□H' CFG >ABDCF' ?OC' □CF' CFG ?@G ND?@?C□D' (□MM' J□CF' DG>GDGHOG' CA' ?' OAHC□HB?C□AH'□ ' CFG G?DME OGHG' □H' LGC'JZGGH' M?HC? ?HGC' ?HN' A>' CFG' &.ADC□@GD' #FG' ALSGOC' A>' CFG KAGC' □H' CFG □HCDANBO-C□AH' A>'CFG G' OGHG '□ '@A C' G@KF?C□O?MME'@?D(GN'□H' GPGD?M'KDG ? □H ' K? ? G ' A>' CF□' KM?E' C' CFG' OMA G' A>' CFG #G@KMG ?DNGH' OGHG

?D J□O('CFB 'G OM?□@

.'#iO'HP P'?'L LHPGT S H'G'A M 9'N OMT+
: i'N 'NH G'7MKN i' i'NHP' P0' GP'MiO'NHP' H NP
HM99'GPiO'APN ppi'NHP' PO' GP'MiO'OPMO9T'i QHN+R
#'NH JGM iO'G J9G'N 'OPMNH'MiO'OPMO9T'i QHN+R
H

#FG' 0AHHGOC□AH' JF□OF' JG' F?PG' CFB' GHNG?PABGN' CA' G C?LM□ F LGC□JGGH' CFG□ □D C' ?DC' A>' GHDE') ' ?HN' CFG =;□D C' ?DC' A>' CFG AHCGHC□AH'I'F?N'LGGH'?MDG?NE'LD□G>ME'HAC□OGN'LE'%D'0AFN AH';H ,' C'□' ?E' KG?(□H 'A>'#?MLAC R

6'X HPI?' %2 '@MG TPN?'MI'I N' ' '$ 8' ?' $ '% * #'GN JNP'KHM IL I'IP P'HMI09PO'G O+R

F?(KGDG'□C ?KKG?D'CDA@'?'K? ? G □HCDANBOGN'LE'F□@'□H'CFG DGP□ GN'OAKE'A>'CFG GOANH' ?DC' A>' GHDE') ' N□N' D O' CF?C GHDE') 'OABMN'HAC'F?PG'DG@G@LGDGN'JF?C'F□'>?CFGO'?□N'?HN' CFGDG>ADG'$ 'OABMN'HAC'F?PG'LGGH'CFG'?BCFAO'A>'CFG ' ?DC' A>' GHDE') . B□'H'CFG=GOANHU'?DC'A>'CFG' AHCGHC□AH1' CFGDG□' '?H'GP□NGHOG'A>'□@□M?D'(HAJMGN G'LE'CFG'?BCFAO'A>'CF?C'KM?E' R

6'X HPI?' MG'K i$O?' MG'AJN'I IP I IN□G' 9O'7%

?HN'CF□'□'?'=;NGO□'PG'KDAA>I'CF?C'CFG'CJA'KM?E'OAB□N'HAC'F?PG'LGGH' JD□CGGH'LE'CFG' ?@G'KGD'AH' 2HN'#FG' □D C' ?DC'A>' GHDE') ' G FDLC'&ADC□@GO'NE□K'□H'CFG'#AJGO'?'C?GG'KD□'AHGD' #FG=□D C ?DC'A>'CFG' AHCGHC□AH'I'@?(G'?N□'LBDE'?E'CF?C' JGH'+MGHNAJGO

6'PL'H I'I'KMLN' NT'N 99'HP'O PO+R

BDCFGD@ADG'CFG' □D C' ?DC'A>' GHDE')'OADDGOC□E'C?CG'CFG'□'BG A>'iNJ?JO□' ?HN'CFG'C□CMG'A>'&ADC@GO'CA'CFG'ODAJH'JFGDG?' CFG=';□D C' ?DC'A>'CFG' AHCGHC□AH'I'□HOADDGOC□E'C?CG'CFG'G'O□DOB@-C?HOG' #F□'□'?DC'A>'CFG' AHCGHC□AH'I'□HOADDGOC□E'C?CG'CFG'G'O□DOB@-A>'F□'?'GDC□AH'?HN'FG'CFB'CD□B@KF?HC□E'OAHOMBNG''=';#FA'G'CJA' KM?E'$.'OABMN'HAC'F?PG'LGGH'CFG'JAD('A>'AHG'F?HN'I' C'□' O?DOG□E'HGOG ?DE'CA'?CCG@KC'?'DGKME' MN'DG?NGD'A>'F?(KGDG'?DG KGD>GOC□E'?JCG'A>'CFG'AOODBDGHOG'A>' BOF'M□ F□'O□H?OOBD?OG'GPGH'□H CFG'>□CF?OC' BDKD□G□'G'KDG GN'GD>ADBM'?HN'CFG'□HOFG'CGD'□'O?MMGN'=';O?DN□H?M'I'□H'CFG'>□D C'?OC'JF□OF' KA□HC'ABC'CF?C' B>>□O□GHC'N□'C□HOCHG' *KAH'CFG'□NGH□C□E'A>' @?MAHG'F□@'GN' CF?C'FG'□'G'KDG'BKAH' FE'ND?@?□>'□'CA'LG'DG?DNGN'?'?'JFAMG' G'F?PG'FAJH'CFG'G KA□HC'□JG'CDB'C'J□CF' B>>□O□GHC'N□'C□HOCHG' *KAH'CFG'□NGH□C□E'A>' @?HHGD'JG'F?PG'CFG'MG'N□J□GMC'LGO?B'G'□H'CFG'PGD'□>O?□□AH'G'KGO□?MME' G?OF'A>'CFG'KM?E'□'?N@□CCGN'LE'&?MAHG'CA'LG'OAH'CDBOCCGN'BKAH'CFG' ?@G'@ANGM'U HN'JF?C'CFGH'F?'&?MAHG'CA'BD'G'?'?H'C'CFG' GHDE') 'JG' GG'C?CG'OADDGOC□E' HAD'F?PG'LGGH'CFG'JAD('A>'CFG'JF□OF'KDAN□BOGN' CFG'>□D C'?OC'#FG'GHDE') 'JG' GG'C?CG'OADDGOC□E' CFGD'CCOMG'A>'&ADC□DKGD'CA'CFG'ODAJH'CFG'KGD'AH'A>'CF□'&ADC□@GD □D C'?DC'A>' GHDE') '@□'C?(G'GPGH'CFG'KGD'AH'A>'CF□'&ADC□@GD

'5 GGP'NMN i'L‡) ' G P99MG'PO N i+

'*.

0AH>ABHN□H'CFG i?M'A>'&?DOF';?'OF□N'J□CF' AC KBD'LDACFGD□H' N?J' F?(KGDG'JDACG'CFG' □D C' ?DC'A>' GHDE')'LBC'?OOADN□H' CA'&?MAHG'FG'N□'HAC'JDACG'G□CFGD'A>'CFG'AMNGD'KM?E';H'JF□OF'JG'>□HN' OADDGOC'?HN'□HOADDGOC' GHG?MA'E' .B□'□>'CFG'?D B@GHC'□';CA'LG' KBD'BGN'CA'□C'OAHOMB□AH';FG' 'JDCG'CFG='□D C' ?DC'A>'CFG' AHCGH-C□AH1'JF□OF□'□H?OOBD?CG□H'CF□'K?DC□OBM?D'LGO?B'G'FG' 'JDCG'CFG □D C' ?DC'A>' GHDE') 'JF□OF□'□'?M A'□H?OOBD?CG' HG'@ADG G ?@KMG'A>'CFG'>?MM?OE'A>' BOF'DG?'AH□H' ' H'CFG'□@□M?D□CE'□H'CFG'K?' ?'G' CFG(□H'F?'LGGH'NGKA GN R?>CGD'.A□H LDA(G'F?'N CFG(□H'F?'LGGH'NGKA GN R?>CGD'.A□H LDA(G'F?'N

6'?i': O%G'IM1P+2%9'MGKPIO'NH'PQM9'NH ip R S

"□OF?DN'CFB'?NNDG G' ADCFB@LGDM?HN' R

6' NHJ1AP 9MIO'NH'J'9MOOP' HP P NHM9' HP'I JIN iQ' 9 iQA UP'MGKPIOG'MT'NH ip+R

#FGDG'J?'HA'AHG'KDG'GHC'LBC"□OF?DN'CFG'QBGGH'?HN' ADCFB@LGD-M?HN' F?(KGDG'A>'OABD G'JDACG'CFG"□OF?DN' .B□'H'CFG GOAHN' ?DC'A>'GHDE') ',.AM□H LDA(G'CFGH(□H 'B G'CFG G'JADN ' KG?(□H'CA' ?DJJO(' R

6' JN' H KH' 7'T J' MG'AT @'I *'(% ' '*' %' ' 2' " ';+ D HPI'&'KHM 0 SD NH2OG'PTP A I7J9' 7'NPM G HPI'KHPKU%O'MIO' MPO'AT NHJ1AP 9MIO S 5 O'GLPMU'NHPGP' OG'I 'L %O'ML LHPKT\S' NHJ1AP 9MIO'NH'J'9MOOP'AT'NHP' H KH' T'K JG I' 9 iQA UP'MGKPIOG'I T'NH ip'8 $ $'$ *'$ ') 8%*' '$ ' ';% ($' B

GDG'?DG'CJA'□@KADC?HC'N□>GDGHOG' FGH'CFG'JADN'JGDG' KA(GH = 0AB□H' GP□MI'J?'HAC'LE'?HN'LG>ADG'CFG'JADN'JGDG' KA(GH GHDE'F?N'?OCB?MME'?'OGHNGN'CFG'CPDAHG'□H'CG?N'A>'F?P□H'=';HA' BOF □HCGHC'I' *KAH'&?MAHG8'?D'B@GHC'CFGH'CFG G G CD?ADN□H?DE'OAHCD?-N□OC□AH'>BDH□F'=?'N6O□□PG'KDAA>I'CF?C'CFG"□OF?DN' '?HN'CFG GOAHN' ?DC'A>' GHDE')'=';0ABMN'HAC'F?PG'LGGH'CFG'JAD('A>'AHG F?HN'I' F□OF'J□G'@ANGM'U HN'JF?C'CFGH'HA'C'□'?'B>>□O□GHC'N□'C□HOCHG' *KAH'CFG'□NGH□C□E'A>' @?HHGD'J□CF'CFG@'LE'0AH'C?HC'DGCDA'KGOC□AH'CA'CFG'GPGHC'JF□OF'CFGE' M□H(GN'J□CF'CFG@'LE'0AH'C?HC'DGCDA'KGOC□AH'CA'CFG'GPGHC'JF□OF'CFGE' F?N'G'FDL□CGN' >'&?MAHG'0ABMN'F?PG'FAJH'LE'F□'?DD?E'A>'□0'BDG' R F□'GHB@GD?C□AH'A>'?DC□AH'□H?M'N□HG'A>'MG□HG'?MCGDGN'?HN'MG□HG'?NNGN' R C?C□CFG'DG'@LM?HOG'LGCJ□GGH'CFG"□OF?DN' '?HN'CFG'J□OF' P□AB'KM?E'F?N'LGGH'0AH>□HGN'CA'CFG'K?'?'JF□OF'□'?DG'HA□'GPGH'□>'FG'0ABMN'F?PG'G C?-□H'CFG'AD□'□H?M'0AK□G'A>'CFA'G'KM?E'AD'GPGH'□>'FG'0ABMN'F?PG'G C?-□M□'FGN'CF?C'CFGDG'J?'?'@ADG'@?D(GN'□@□M?D□CE'□H'CFG'K?'?'G' ?NNGN'R'FG'JABMN'KDAL?LME'F?PG'DGHNGDGN'CFG'KDG'GH□'G ?E'KGD>GOC□E' BHHGOG'?DE' .B□'FG'F?'HA□'GPGH'@?NG'CFG'?CCG@K□'CA'0A@K?DG

#

CA 2CFGD'□H'CFG□ M□ FCG C @?HHGD'CFG□ JAD('□JF□OF□ FG□ ?MMG G ' CA' LG' KBD□AB'?HN'CFG□ JAD('□JF□OF□ ?MM @GH' FAMN' CA'LG' GHB□HG' $GC' B ' GNG?PABD' CA' BKKME CFG A@□ □AH

HP' MIN i'3O M O'M'IO'NHP'9JGNT':p QP'\
1 ' HP P%G NHMN' M9 M1N'K U AMKU%O'L O'QT
5 KUT'T'J'A'T'NHMN' NH'H G'Q J1A9 IQ' KP
X MG' IN'N 'KHPP'H G'OMO' i'1JN i PG'\
1 '%I iQGN'NHP' PGN' HP P' G T J'OM 9 IQ' &JN9M IO'\
/ U'4 U'2'O LL%O'NH G iMLU i'i'NHP A9 O'
HMN' M9 MIN' 9 77 O' NH'H G ML p %G L iN+
MOP' GGJP'7 I'NHP'A G I' 7'NHT'A T'
#IO' 7'N IP'PTPG KMI' MNP'7 'H G OPMNH
2'Q P'NHPP'NH G N 'O T'HT'KPPUG' NHM9+
#9MG'[L ' 4 U' A JN' NHMN' 2' HMNP' GNMNP+
2'GH J9O'9M I PIN'NHT I GP MA9P'GNMNP+
2'L NHPP'Q P P N 'I MUP' IP'I P T'4 U 8
NM I L' M P'MIO'7 PN'NHMN'2' IMT'G IQ'MIO'OMIKP+
X HMN' HMNH'NHT'7 P T'HPM N'G 'LM KH%O'NH IP'PIN M 9G
HMN I N'M'NPM'KMI'7MG9'7 '&JN9MIO%G OPMNH';
H 'J' J9O&N'AP'7PP%O'2'GPP'N ' I MUP' IP'GL N8
4 U'KMII N'GLPMU'J1PGG'HP' PM'M'K i+S
#'K i'7 '4 U'MIO'9 OG'A '9 'N 'H I+
'H 9O'T 'J'H G'HMIOG' H 9GN'2'O 'GPN N' i+
#T'i '9 UG HP'9 UP'M'U IQ+
H G'G'HP'NHMN'N U'U IQ' "pi T%G KHM +
#IO'NH G G'HP' MG'H G'MO LNPO'HP +
JN'H 'G N'NHMN'Q PMN'-9MINMQPIP%'
2G'K IPDG'G 'i'MIO'A UP'H G'H 9T' MNH'1
#G'2'APNH IU'IP'T 'J'GH J9O'I N'AP'U IQ'
99' J'"pi T'HMO'GH U'HMIOG' NH"OPMNH+
#IO' 99 T 'J' ILM9P'T 'J'HPMO' NH"pi T%G Q9 E%
#IO' A'H G'NP I L9PG' 7'NHP'O MOPI+
17' NH'NHP'K i8 MIO' NH'NHP'K i'H G'HPMO8
#IO' H 9GN' P'A PMNHP'MMUP'H I'N 'O 'H I'OPMO+R

'"2+

6' : ' 27'MIK piN'G 'AP'I GN' p p p i N
: P'I i'NHP'APip7N' 7'GPi T+
#IO'9PN'I T'Q p77 i' i'NHP'JLLP'HMIO+
27'G 'KMI'MOI N'G K PNT' 4 ' 8'8 $'$
P99'%P'T J' PG MQM i'AT' p i'Q' I ip'8 S
2'HMO'MI'3O M O'N 99'M'& KHM O'U 99%O'H I'
2'HMO'M'HJGAMIO'N 99'M'& KHM O'U 99%O'H I

' HP P'M P'LMGGMQPG' i'NHP'7 9 'PO N i' H KH'M P'i N'7 J1O' i'NHP']JM N G'
MIO'IMIT'9 ipG' 7'NHP']JM N G'HM P'APPi' pI OP99PO'8 AJN'NHPGP'I iJNPO'77P piKPG
M P'i N' IL NMIN' i'NHP'L PGPiN' i]J T+

' 5' '

F?(KGDG R

6' : ' M P' M G' 977 O'MIO' NHJ1AP 9MIO
IP' IMUP'H I'GNMIO'JL i'NH G I 9P H 99'HP P+
HMN'M I %O'MN' I J1M iG' NH' JN6N PNKHPO'M I
#IO'LM NPO'AJN'NHP'GHMO ' NH'H G'HMIO+
X MG%'T J'NHMN' P P %O' i' J'LM 9 MIPIN+
#IO'IMOP'ML PMKHIPIN' 7T J'H QH'OPGKPIN'I '
X HP P'M P'T J'IPGG' 7G iN'AMKU'T J'i '\

H J'HMOGN'MI'3O M O'N 9'M'& KHM O'U 99%O'H I
H J'HMOGN'M'& KHM O'N 99'M'& KHM O'U 99%O'H I+
($' 2'HMO'M'& KHM O'N 'MIO'NH J'O OGN'U 99'H I 8
2'HMO'N'&JN9MIO'N 'NH J'H 9L%GN'N 'U 99'H I+
: ' H J'HMOGN'M' 9M PIKP'N 'MIO'& KHM O'U 99%O'H I+
O I'7 NH'NHP'UPIPI9' 7'NHT' IA'HMNH'K PLN
#'HP99 J'IO'NHMN'O NH'HJIN'JG'M99'N 'OPMNH'
HMN'O Q'NHMN'HMO'H G NPPNH'AP7 P'H G PTPG'
' T 9MI AG'MIO'9ML'NHP 'QPIN9P'A9 O8
HMN'7 J9 OP7MKP' 7' : O%G'HMIOT U+
HMN' P QIG' i'QN99PO'PTPG' 7' PPL I Q'G J9G8
HMN'PWKP99PIN'Q MIO'NT MIN' 7'NHP'PM NH+
HT' IA'9PN'9 GP'N 'KHMGP'JG N ' J'Q M PG+
1'JL QHN'EJ5N'MIO'N JP O 6L G IQ' : O
" 'O'2'NHMIU'HPP'NHMN'NH G'KM IM9 KJ'
- PTG' i'NHP'GGJP' 7H G I NHP %G A OT+
#IO'IMUPG'HP'LP 7P99 ' NH'NHP G% I MI[
($' 1' "M T%G 7P'N JILH i N'i'I T' PG8
: O' NIPGG' NH'I P'2'HM P' PLN'7 'NH ip+
: ' ' PM' NH I P8 2'MI'H J1Q T'7 ' p piQP+
#IO'i '2'K9 T'I P' NH'APH 9O i'Q N+
HT'3O M O'HP' G OPMO'NHMN'ZO99%O' IT'3O M O8
+ HP' NHP'3O M O'OPMO'N ']J N'I T'3O M O'8
4 JIQ'4 U'HP' G AJN'A N'APKMJGP'A NH'NHPT
MNKH'i N'NHP'H QH'LP 7PKN i' 7'I T'9 GG+
HT' 9M PIKP'HP' G OPMO'NHMN'GMAA%O' MT'3O M O8
DIO'NHP'APH 9OP G 7'NH G 7 MIN K'L9MT
HP'MOJ9NP MNP"'MGN iQG'& p G' MJQHMI';: PT
?iN I P9T'GI NHP %O' i'NHP 'OJGUT'Q M PG'
"KHM O TPN'9 PG'HP99%G' A9MKU' iNP99 QPIKP 8
2i9T'PGP %O'NHP '7MKN ' N,'AJT'G J9G'
UIO'GPIO'NHP I'NH NHP ' JN'MN'HMIO'MN'HMIO'
3M NH'QMLPG'HP99'AJ1G'7PIOG' M 'GM iNG'L MT+
'HM P'H I'GJOOPI9T'K i PTN'O'7 I'HPIKP'8
MIKP9'H G A IO' 79'7P'OPM';: O'2'L MT+
HMN'2'IMT'9 P'N 'GMT'NHP'O Q' G'OPMO+R

?H' ?HE' AHG' FGDG' NABLC' A>'CFG' ?L' AMBCG' □NGHC□CE' A>'OF?D?OCGD' R A>'CFG'
□@□M?DC□E' A>' @?HHGD'GPGH'CA'CFG' HCOG C' CDBOCBDG' A>' CFG' PGD G'W' >'
CFG' DG?NGD'J□M' OA@'K?DG'CFG' KGGOF' A>' &?D ?DGC' CA', AD(' ? 'KD□HCGN'
?LAPG'>DA@'CFG =' AHCGHC□AH I'J□CF'CFG' CG C' C A>'CFG' ?@G' KGG0F'□H'
CFG'#F□DN' ?DC' A>' GHDE') 'FG' J□M'>HN'CF?C'CFDGG'NC□HG'?DG'A@□CCGN'
#FGE'?DC'CFG G R

#FG'M? C' OGHG'LBC'AHG'□H'CFG =' GOAHN' ?DC' A>'CFG AHCGHC□AH I'□
1/ ?

? Ε ; ; 7 7

CFG @BDNGD A>' GHDE') ' CFG GOAHN' OGHG' A>' CFG "OF?DN' ' □ ' CFG >BHGD?M A>' GHDE') ' .BC CFG KAGC □' HAC' ?C >GN' J□CF' CF□' @?D(GN' OAHHGOC□AH' A>' CFG ND?@?C□G' ?OC□AH'A>' CFG CJA'KM?E ' GZR' F?(KGDGR O?CCGD' APGD' F□ ' "OF?DN' ' ?MB □AH ' CA' PGDE' @HBCG O□DOB@ C?HOG '□H' CFG >AD@GD' KM?E' JE□OF FG □' ?MG GN' HAC' CA' F?PG' JD□CCGH' G' J□MM' GM6OC' A@G A>'CFG G' H' CFG>□D C'?OC A>' "OF?DN' ' CFG %B(G' A>'+MA CGD' CFB ' ?NNDG G ' HHG' R

6' HP6GP'PTPG' H K H' ip P'GHPO' pI GP7J9 'NPM V ' HPi'I T 7MNHP'4 U'MiG' 30 M G' pL'N ,'HPM','N PL MP JG I Mi'NHMN'&J9M9iO' I MOP $ XHPi'A9MKU 7MK%O' 9 77 O'GH U'H G G O'MN'H I' ' HPi'NHT' M HUP 7MNHP ' 9 UP'M KH O 9O'NHP'GMO'GN T' 7 I T 7MNHP %G'OPMNH+ #iO'N PINT'N I PG I MOP'LMJGP'N 'G A'MiO' ppL+ HMN'M ,'NHP'GMiIOp G AT'HMO' pN'NHP ';KHPPUG+ / UP'N PPG'APOMGH%O' NH' M i ' i'NHMN'GMO'N I P+ T I Mi9T'PTPG O O'GK i'Mi'HJ I A9P'NPM +R

A@K?DG CF□ ' J□CF' ,AD(8 ' KGGOF' □H' CFG ',' GOAHN' ?DC' A>' CFG AH- CGHC□AH I' V OC' ' O') R

6' X J9OGN'HM P' I P' ppL'I HT'G '' NH J'HMGN'NHT' GH8 O ' MQ i'Q' iOG'A9 'JL'M' GN I' 7NPM G+ #iO' HPi'NHP' MQP'M99MTG'NHP' M i'APQ i'G+ HTL IP' 7'MiH O'OM iQ'A 9O'MiO'7NJ JG+ HT'MQP'K i7 I%O'L JO'GJAN9P'G9T'MiO'A9 OT+ P I 9O'AJN'TPN' I P'HM I?H2'U iO' i'HMN PO+R

6' #'Q p JG AJ NHPi' MG'NHT'A NH'N ' IP'8 PNKHT'MiO' MT M O' MG'NHT' i7MiKT8 HT'GKH 9 OMT67 QHN7J9'OPGLP'NMP' 9O'MiO'7J JG8 HTL IP' 7'MiH O'OM iQ'A 9O'MiO'AGP]J PG HPGP'NPM G'M P' I T'G ppN'&J9MiO%G' #iO' HPi'NHP' MQP'M99MTG'NHP' M i'APQ i'G+ #iO'p p T'O L'APQG' piQPMiKP'MG' N'7M99G+ 1i'NHPP'7P99' 9 77 O'MiO'NHPP'7M9GP'O piKH IMi+R

HN' J□CF' "□OF?DN8 ' G O'M?@?C□AH'□H' CFG GOAHN' ? O C R

6'?'KM I N' ppL'7 'M99 I T'A PMGN%G I GNJ P' KM KP'GP PG'N ']JPiKH' I T'7J MMKP AJ I iQ'HMNP+R

6'#i' MNH' G 7i ' I IpiN+ piQ'i N'G i'AP7 P'M'9M 7J9 I MQ GN MNP+ "piT'G i ip'AJN'O NH'JGJ L'T J' QHN+ #iO'TPN'T J'Q MKP'GMiOG'A JiO'N 'H I'AT' MNH+R

#FG' GOAHN' ?OC' A>' CFG ',' GOAHN' ?DC' A>' CFG AHCGHC□AH' I' 0AHC□HBG ' CA' DGKDG GHC' CFG EABH ' "OF?DN' ? ' CFG' N?D□H ' AMN□GD' J□CF' 0ABD? G' G OGMMGN' AHME' LE' F□ ' ?OBCGHG ' LBC' D?NB?MME' LGOA@□H ' =' LMAANE I' ?HN' G F□L□CH ' CF?C ?DO' C□O' FB@ABD' □H' F□ ' DGPGH G' J F□OF' □ ' □NGH- C□>GN' J□CF' F□ ' ?>CGD' OF?D?OCGD' FGH' M□>>AD□ ' >ABHN' NG?N ' J FA' LBC' "□OF?DN' OABMN' F?PG' BCCGDGN' CFG G' JADN ' WR

. BC' □H' CFG' CF□DN' ?OC' CFG' OA@KMGCG' "□OF?DN R

6' J□GP' 7' J ' OG' 99 i N' J ' G OG' GHM99+R

H' CFG >□ FC' A>' C' ML?H8 ' "□OF?DN' (□M ' A@GD GC[' ?HN' ?MCFAB F' M□>>AD N' NGHABHOG ' F□@' ? ';' =' OD A A(8N L?O(' P□M?□H I' F□ ' CFAB FC ' ?DG CFA G' A>' ?' @A C' ?MM?HC (H□ FC' J FGH' FG' NG' OD□LG ' CFG' L G?D□H ' A>' AMN' ?M□ LBDE R

6' T9 O'?'GM ';H I' i'NHP' NH KUPGN'NH iQ+ HM Q i'Q'H G'9MiKP' NH'H G' 9O' PM T'M I G8 #iO'NH KP?'GM 'H I'APMNPi'7 I'H G'H GP #iO'NH KP'NH G'HMiO'O O'GPN'H I'JL'MQM i ' #iO'GN 99 HP'7 JQHN' NH'K J MQP'%QM iGN'H G'7 PG+ HP'A 9OPGN GL NPO'IMi'NHMN'P%P'I iP'PTPG'APHP9O+R

G' F?PG' HA'NABL'CF?C CFG KAGC'LDAB FC' "OF?DN' CFB ' G?DME'BKAH'CFG OGHG'□H'CFG =' □D C' ?DC' A>'CFG' AHCGHC□AH I' J□CF' N□ C□HOC' DG ?DN' CA' CFG' □@KADC?HC 0F?D?OCGD' FG J ?'CA' B C?□H' □H' CFG' BOOGGN□H ' KM?E ' H' CFG =' GOAHN' ?DC' A>' CFG' AHCGHC□AH'I' F□ ',' N?D□H ' LAMN' ?HN' PGHCBDAB'I' K□D□C' □ '@A C'KDA@□HGHC'□H' CFG K?D@M?@GHC' OGHG' R

□ '@ACFGD8 'NG'OD□KC□AH' C□MM' FAMN ' AH' R

6' HT'MQP'K i7 I%O'L JO'GJAN9P'G9T+R

□CHG ' F□ 'OABH GM'CA' F□ '>?CFGD'CA'LDG?(' F□ ' A?CF' R

6'#i' MNH' G 7i ' I IpiN+ piQ'i N'G i'AP7 P'M'9M 7J9 I MQ GN MNP+ "piT'G i ip'AJN'O NH'JGJ L'T J' QHN+ #iO'TPN'T J'Q MKP'GMiOG'A JiO'N 'H I'AT' MNH+R

6'X HMN'i N'M i' MNH'\ MT'NHPi'2'Ui 'HP%G OPMO % G'HM O' HPi' 9'77 O'KMii N'%7 O'H G'7 piO'Mi' MNH8 T'NH G'2'Ui 'HP%G OPMO' ' #iO'AT'IT G J9+ X J9O'NH G QHN'HMiO'AJT'AJN'Mi'H J %G'9 7P @ HMN'2' i'M99'K iNPILN'I QHN' M 9'MN'H I 2%O'KJN' N' 77'MiO' NH'NHP' GGJ iQ'A9 O' N 79P'NHP' 99M i+R

$ 6' NHJ1 AP 9MiO'NHPi'L pGPiN' XPLN' 'GPP N+R

D

&?D ?DGC'H'CFG ',' AHCGHC□AH'I'G OM?□@ ' ?C ADCFB@LGDM?HN8 'CG?D R D

6' X HMN' ppL i P'GP' LP'I T'9 O' NHJ1 AP 9MiO'\'R

#FG' PGDE' @□HBCGHG 'A>'CFG G ?MB □AH ' □ ' ?' KD A>' CA' B ' CF?C CFG ?BCFAD' J ?' KGDK□CFGE'DG>GD' F?N' HAC' LGGH' >ABHN'H' CFG ',' AHCGH- C□AH I' LBC' AHME' H' CFG' DG@ANGMGN' KM?E' &?MAHG8 ' ?DC□F@GC□O' @□ FC F?PG' AHG'>AD' A@GC□H

. BC' J G' HAJ' ?KKDA?OF' CFG' OF?D?OCGD' A>' "OF?DN' F□@ GM>' ' HN' CA' B ' □C GG@ ' CFG @A C G C□D?ADN□H?DE' @?DPGM' CF?C CFG' J ADMN' >AD' @ADG CF?H F?M>' ?' OGHCBDE' FABMN' F?PC' OAH GHCGN' CA' LGM□GPC' CF?C CFG' @?H J FA' ?L AMBCGME' ODG?CGN' CF?C' @A C' J AHNGD>BM' OF?D?OCGD' □H' ?MM' □C ' G GHC□?M' M□HG?@GHC ' □H' CFG =' GOAHN' ?DC' A>' CFG' AHCGHC□AH I' J ' HAC' CFG @?H' J FA' OAH□HBGN' □C' □H' CFG "□OF?DN' ' H' CFG >ABDCF ?OC' A>' "□OF?DN' F□ ' @ACFGD' CFB ' NG' OD□LG ' F□@ R

6' X J9OGN' HM P' I P' ppL'I HT'G '' NH J'HMGN' NHT' GH8 O ' MQ i'Q' iOG'A9 'JL'M' GN I' 7NPM G+ #iO' HPi'NHP' MQP'M99MTG'NHP' M i'APQ i'G+ HTL IP' 7'MiH O'OM iQ'A 9O'MiO'7NJ JG+ HT'MQP'K i7 I%O'L JO'GJAN9P'G9T'MiO'A9 OT+ P I 9O'AJN'TPN' I P'HM I?H2'U iO' i'HMN PO+R

#FG' ?BCFAD' A>' CFG ',' AHCGHC□AH'I' ?HC□O□K?CG ' CFG =' @?HFAAN'I' A>' "□OF?DN' ?HN' FAJ ' F□@' ?' =' N?D□H ' LAMN' ?HN' PGHCBDAB ' I' AMN□GD' ' □H MG' M□HG' CGMM ' F□ ' O□F?D?OCGD' J FGH' FG' AD□ □H?MME' 0A@G ' BKAH' CFG 0GHG'□H' CFG =' □D C' ?DC' A>' CFG' AHCGHC□AH I' FGH' ,AD(' ? (' F□ ' AH ' J FGCFGD' CFGE' J□MM' LG' ,'L?□M I' >AD' CFG□D' >?CFGD' i N J ?DN' D□GKM□G R

$ 4PG'i A9P'7MNHP ' 7' J ' OG' 99 GP P+R

! O GP NHP MGL ! Q MN 9 ! P N GKH 9+
M ! 2 O NH G M ! O KM ! ! N QP NHP K ! \
JGH P P N NP ! N I PG H QHP 2 99 LJ99 N O ! +R

8 222+ 2+ K+ 2+

6 JN 2 NHMN M I ! N GHML%O 7 GL N P N K9KG+
I MOP N K J N M ! M I JG 9 U ! Q Q9MGG8 S
2 NHMN M I JOP9T GNM I L%O M ! O M ! N 9 P%G I MEPGNT
GN JN AP7 P M M ! N ! M I A9 ! Q ! T I LH 8 S
2 NHMN M I KJ NM 9%O 7 NH G 7M L L N !+
HPMNPO 7 7PMNJ P AT O GGP I A9 ! Q ! MNJ P+
5P7 I %O J ! 7 ! GH%O GP ! N AP7 P I T N I P
2 ! N NH G A PMNH ! Q 9O GKM KP HM97 I MOP JL+
! O NHMN G 9M I P9T M ! O J ! 7MGH !MA9P
HMN O QG AM U MN I P MG 2 HM9N AT NHP I 8 S
X HT 2 ! NH G PMU L L ! Q N I P 7 LPMKP
" M P ! OP9 QHN N LMGG M MT NHP N I P
! 9PGG N GPP I T GHMO ! NHP GJ ! +
! O OPGKM ! N ! I ! P ! OP7 I NT+
! O NHP P7 P G ! KP 2 KM ! ! N L P M 9 P +
P ! NP NM ! NHPGP 7M P99 GL UP ! OMTG
2 M I OPNP I ! PO N L P M 99M ! +
! O HMNP NHP O9P L9PMGJ PG 7 NHPGP OMTG+
-9 NG HM P 2 9M O ! OJKN ! G OM ! QP JG
T O J ! UP ! L LHPK PG 9 AP9G M ! O O PM I G+
GPN I T A NHP 9M P ! KP M ! O NHP U ! Q
2 ! OPMO9T HMNP NHP ! P MQM ! GN NHP NHP
! O 7 U ! Q 30 M O AP MG N JP M ! O EJGN
G 2 M I GJAN9P 7M9GP M ! O N PMKHP JG+
H G OMT GH J9O 9M P ! KP K9 GP9T AP I P %O JL+R

FGH LLGD OAHOAOCGN CFG @GNMGE JF OF FG O?MMGN " OF?DN FG HAC F?P H CFG >G?D LG>ADG F GEG A> CFG ODCO JFA BOOGGNGN F@ ?NAKCGN CFG OGHG H JF OF "OF?DN @BDNGD GHDE) ? CFG JAD(A> F?(KGDG G DGQBG C ABD DG?NGD CA CBDH CA CF?C OGHG d GHDE) ?DC OC) O) C JMM ?@KME DGK?E CFGD KGDB ?M LG H H C JFAMG OAHOGKCAH N C H B FGN LE CF?C CDBCF A> OF?D?OCGDT?CAH ?HN CF?C GHGD E A> M?H B? G JF OF JG F?PG ? DGGN CA O?MM F?(KGDG?H . BC ?OOADN H CA & ?MAHG ?HN CA CFA G JFA ?NAKC CFG CFGADE CF?C JF?C F?(KGDG OAHCD LBCGN CA CFG GOAHN ?HN #F DN ?DC A> GHDE) HOMBNG HACF H JF OF >ABHN H CFG =GOAHN ?DC A> CFG AHCGHC AH I F?(KGDG AHME JDACG >PG MHG A> CF H OGHG ? #FGE ?DG ? >AMMAJ R

6 # ! O A NH L PL GNP JG8 NHP P7 P ! N Q O 9 O+
5 MH 9PM P JG N J GP9 PG P I JGN K !7P +
7 9 79 PG NHP PKU9PGG GHPLHP O 7 I NHP 97
7 GN NHP HM I 9PGG GHPPL O NH T P9O H G 79PPKP+
! O ! PWN H G NH MN J ! N NHP AJNKHP %G 9J 7P+R

> CFG DG?NGD JMM CBDH CA CFG =GOAHN ?DC A> CFG AHCGHC AH I FG JMM GG CF?C CFG G >PG MHG ?DG J?HC H ?C CFG LG HH H A> CFG OGHG MM CFG DG C A> CFG OGHG G GHC?MME CFG ?@G VJ CF CFG G OGKC AH A> ? >GJ PGDL?M ?NCGD?C AH H CFG =GOAHN ?DC A> CFG AHCGHC AHI ?HN CFG #F DN ?DC A> GHDE) M G MG?PG CFG NGO AH H CFG DG?NGD8 F?HN KGD>GOCME ?C >GN CF?C FG JMM ?DD PG ?C CFG OAHP OC AH CF?C > F?(KGDG N N HAC JD CG CF OGHG ? C AD H?MME CAAN HG CFGD N N FG JD CG " OF?DN

3

#FG ?D B@GHC JFA G OABD G JG F?PG >AMMAJGN BK CA CF KA HC F? AB FC CA G C?LM F CFG BH CE A> ?OC AH ?HN A> OF?D?OCGD T?C AH R HO NGHC?MME HAC O H ?M A CFG @M?D CE A> @?HHGD R ZLGCJGGH CFG D C ?DC A> GHDE) CFG D C ?HN GOAHN ?DC A> CFG =A@ CGHC AH I ?HN CFG " OF?DN H CFG G F L C AH A> CFG G BH C G LGCJGGH CFG D C ?DC A> GHDE) ?HN CFG # JA ?DC A> CFG =AHU CGHC AH I JG F?PG GHNG?PABDGN CA KDAPG CF?C CFG G CFDGG ND?@? A> JF OF @?HC?HGN CF?C F?(KGDG JDACG HAC ?H MG MHG JGDG CFG JAD(A> AHG @HN ?P H CFB MH(GN CFG G CA GCFGD JG O?DD GN AH CFG MH(CA CFG " OF?DN ?HN CFB ?CCG@KCGN CA NG@AH CD?CG CF?C CFG >ABD ND?@? ? JGMM ? CFG CFDGG JGDG CFG JAD(A> AHG @HN ?HN CF?C @HN F?(KGDG8 * KAH CFG DG?C ND?@?C O OF?D?OCGD C O A> CF GD G A> KM?E JG F?PG AHME M FCME CABOFGN C JMM DG@?H >AD B CA FAJ CF?C H ?MM CFG F FGD ?CCD LBCG A> GH B JF OF CFGE N KM?E ?HN G KGO?MME CFG >ADOG A> K? AH ?HN CFG CDBCF A> OF?D?OCGD HA @HN LBC CF?C A> F?(KGDG OABMN F?PG KDANBOGN CFG@ G F?PG ?C KDG GHC OF G>ME ?@GN ?C > H CFG ?CCGHC AH A> ABD DG?NGD BKAH CFG BH CE A> CFG G ND?@? > JG F?PG G C?LM FGN CF GH G A> CFG JADN CFG ?BCFAD A> CFG #FDGG ?DC A> GHDE)

C F? LGGH FGMN AAN GDP OG CA CFG DGKBC?C AH A> F?(KGDG CA ? B@G CF?C FG N N HAC #CG ?M HG A> CFG >D C K?DC A> CF GD G & ?MAHG ?E J CF DG?C CD B@KF CF?C FG F? =P HN O?CGN F?(KG?DGI >DA@ CFG @KBC?C AH . BC FG F? ?C CFG ?@G C@G OAH>GDDGN BKAH F@ ?H FAHABD JF OF ?KKG?D CA B H CDBCF ?M >ABM N D?OG ?HN >DA@ JF OF J G ?DG GQB?MME ?H AB CA P HN O?CG F@ F?(KGDG8 F?DG H CFG GOAHN ?HN #F DN ?DC A> GHDE) CFB C?CGN LE CFG OD CO JFA CFAB FC C ?NGDA ?C AH >DA@ CFG KAGC8 >?@G CA F?PG JD CCGH CFG OGHG H CFG #G@KMG ?DNGH ?HN CFG NG?CF OGHG A> #?MLAC R

= GPGD?M EG?D ?>CGD CFG NG?CF A> . A ?DNA D?HOG OA . GDH BHNGD-CAA(CA HGJ PGD >E . A ?DNA8 KAG@ GHC CMGN < DM?HNA HH?@AD?CA 8 < . GDH 8 ? . ?DGCC AL GDPG < J? HAC ?C >GN J CF @GDGME @?(H CFG PGD >O?CAH A> CF?C KAG@ LGCCGD FG HCGD KGD GN C J CF @?HE C?HT? A> F A J H ?HN OF?H GN ?M@A C ?MM CFG LG HH H A> CFG O?HCA HCDANBO H G?OF A> CFG@ J CF A@G @AD?M DG>MGOC AH ?D H >DA@ CFG O?HCA >ADG A H 8 F?C . GDH N N CA . A ?DNA8 KAG@ ?>CGD CFG NG?CF A> C ?BCFAD ?HN @ADG BKKA G F?(KG?DG CA F?PG NAHG CA <#FG D C ?DC A> CFG AHCGHC AH A> CFG CJA AB G A> , AD(?HN $?HO? CGD 8 YO HN <#FG CDBG #D? GN G A> "OF?DNG %B(G A> , AD(G 8 YO $. CFG D M CGD?DE K?DGHC ?HN CF . ? CFG C?M?H O?MM C A> CFG G CJA KM?E BK-KA G CA F?PG LGGH G GOBCGN LE F?(KG?DG ?HN G F L CGN ?C CFG +MALG AD . M?O(>D ?D 8 CFG?CDG H CFG EG?D 51

= F?PG ?N F?(KG?DG N N JF?C . GDH N N ?HN @ADG G N N HAC OAHCGHC F@ GM> J CF JD C H HGJ LG HH H CA CFG ?OC FG HGJ PGD >GN FG HGJ @ANGMMGN FG CD?H KA GN @?HE A> CFG K?DC ?HN DG?CME ?@KM>GN ?HN O@KDAPGN CFG JFAMG GPGD?M MHG FAJGPGD ?HN GPGH JFAMG KGGOFG JF OF FG CFAB FC B>>O GHCME KAM FGN FG ?OOGKCGN ?HN HCDANBOGN HCA F AJH JAD(JCFABC ?HE AD JCF PGDE M FC ?MCGD?CAH I U

> F?(KGDG F?N NAHG ?MM JF OF & ?MAHG FGDG DGKDG GHC F@ CA F?PG NAHG R HGJ PGD >E HGJ @ANGM CD?H KA G ?@KM>E @KDAPG ?HN KAM F R ZFG JABMN CMM F?PG LGGH G GHC?MME ? N FAHG C KM? ?D C G F?PG HA FG C?C AH H C?C H ABD LGM G> CF?C CFG #JA ?DC A> CFG =AHCGHC AH I CFGDG HAC ? H MG CD?H KA C AH H CFG ADNGD A> CFG OGHG) GDE M FC HNGGN ?DG CFG OF?H G H CFG ADNGD A> CFG KGGOFG >DA@ CFG >D C M HG A> CFG G KM?E CA CFG M? C = G HGJ @ANGMMGN I ?E & ?MAHG

5 GGP NMN ! L +

#F□ ' □ ' ? KFD? G A?' M?D G ?00GKC?□AH' G 0?H' BHNGD C?HN' FAJ' F?(KDGG HGJ @ANGMNGN' CFG' AMN' #?@□H ' A?' ? FDG'J' ?HN' CFG' AMN' □AH I'U A J ' CFGH' C?HN ' CFG ?00ABHC' ?00ADN□H ' CA' CF□ 'W >' CFG 4 777' M□HG ' A@GCF□H ' MG ' CF?H ? CFDN' J ? ' JD□CCGH' ' CFGE ?KKG?G?' □H CFG GOAHN ?HN' #F□DN' ?DC ' A?' GHDE') ' LE' CFG ?BCFAD' A?' CFG ADD □H?M' KM?E ' A@GCF□H ' HZADG CF?H ? CFDN' J ? >AD@GN' LE' F?(KDGG AH' CFG >ABHN?□AH' M?□N' LE' F□ ' KDGNGOG AD ' ' ?HN' ?LABC ? ' CFDN' J ? ' GHC□DGME F□ ' AJH' 0A@KA □C□AH' ' &'MAHG' N□ C□H B□ FG ' CFG G GPGD?M OM? G ' □H F□ ' GN□C□AH ' LE' K?DC□OBM?D @ ? D (=' MM' CFA G M□HG ' J□FDOF FG ?NAKCGN' J□CFABC' ?HE' ?MCGD?C□AH' ?DG' KD□HCGN' □H CFG B B?N' @?HHGD' CFA G KGGOFG ' J□FDOF FG ?MCGDGN' AD' G K?HNGN' ?DG' N□ C□H B□ FGN' LE' □HPGDCGN' 0A@@? ' ' ?HN' CA' ?MM' CFG M□HG ' GHC□DGME' 0A@KA GN' LE' F□D GM?' ? CGD□ (' ?DG' KDG>□ GN I' ACFDH ' ? '□C' JABMN' GG@'0?H' LG ' >?□DGD' CF?H CF□ ' ?HN'CFG'D?NGD' JFA' GG 'CFG'□HPGDCGN' 0A@@? ' ?HN' CFG ? CGD□ (' KDGG?N' APGD' GPGDE' K? G' @B C' 0A@G CA'CFG' 0AHOMB □AH' CF?C' JF?C' F?(- KDGG NCN' CA' CFG' CFG AD□ □H?M' JAD(' OAH CCDBCGN' ?C' MG? C' CJA CFCDN ' A?' CFG M?LABD' ?HN' CF?C' CFDGDG>ADG' □?' CFG ADD □H?M' ?BC□AD' JGDG GGMG' AD +DGGHG' AD' &'?DMA'J G ' AD' A@G' AHG' JFA G H?@G ? ' KGD□ FGN' CFG ?HE' □HSBDE CA' F□ ' OF?D?OCGD' F?PG' LGGH' FGNG' SB C□>GCN' □H NA□H ' JF?C FG' KMG? GN' J□CF' CFG' DBNG' @?CGD?M ' CF?C' >GMM' □HCA' F□ ' F?HN ' G' ?DG A>' A□H□AH' FAJGPGD ' C?C' □>' &'?MAHG' F?N' KD□HCGN' CFG =' AHCGHC□AH'I' □H F□ ' GN□C□AH ' F□ ' ?D□CF@GC□D' JABMN' F?PG ?MM' LGGH' LMAJ'H' □HCA'CF□H ?□D' LBC' FG' OFA G CA' KD□HC'□H' BKKADC' A>' F□ ' □HPGDCGN' 0A@@? ' ?HN' F□ ' ? CGD□ (' CFA G' K? ? G ' ? ' HACG ' □H' J F□OF' CFG DG?CG C ?@ABHC' A>' ?MCGD?C□AH' F?N' C? (GH' KM?OG ' G' J□MM' GHNG?PABD' CA' KBC' CFG @?CCGD AH' ?' >?□DGD' >ABH N?C□AH' LE' ?H?MET□H ' ? M?D GD' KADC□AH' A>' CFG AD□ □H?M ?HN' CFG' 0ADDGCCGN' JAD(' C' JABMN' LG' CGN□AB ' >AD' B ' CA' KBD BG' CF□ ' LD?HOF' A>' CFG' □HQB□DE' LGEAHN' ?' M□@□CGN' G CGH□' ?HN' JG' CFGDG>ADG F?MM □H C□CBCG' ? 0A@K?D□ AH' OF□G>ME'LGCJGGH'?'>GJ'A>'CFG' OGHG ' JF□OF' FG' □ ' FGMN HAC' CA' F?PG' JD□CCGH' G@DE) ' ?DG ?@AH C' CFG @A C CDG? BDGN' DGOAMMGOC□AH ' #FG' KM?H' JF□OF' JG' F?MM' KBD BG' J□MM' LG' CA' KD□HC' >□D C' CFG' CG C' A>' GHDE') ' J□CF CFG @?D(' ? □ GN' LE' &'?MAHG' HAC' HM' MAA9P' NHMN' PE KP' #iO'7 99 %O' NH'M' MPM'G'MiO'HPM'iT'OPPL'7PN'Q Mi+ HP' JNH9PG' 79 iN'O NH'K'JN' iT'Mpi0P 'JG'LP'9MJQH' Y #iO' HPi'2'GNM N'NHP'pi JG'LP L9P'9MJQH' Y #iO'A O' iP'AP MO GPO'H '6'N PMO+ #H';'J1LH PT' M1'2'APM';NH G'GHMIPJ9'T UP+\ X HPi'NH J'O OGN' OP' i'N J1LH'NH JQH'NHP'GN PPNG+ JN'G 7N[2'NH iU'GHP'K IPGB MiO'2%9$'L PLM P' ?2T'NPM GNM i%O'PTPG'N 'GPP'HP'I GP PG+ ' HP 79O' '1Z7 KP G+ $ ()*$ ' ;' ' '

H GN M!' PM' G MA9P' N ' PIOJ P N*' ;#'iO' APG OPG M99 NH G' NH J' HMGN' MLL iNPO' KP NM i'EJGN KPG 7' NHP' LPMKP' i' p p T GH p' N ' HM!Q' H IpGN' Ipi' NHMN' GMP9 7 ' NHP '9 iQ8 MiO' APKMJGP' NHPT' K J9O' i N' PMO' NH J' HMGN' HJiQ' NHPI' JL'8 i9T'7 '
H KH' KMJGP' NHPT' p P I GN' NHT'N '9 P+
4 2 ' 4PG' HMN' 7'NHMN'1
' M T'2'GMT'NH J' JQNMPGN' i N N ' 9PN' NHT' H GP' PM' NM' K9 MU' HPI' MI'
H IpGNP ' I MI'NHMI' NHTGP9T'Q PG' i'H G'H GP' MiO'O JA9PN*

#FAB F' &'?MAHG ' ?C JMN' LG' AL GDPGN' F?' ,LGGH' FGDG' A@G J F?C' MLGD?N' J CF' F0 ' 0A@@? ' FG F?' DPGH' B ' PGDE' >GJ' ? CGD0 (' F?(' KGDG' CFB ' AHME' 0AHCD0LBCGN' A@G F?N> NATGH' AD0 ?H?N' MOHG ' CA' CFG G OGHG 4' ?HN' >' JG' JD?0G' CFG MOHG ' @?D(GN' J0CF' 0A@@? ' CA' CFG OADDG-KAHN0 ' MOHG ' 0H' CFG =' AHCGHCAH I' JG' F?M' >HN' CF?C' F5' HAC' 0AHCD0LBCGN' ?' 0H MG' HGJ'KA0HC' OOADN0H ' CA' &'?MAHG8 ' CFGADE ' CFGH' CFGDG J?' =' A@G ?BCFAD' JFA' KDGOGNGN' F?(' KG?DG' I' JFA' @'8' OM ?'@' CFG @GD0' A>' F?P0H ' 0PGH' L0DCF'0H' I H M?HN' CA' CFG PGDE F0 FG C 0A@GNER HAC' CFG @GGG 0A@GNE' A>' @'?HHGD ' HAC' CFG 0A@GNE' A>' @0C?-CAH ' LBC' CF?C 0A@GNE' JF0OF ' F?P0H ' 0C ' DAAC ' G@LGNNGN' 0H' CFG @A C KDA>ABHN' KF0A AKFE'0 ' CMM' ? ' >DG F' ? ' ?C' CFG' FABD' JFGH' 0C J? ' >D C J0CCGH ' ?HN' JMW' GHNBDG' CFDAB F' GPGDE' OF?H G 0H' CFG' ABCJ?DN >AD@ ' A>' AO0?M M0>G' AD' J F?C 0' ' CFG 0A@GNE' JF0OF' 0 ' FGDG' LG>ADG' B ' JDC0CGH ' ?' 0C' JABMN' GG@' LE' = A@G ?BCFAD' JFA' KDGOGNGN' F?(-KG?DG'WI' 0C' CFG 0A@GNE' A>' &'?DMA J G'W' AD' A>' +DGGHG'W' AD' A>' GGMG'W AD' A>' CFG' M?CCGD' CJA' CA' JFA@' &'?MAHG' ? OD0LG ' CFG G KM?E ' W' AD' A>' $AN G ' JFA' JDACG' 0H' 0AHSBH0C0AH' J0CF' +DGGHGW' AD' A>' $EMEW' AD' EN'W' AD' ? FG'WR AD' 0 ' 0C' CA' LG' CD?0GN' CA' A@G ?HAHE@AB ' ?BCFAD' BOF ? ' FG' JFA' KDANBOGN' CFG = ?@AB ')0CAD0G WI' G ?DG BCCGDME ?C' ?' MA ' JFGDG' CA' ? 0 H' CFG ?BCFAD F0K' A>' CF0 ' 0A@GNE' BKAH' &'?MAHG8 ' CFGADE' G CBDH' CA' CFG JAD(' A>' CFG ?BCFAD ' JFA' KDGOGNGN' F?(KGDG ' ?HN' JG' >0H' ?LBHN?H0G '0HNGGN' A>' MAJ' LB>>AAHGDE ' LBC' O?DOGME' ?' K?D(' A>' CF?C BH0PGD ?M J0C ?HN' FB@AB0 JF0OF ' ?MW' CF0H ' 0AH 0NGDGN ' ?DG' CFG PGDE' D?DG C ?@AH C CFG 0C ' #G J (G LBDE ' ?HN' CFG 0GHG' LGCJGGH' +MA CGD' JFA' ?DG' >?@0M0?D J0CF' CFG' JAD(' A>' CFG G?DM0G C iH M0 F' ND?@?C0 C ' 0A@K?DGN' KADC0AH ' Q>' CFG' G0AHN' ?HN' #F0DN' ?DC ' A>' GHDE') ' ?' G A>' CFG' 0C ' ?DG' F?@HNA@' 0CFABC GHCGD-J0MW (HAJ' CF?C ABD' ? GDC0AH 0 ' HAC @?NG ?C D?HNA@' 0CFABC' GHCGD-0H ' ?C' KDG GHC' @ADG @0HBCGME'0HCA' CF0 ' 'QBG C0AH ' J G' @'?E' BKKADC' ABD' AK0HAH' A>' CFG' 0F?D?0CGD' A>' CFG' 0A@GNE' J F0OF ='KDGOGNGN' F?(KG?DG' I' LE' CF?C A>' ?' P?MBGN' >D0GHN ' G CD?0CGN' >DA@' ?' >GJ' K?' G ' A>' 0D0C0QBG' AH' CFG' GH0B ' A>' ABD' KAGC ' ? ' 0A@KDGFGH 0PG ? ' 0C 0 ' LG?BC0>BM' =' G' ?@KMG ' G' >M0G ' A>' >DA@' CFG' GHGD?M' QBG C0AH ' ?HN' AG ' CA' CFG' GHDE') ' A>' &'?MAHG' CF?C CFG G DG G@LM?HOG ' 0?H' LG' >ABHN' AHME 0H' JF?C :'

H 0H?00B0?0CG I' J F0OF' FG' FAMN ' >DH$' ?' N0 C0H B0 F0H '='KGOBM0?0C0E I' >0CE >AB0' ?HN' A>' J F0OF' CFG' ?NN0C0AH ' ?DG' GP0NGHCME' HAC' A>' F?(KGDG8 ' GZM0G C' KGDAN' #FG' 0GHG' L0CJ0GH' GHDE' ?HN' CFG' ?@G(GGKGD '0 ' ?M A' DG?C0E' G K?HNGN' A' CFG' A0MAQBE' A>' +MA C0D' ?C CFG' GHN' A>' CFG CF0DN' ?OC' ?HN' A' CFG' 0GHG' J0CF' $G J0 ' A>' D?HOG' #FG G' GM?LAD?CGN' BH?MCGDGN' CFG 0GHG ' ?DG' 0A@K?DGN' J0CF' CFA G' J F0OF' GP0NGHCME' HAC' A>' F?(KGDG8 ' BKKA GN' CA' F?PG' >AMAJGN I' G' KDAOGGN' CA' G F0L0C' HAC' CFG ' =' H' KGDB 0H ' CFG G' M0KG I' ?E ' CFG' AMG@H' 0A@@GHC?CAD' =' AHG' 0?H-HAC' FGMK' DGOAM0C0H ' CFG' CD?NG' J F0OF' M00 ' >?CFG0' F?' LE' A@G' LGGH' =' A>' F?(KGDG' ?HN' =' ACFG0' @'HBCG' @?D(' A>' F0 ' F?HN I' B0F' FH ' B ' H ' ?NSGOC0PG ' ?NP0GDL?MME H ' 0F?D?0CGD0 C0' HA0' A>' F?(KGDG' ?MAHG ' LB0' A>' GPGDE' D0CG0' A>' F0 ' C0@G ' H' CFG' ?@G' J?E' FG' @?HC?H ' CF?0 =' H' ABD' ?BCFAD8 ' GHB0HG' KM?E ' FG' >DGQ0GHCME' LADDAJ ' >DA@' F0@ GM>' CFG ?@G' FC' LGIH ' >ABHN' H' HG?DME' CFG' ?@GXG KDG 0AH ' H' N0>>GD0H0 ' J0CF' CFG G 0GKC0AH' A>' CFG0GHG K?' ? G ' ?D0' AHME >ABHN' LGCJGGH CFG' ' 'K?' ? G ' ?HN' CFG' H' CFG' G0AHN' ?HN' #F0DN' ?DC ' B0F' KG0DG' ?' 0A@K?DGN' J0CF' CFA G' J F0OF' DG@?H' BH?MCGDGN' J0CF' CFG' ?@G0HNGN' KADC0AH ' Q>' CFG' G0AHN' ?HN' #F0DN' ?DC ' A>' GHDE') ' ?' 0A@K?DGN' J0CF' CFA G' KADC0AH ' J F0OF' ?DG' BHCAB0FGN' J G' ?DG' DG?NE @?CGD0?M KA0HC' . B0' CFG' ? GDC0AH' 0 ' BCCGDME' J0CFAB0' >ABHN?C0AH' CA' ?N@0C CF?C CFG' DG0G'PGN' CFGADE' J0ABMN' DG@?H BH F?(GH' 0H ?' PGDE &'?MAHG' F0@ GM>' NAG ' HAC' ?CCG@0C' CA' BKKAD0' F0 ' G0C0AH' LE' ?HE G ?@K0G ' >DA@' CFG' GHGD?M' QBG C0AH ' ?HN' AG ' CA' CFG' GHDE') ' A>' &'?MAHG' CF?C CFG G DG G@LM?HOG ' 0?H' LG' >ABHN' AHME 0H' J F?C

7 ? E ' ' 7 7

FG' FGMN' F?(KGDG' CA' F?PG' JD□CCGH' A>' CFG G' ND?@? R CF?C □ ' □H' AHG' K? ? G' A>' CFG' □D C' ?DC' A>' GHDE') ' ?HN' □H' CFDGG' A>' CFG' BH@?D(GN' M□HG ' A>' CFG' GOAHN' ?HN' #F□DN' ?DC

4 ' % ' 2+ ' ' 2+

6' 4(' '$2- ('R S @MOO PGGPO' N 'M' KM O !M9 +
6' : O' : O' [' NHMN' ! A9PG' GH J9O' GJKH' % ($% APM +R
6' & MNHP 'NHM!' 2' J9O' AP' G ' 6! % 0 B
/' ' ! ' 2' M I ' AJN' %$ 8' 7' I TGP97+R
6' 2' 9 P' ! ' (' % .
6' X P P' Q !Q' ' !KP' - 0 'N ' I T' 99+R
6' T' ")' ' 2 B
/' #9T' "' !) 'HMNP+R
6' / UP' ' -%' H GP' 8 % ' *' G' GLP!N+R
6' H J' O GN' NHP!' !Q' I P8 MG' NHP' G9MJQHNP P $O NH+
X H KH' Q PNH' I M!T' J!OG' HP!' !P' 99' U 99+R
6' 1J '% ()%' GHM99' AP' M' I PM!' N '% ()' M' K NT+R
6' / PM!' *']JM NP !Q' % '*' M!O' K9 I A !QT? D+R
6' 6X H ' ! ' G' ' ' NH' M' 8 % ' 7' !+R
6' 'NH J' M N' K I P' J!N 'D' % ' ' $.
6' % G' AJN' NHP' %$ 0 ' ' 2' ' ' 2 .
6' H J' ()' $*' H KH' ' $%' %' $ ' '%(.
/' #9M MQP' G' M' I MNNP ' 7' I P' NH'
HM!' N 'AP' OPM9N' NH' AT' 2%$ - .

M 4(' 'G !' R S 9 ' '@MOO PGGPO' N 'M' KM O !M9 +
6' " P' MG' M' I M!'
1 7' M!' J!A J!OPO' % ($. S 9 2'
Y' % G' APNNP 'N ' AP' 9P' NHM!' ' ! % G . S 4 %
P' 2' M I ' NHP' %$ 8' 7' L ' JKU !QHM I +R S 9 2'
P' 2' O '7PM 'K 9 J MA9P' (' % . S 0%' " 0%' %
P' NMT' NHP' P T' - ' 7' NHP' . < ($ ' ' (
P' HP' "' ' ' 2' 2 . S 9 '
Y' 5 T' G ')%' '"' B!= ' ' '
P' T' '! ' -* M!O' !" 8 % '9 QHN+R S ($ '
P' / UP' N 'M' I J OP !Q L PKP' !' I M!T' L9MKPG'
: PG' I P' GJLP 79J JG' OPMNH+R S 9 '
P' " P P$G' NHMN' 99' % ()' M' K NT+R S 9 2' ' @OM9GNM77' GH !Q' H G' A NN9P' 7' % () 0+'
0' / PMGH%O' !' 9 UP' H J!OG' GH J9O' *' %8 ' ' B S 9 2'
P' HMN' MG' M' 8 % 'O ' ' '2 'MA JN+R S 7 ' $
0' H G' % ' '" ' .< ($ '
R" PM P!' %$ ' " M T%G' HMLLT' ' ' 2 . < 9 2'
0' PPLG' $' H G' K J N' M!O' NHP P' NHP' ()' G NG
4('H G' GNMNP+R S ($ '

R P' CFG' 2' 7' I T' 9 P' N 'HP +R S ($ '9

4 ' ' 4 ' ' 5' '

$ HP' APM G' M') 0%' 8$ ' ' %' '$ '" () B
@ M9 !P' HMG' I M UPO' NH G' MG' M' !P '9 !P' NH' M!' MGNP GU 'NHP' !9T' O 77P P!KP'
AP !Q' NHMN' 8$ ' ' G' 3 I NNPO+
$ M 9%O' JL' !' GHM I P' ? ?$' - - %' !' HT' AMKU+R
$ 17N' HM P' 2' GPP!' M' N I P9T LM NPO' $ % B
@? H!G !' AGP PG' NHMN' HMN' G' N JP' 7' M' (-% ' G' HP P' MLL PO' N 'NHP' % ' +
$ IPN I PG' HP' KM99G' JL !' OJUP' " I !DH PT%G' QH GN+
#!O' 8$ %- %' '$ %' - '' 8* MG' N 'H I \R
$ M!' 2' I MUP' I P!' 9 P' HPNHP 'NHPT' 99' '! ' # B
M HP!' GHM99' 2' ($ 'NHPP S H 9O' NHT' 9M GH' N !QJP+R

$ " M P' A UP' NHP ' "(8)% NH' ' 2 ' %' ' $. < 9 2' '
0' 3 'NHP ' " $ $ %' L JO9T' ' $ ' " ()% . < 7 ' $
$ / UP' M' LP EJ P' PM !Q MLP E+R S 0%' " 0%' %
0' $ ' $ % %' NHPT' HM P' OPL G%O+R S ($ '
6' 5 M I !PO' %- %' M
HMN' !' K GG' MTG' M!O' 79 OG' HM P' " ' . S 9 '
/' 2!7PKNPO' I !OG
'NHP ' D - '' 8 %' 99' O GKHM QP' NHP 'GPK PNG+R S (" $
Y' H !U' T J' 2' APM 'NHP' GHPM G' 7' OPGN !T' \
" M P' 2' K I I M!O I P!N' !' NHP' LJ9GP' 7' 9 7P' S 7 ' $
P' : 'N 8' ($ 'T J' . S $ ''

4 ' ' ' ' 5' '

Y' HP' G QHN' 7' M!T' 7' NHP' H JGP' 7' 4 U'
2G' MG' M' 7J T' N 'N I P!N' I T' G J9+R
Y' X NH' LJ L9P' 7MJ9KH !'- 'N 'NHP' H 9NG'
2!' "' ' 7' NH GP' H I 'HP' HMO' G9MJQHNP PO+R
Y' X J9OGN' HM P' I P' PPL' \' HT' G '8 NH J' HMGN' NHT' GH
O ' MQ !Q' !OG' A9 JL' M' GN I ' 7' NPM G+
#!O' HP!' NHP' MQP' M99MTG' NHP' M !' APQ !G+%
#!O' 7' NH J' NP 'NHP' GN T' P99' +
L !' I T' G J9' NHP' HPM P G' 99' GHPO' NEM G+R
Y' !Q' 7 NH' NHMN' 7MNM9' %(($! 8*' N ' J 'H JGP+
HMN' ! NH !Q' % 'N 'JG' AJN' A9 O' M!O' $.
I '$ ' '($' * OP 9G+R
g X HMN' M9 M!N' 7 PI P!' 9 UP' N 'MJNJ I !%G' (
" M P' 7P' 80 'O ![R
Y' #!O' ! ' HMN' PGNG' AJN' NHMN' P' GLP!O' NHP' N I P'
X NH' GNMNP9T' N J I LHG' M!O' I NH7J9' K I K' GH G' \R

6' #' O Q' 7' NHP' H JGP' 7' !NMQJP' I PG' I P R < '(' ' '
6' X NH' = S'- ' !' NHP' "' ' 7' " M 79PJ +R S 9 2'

II : (' ; ,O1' +% B%(+' + ' +' 9 * ;' 'B' 2- ,
" P9O' AMKU' H G' G %G' N OP' N ' I MUP' N' I P8
#N' 9MGN' N' M !G' M!O' AJGT' !OG' Q P' %P' R S ((
6' H G' GH P ' A9 !' JL' AT' NP I LPGN' 7' NHP' G J9+R S 7 ' $
/' P99' NH J' NHP' 9M I P!NMA9P' NM9P' 7' I P+
#!O' GP!O' NHP' HPM P G' PPL !Q' N 'NHP 'APOG+R S ($ '
6' 1JN' !' T J' 8'%@ ! NH !Q' AJN' % %' ' $' \R S ($ '
/' " P' HMG' ! 'KH 9O P!+R S (" $
6' 8 *' 9 UPD X
4 J' 7 PGH 7M ' Q !G' M!O' T J' 79 P !Q' !7M!NG+R S 9 2'
6' I P' 9PN' JG' Q 8 P' 99' !K9JOP' M99' EM G
X NH' N J I LHG' I NH' M!O' M P' G 9P I ! NT+R S0 8 ' 5 ' ' '

>' & ?MAHG' CFGH' ? ' JG' F?PG' GGH' BKKDG G' CFG' DG G@LM?HOG' LGC JGGH' K? ? G' J F□OF' FG' FAMN' JGDG' HAC' JD□CCGH' LE' F?(KGDG' ?HN' K? ? G' □H' F□' BHNABLCGN' JAD(' □C' □' HAC' BHDG? AH?LMG' CA' G KGOC' CF?C' □H' CFG' ?@G' N□ □H GHBAB' K□D□C' FG' FABMN' F?PG' OAHOG?MGN' CFG' DG G@LM?HOG' J F□OF' ?M A' G □ C' LGC JGGH' CFG' HGJ' ?HN' CFG' AMN' KADC□AH' A>' CFG' GOAHN' ?HN' #F□DN' ?DC' A>' GHDE') ' ?HN' CFG' HGJ' KADC□AH' ? ' OA@K?DGN' J□CF' CFG' GHC□DG' □D C' ?DC' C' □' □@KADC?HC' CA' HACG' CFG G' K?DC□OBM?D

#FGDG' □' HA' AK□H□AH' @ADG' OA@@AHME' DGOG□PGN' ?HN' SB CME' CF?H' CF?C' A>' F?(KGDG8' ND?@? ' LG□H 'DG@?D(?LME' >DGG' >DA@' OM? □O?M' ?HN' @ECFAMA □O?M' ?MMB □AH' ? ' OA@K?DGN' J□CF' CFG' JAD(' A>' F□' OAHCG@KA-D?D□G' ' ?HN' □C' F? ' MAH ' LGGH' CFG' >? F□AH' CA' ? OD□LG' CF□' ?L GHOG' A>' CFG' KGOBM□?D□CE' JF□OF' N□ C□H B□ FGN' ?MM' ACFGD' KDANBOC□AH ' A>' F□' N?E' CA' F□' J?HC' A>' CFG' HGOG ?DE' MG?DH□H ' &D' AMM□GD' ?E ' =' □' V+DGGHG8 ' B B?M' >?BMC' @ADG' N□ OAPGD?LMG' □H' F□' KM?E' CF?H' □H' F□' KAG@ ' □' ?H' ?L GHOG' A>' □@KM□O□CE' $' LBC' F□' KGN?HC□O' OM? □O?M' DG>GD-GHOG '>DGQBGHCME' J□CFABC' G□CFGD' C? CG' AD' N□ ODGC□AH' FG' F?N' □H' OA@@AH' J□CF' CFG' ACFGD' OD□LLM□H ' OFAM?D ' A>' CFG' C□@G' C' J? ' F?(G KG?DG8 ' AAN' >ADCBHG' CA' LG' □H' ?' DG?C' NG DGG' J□CFABC' CFG' (HAJMGN G' ?HN' CFGDG>ADG' □>' AH' HA' ACFGD' ?OOABHC' J□CFABC' CFG' NG>GOC I U' & ?MAHG' KDAPG' CF?C' CFG' □D C' ?DC' A>' GHDE') ' OABMN' HAC' F?PG' LGGH' JD□CCGH' LE' F?(KGDG' LGO?B G' □C' ?LABHN' J□CF' BOF' DG>GDGHOG R

=' C' □' PGDE' AL GDP?LMG' CF?C' □H' CFG' □D C' ?DC' A>' □H ' GHDE') ' CFGDG' ?DG' @ADG' ?MMB □AH ' CA' @ECFAMA E' CA' OM? □O?M' ?BCFAD ' ?HN' CA' ?HO□GHC' ?HN' @ANG@' F□ CADE 'CF?H' ' LGM□GPG' O?H' LG' >ABHN' □H' ?HE' AHG' K□GOG' A>' ABD' ?BCFAD8 ' JD□CCGH' AH' ?H' !H M□ F' CADE' ?HN' CF?C' CFG G' ?MMB □AH ' ?DG' □HCDANBOGN' PGDE' @BOF' □H' CFG' ?@G' @?HHGD' ? ' CFGE' ?DG' □HCDANBOGN' □H' CFG' KM?E ' A>' +DGGHG ' GGMG ' $AN G' ?HN' ACFGD' ND?@?-C□ C ' JFA' KDGOGNGN' F?(KG?DG ' CF?C □ ' CFGE' NA' HAC' H?CBD?MME' ?D□ G' ABC' A>' CFG' BLSGOC ' LBC' GG@' CA' LG' □H GDCGN' @GDGME' CA' FAJ' CFG' JD□CGD8 ' MG?DH□H I

& ?MAHG' CFGH' KDAOGGN ' CA' GMGOC' CJ GHCE CJ A' A>' CFG' =' @A C' DG@?D(-?LMG' I' A>' BOF' K? ? G ' >DA@' CFG' □D C' ?DC' A>' GHDE') ' C?(□H ' %D ' 0AFH AH8 ' 0AHSGOCBD?M' =' . GDGH□OG' I' ? ' AHG' A>' CFG@' C' □' ABD' □HCGHC□AH' CA' KD□HC' CFG G' CJ GHCE CJ A' K? ? G ' ? ' & ?MAHG' □PG ' CFG@' ?NNBO□H ' FAJ GPGD ' HG?DME' ? ' @?HE' K? ? G ' >DA@' ACFGD' KM?E ' □H' J F□OF' CFGDG' ?DG' HAC' AHME' OM? □O?M' ?MMB □AH ' LBC' $?C□H' QBAC?C□AH ' #F□ ' J □M' ?C' MG? C' FAJ' CFG' >? F□AH' A>' CFG' C□@G U' G' >□D C' □PG' CFG' K? ? G ' >DA@' GHDE') ' ?DC' R

*' ?2M G' H G' N JP' I !Q' P P!' MG' !' NHP' HPM P!G
' !' NHP' PM NH ' N ' NHEG' OMT' G' ! N' U! !+
*' #' 7M ' I P' Q9 JG' GNM ' NHT' G JG' 99' I MUP'
HM!' ?J9 JG' MPGM ' ' A QHN' ^ P P! KP'+
*' $X MG' MH I PN' !GL PO' NH' M' O P' \
*' " P9P!' NHP' I NHP ' 7' Q PMN' !GNM!N !P
'TPN' M !N' - H 9 L%G' OMJQHNP G' P P' 9 UP' NHPP+
;)* 0 GM O' M' K J!N T I M!' 7' J G' PK OG' BK+
* D#!O' 9 UP' NHP ' ^ P '
' - 9MT' !' NHP' 2HNP' APH 9O !Q' NHP' N !G' AJ ! !Q+
* HP' GL N' 7' OPPL' L LHPKT' GHP' HMNH
3WKPPO !Q' NHP' ! !P' TA 9G' 7' 9O' & I P+
* #' NKH' AT' 7PM ' ! N' 7 KP' 9BP' " M!! AM9
5 PG' AMKU' J' N LG* ,
=* 5 !PGN' K PMNJ P' #GN MPM%G' OMJQHNP +
* S D#O ! G% QM OP!G+
HMN' !P' OMT' A9 I %O' M!O' 7 J N7J9' P P' NHP' !PWN+
* #' GNMNP9 P' LT M I G' N 'HP' 2 99' PM +
HM!' &H O LP%G' ' P I LH G% P P' MG+
* S #!' J I ' I P' L PK JG
HM!' NHP' KH EP P99%O' K 77P' 7' 5M JG+
* 2' GHM99' MG' 7M I JG' AP' AT' NH G' PWL9 N+
#G' KTNH M!' H I T G' AT' T JG% OPMNH+
* 2' NH JQHN' 2' GH J9O' HM P' GPP!' G I P' " P KJ9PG
#' GPK !O' " PKN ' 7 'H G' Q I' MGLPKN+
)* PGN 9 UP' MQPO' !' M!' MQP' 7' KM P+

;' # ! ! M9G' 7' NHP' NMQP' 9* H + L*) +

HP!7 99 NH J NHT OPGLP MNP G P 7 PNP H J 2KM JG+

X HP P G NHP Q PMN #9K OPG 7 NHP 7 P9O 1

M I 2 9 9 P NHMN L JO !GJ9N !Q GH L+ HMN NPGM M!O H G 7 NJ!P AM P MN !KP+

Q+ 2G M9A N G9M !8 NHP O P!KH I M!%G !9T GK J QP 4 J U !QO I%G NP M!O A9MKU P I PG G 1

H J I MT%GN ! N M!OP ! NHMN 9MAT !NH8 HP P ! NMJ G M!O JQ9T N PMG !G 9J U+

PP H NHP JQ9T NKH O NH AP!O HP A G# #G 7 NH KP GHP J9O KHM!QP I T GHMLP+

HJG HP Q PG #G O O NHP T JNH7J9 -M G !KP N : PPKP8

X NH H LP N 7 !O NHP 9 UP P P!N !9 P+

PNH !UG NHP PM9 I G 7 3!Q9M!O O M!KP M!O 2 P9M!O PM NHMN L L N !N IT 79PGH M!O A9 O+ #G O O NHP 7MNM9 A M!O #9NHPM AJ I %O+ !N NHP L !KP%G HPM N 7 M9TO !+

NP # MK OM & I M! G !KP P L GGP+

M!N P!P M! I G KKP9PGN AJG MP @

PO KP NP LGJ I +

G N M!O NKH I P MG #GKM! JG O O+ X HP!HP N I MOO !Q 5 O J9O J!7 9O " G 7MNHP %G MKNG K I I P!K%O !AJ ! !Q T \

#!O 9 UP M I A N JG T99M P Q Q%O X NH Q AAPNG 7 NHT I NHP %G A9PPO !Q HPM N+

-K! QP9 OJG N I KKJLMN M NJG+

2!N MG I M!T Q AAPNG 99 2 KJN N+ #G 9O POPM T J!Q #AGT NJG O O+

5 7MK M!N 9MJO G GJ I I M G N GNM NJ !+

"P9P! 7 : PPKP MG 7M P 7M NHM!NH J+ #9NH JQH NHT HJGAM!O I MT AP P!P9MJG 8 #!O !P%P MG #QM I P I ! !%G A NHP !Q%O T NHMN 7M9GP I M! MG NH G U !Q AT NHPP+

#!O 7 P NH P L I GP NHP I GJKH P M OG #G KN G $PM MN NHP 19T I L M!K QM I PG+

#!O G AGP]J JG 99 NHT 7MNHP AP MO 7 NHP 9 GG 7 NHPP HM !Q ! I P+

#G - M I MG 7 M99 H G M9 M!N G !G+

HP N QP 99 AP I 9O H 9P GHP O NH I J !8 #!O P 99 AP NM !NPO NH P I GP+ HPM E M!O GPP HP L9M !NG HP A ! GH NPM G+

2%99 L9 T NHP MN MG P99 MG PGN 5PKP P I P G9 9T NHM!9TGGPG K J9O+ #!O 9 UP M ! !NMUP M! NHP T+

HMN MG 9TGGPG M!O GN JN 5 I POP X NH G9P QHN M!O I M!H O GN 9P N &HPGJG%NP!NG #!O A JQHN 7 I NHP!KP NHP H MK M!7MNM9 GNPPOG+

/ UP N NH G G9M!O Q N ! NH NHP KPM!+ 1 I I OPGN 5 M!K K9PO NH HP !T I LHG+

UPPL NHMN MNH P P I P I L PNT HM!?PLHNHM%G HP!HP GMK 7 KPO H G OMJQHNP +

#!O! 9 UP #EMW P9M I ! JG+

C J MM LG ALP AB CA CFG O?DG>BM DG?NGD CF?C JG F?PG C?(GH CFG G FCGGH K? ? G H JF OF CFGDG ?DG BOF =?MMB AH CA @ECFAMA E CA OM? O?M ?BCFAD I YO ? ?DG D?DGME >ABHN H F?(KGDG >DAHC CFG GOAHN ?HN #F DN ?DC A> GHDE) . BC C @?E HAC LG GQB?MME ?KK?DGHC CF?C 0 $ 3 $ =! 2 H D JO $ F DR ?MM J CF-ABC ?H G OGKC AH FGMN CA LG OAHCD LBCGN LE F?(KGDG C O?DOGME HGOG ?DE CA KA HC ABC CF?C CFG G F L C AH A> BOF K? ? G ?C AHOG NG CDAE & ?MAHG8 ?D B@GHC CF?C CFG D C ?DC A> GHDE) M OABMN HAC F?PG LGGH JD CCGH LE F?(KGDG LGO?B G C ?LABHN J CF @M?D ?MMB AH ?HN >BDCFGD FAJ CF?C CFGDG ?DG KGOBM?D C G H F?(KGDG8 BHNABLCGN KADC AH A> C>G G ND?@? JF OF ?DG CAC?MME N >>GDGHC >DA@ CFG ADN H?DE OF?D?OCGD C O A> $ @?HHGD G NJGMM MCCMG BKAH CFG >?OC CF?C CFG G G FCGGH K? ? G JF OF ZEG F?PG PGH ?DG OAHOMB PG ? ?H C CFG CFGADE A> F?(KGDG8 J?HC A> (HAJMGN G #FGE KDAPG HOAHCG C?LME CF?C ? ? EABH JD CGD FG F?N CFG (HAJ-MGN G ?HN J? HAC BHJMM H CA N KM?E C LBC CF?C JCF CF?C JAHNGD>BM SBN @GHC JF OF J? ? DG@?D(?LMG ? CFG KDAN AB D?H G A> F @? H?C PG KAJGD FG AAH MG?DHC CA ?PA N CFG KGN?HCDE CA JF OF H>GD AD @GH A KGDC H?O AB ME OMBH H CFG KD NG A> CFGD OFAM?D FK

&?MAHG JG F?PG GGH C?CG N C HOCME CF?C CFG 3 A> CFG HGJ KADC AH A> GHDE) A> ? N>>GDGHC OAMABD >DA@ CFG AMN

5 GGP NMN ! L+) +

KADC AH A> CFG = AHCGHC AH I G FAMN >BDCFGD CF?C CFG PGD O?-C AH A> CFG D C ?DC A> GHDE) KDGO GME A> CFG ?@G OF?D?OCGD ? CFG # J A ?DC A> CFG = AHCGHC AH ?HN BKAH CF ? DABHN OA@-L HGN J CF CF?C A> CFG N KM?E A> MG?DH H J F OF JG F?PG ?MDG?NE HAC OGN FG DGSGOC CFG D C ?DC A> GHDE) ?MCA GCFGD >DA@ LG H F?(KGDG8 ?HN ?NAKC ? F?(KGDG8 AHME CFG HGJ K? ? G H CFG GOAHN ?HN #F DN ?DC R

=#FG PGD O?O?C AH A> CF KM?E V GHDE) ?DC ?KKG?D CA @G OMG?DME A> ? N>>GDGHC OAMABD >DA@ CF?C A> ?MM ABD ?BCFAD8 GHB HG ND?@? JF MG ?C CFG ?@G C @G C DG G@LMG CF?C A> @?HE A> CFG KM?E KDANBOGN LG>ADG CFG C@G A> F?(KG?DG

=H ?MM CFG CD? GN G JD CCGH LG>ADG F C@G AD SB C JFGH FG OA@-@GHOGN ?BCFAD ?' OGDC?H C?CGME @?DOF A> PGD O?O?C AH PGDE AL GDP?LMG #FG GH G OAHOMBNG AD K?B G ?M@A C BH>AD@ME ?C CFG GHN A> GPGDE MHG ?HN CFG PGD G F? O?DOGME ?' DGNBHN?HC EMM?LMG CFG DG?NGD @?E HAC F?PG ?HE A> CFG G K GOG ?C F?HN VLE CFG KA G AH A> JF OF FAJGPGD F MLD?DE JABMN HAC LG @BOF GHD OFGN F?MM ?NN ?' >GJ H C?HOG R CFG >D C CF?C AOOBD I

#FG QBAC?C AH JF OF &?MAHG F? BLSA HGN ?DG PGDE HB@GDAB AOOBKE H >ABD OMA GME KD HCGN K? G #FGE ?MM A CA FAJ JF?C JG F?MM BL GQBGHCME GHNG?PABD CA G C?LM F CF?C CFG LM?H(' PGD G JF OF H CFG F?HN A> CFG @?CBDGN F?(KGDG LGO?@G CFG @A C G QB CGME @ANBM?CGN H CDB@GHC A> F?D@AH AB BCCGD?HOG J? LG>ADG $ >BMME CD GN C KAJGD ?HN C OA@K? ?' DBNG ?HN ?C CFG LG C ?' @AHACAHAB H CDB@GHC R ?' PGF OMG A> PGD G CF?C J? MCCMG LGCCGD CF?H @G? BDGN KDA G &D AMM GD G F L C CFG OF?D?OCGD A> ABD G?DME LM?H(' PGD G J CF ?' (HAJMGN G ?HN G ?OCHG PGDE BKGD AD CA & ?MAHG R = C J MM LG GP NGHC CF?C CFG MAH B G A> DFE@G H JF OF CFG G?D J?CGN >AD CFG DGOBDDGHOG A> CFG OADDG KAHN H ABHN MGN ?C >D C CA CFG >AD@?C AH ?HN G@KMAE@GHC A> JF?C @?E LG CGD@GN OABKMGC H LM?H(PGD G H JF OF CFG K?B G AOOBDDGN ?C CFG GHN A> CFG M HG ?HN CFG GH G J? AHME OA@KMGCGN J CF CFG OA@KMGC AH A> CFG OABKMGCI C

#FG >ABD K? G A> QBAC?C AH JF OF &?MAHG G F L C FAJ @A C NGO PGME CF?C ?LABC CFG C@G JFGH CFG D C ?DC A> GHDE) ?HN CFG = AHCGHC AH I @?E LG FGMN CA F?PG LGGH JD CCGH ABD ND?@?C O KAGCDE J CFABC ?' H MG G OGKC AH J? >AD@GN BKAH AHG @ANGM A>

PGD O?O?C AH #FG KDGP?M H CFGA E CFGDG>ADG CF?C F?(KGDG OABMN HAC F?PG BD CCGH CFA G KM?E LGO?B G H F BHNABLCGN JAD(?' N>>GDGHC OF?D?OCGD A> PGD O?O?C AH KDGP?M BD LGM G> AH CFG OAHCD?DE LG H CF?C F?(KGDG NN JD CG CFG G ND?@? ?C ?' PGDE G?DME ? G JG F?PG HA N>>OBMCE H LGM GP H ?M A CF?C F >D C G>>ADC JGDG >AD@GN BKAH G C H @ANGM A> PGD O?O?C AH #FG N OAPGDE A> CFG KAJGD A> F H CDB@GHC OABMN AHME OA@G >DA@ C ' F?L CB?M B G)GD O?O?C AH ' ? @BOF KGD>GOCGN LE KD?OC OG H CFG KAGC ? OAMABD H H CFG K? HCGD LBC JFGH NN ?' KAGC AD ?' K? HCGD H F >D C ?CCG@KC KDANBOG ?' HGJ E CG S? A> PGD O?O?C AH AD ?' HGJ E CG@ A> OAMABD H C MM FG F?N MG?@C LE KD?OC OG CFG @KGD>GOC AH A> G C H @ANGM W AMN H CFG # J A ?DC A> CFG = AHCGHC AH I CA LG F?(KGDG8 AD H?MME LBC JD CCGH LE F@? ?LABC >' HAC LG>ADG 517 JG ?DG KDGK?DGN JCFABC ?HE ?L?CG@GHC A> ABD ?N@D?C AH A> F G?DME GH B CA >HN F@? G@KMAE H CFAB F HAC G OMB PGME CFG PGD O?O?C AH A> F C@G H JF OF = CFG GH G OAHOMBNG AD K?B G ?M@A C BH>AD@ME ?C CFG GHN A> GPGDE MHG ?HN CFG PGD G F? O?DOGME GPGD ?' DGNBHN?HC EMM?LMG I . BC H CFG G KM?E JG ?M A AOO? AH?MME >HN ?' >DGGNA@ ?HN D?K N CE JF OF JG H P? H GG(' >AD H ACFGD F CAD O?M KM?E A> CFG KGD AN * KAH CF KA HC JG F?MM HAC ?C KDG GHC NJGMM G ?DG ?LABC CA @?(G ? GMGOC AH >DA@ A@G A> CFG G ?@KMG QBACGN LE &?MAHG >DA@ CFG G?DME KM?E G F L C H CFG@ JCF A@G K? ? G >DA@ CFG GOAHN ?HN #F DN ?DC A> GHDE)

2+ 6 T 9 O 7 :9 JKPGNP M!O 9 O N I P O T J H ! J !T J G P P Q!%G PTPG HMN MG P HPM G !P 9T K I P M9M!O O I -M9PGN !P NH M99 H G I P!' 7 M @ HP L P I M !OP 7 NHP TM9 79PPN - PGP %O AT I MK9P !' K G MO : I J!N T J K J GP G I PPN H I !NHP MT8 - MT H I N GLJ H G GNPPO I !JNPG M!O H J G+ !N 9 H G I NHP GPP HP L !KP9T G !+ H ! !Q !Q9 T 7 H G GM7P PNJ !+R " 2 " + AT

2+ 6 M+ 9 OG I T KH 9P AP !Q P A9 ! .X NH M9U !Q !KP MA JN NHP]JMO M!Q9P 2 K I P N NM9U K I I ! PM9NH M77M G+ #G 7 T J GL NP7J9 7M9GP AEPKN !G

7 # I M9G 7 NHP NMQP 9 L = 1 / +! >

- P'NHPI 'MIO'2'9 P' LPI'N 'NHP'9M 8
JN' : O' I'IP KT'G 'OPMJ' NH' I T'G J9
X H KH' 7' N' T P9O'I N N ' J 'K IL I GP+
HP'L9 'JQH' GHM99'7J ' HP P' NHP'LM9MKP'GN O+
#IO'7J T'GHM99'PI T G 'H QH'M'L P
9 MN' IP KT' GHM99 AP'AMI GH%O'7 I' J'G O+
' X HMN' GPPUG'NHP' 3IQ9 6H'U IQ'\
7 ' K N' LP'NH 6P'QMNPG'MIO'9PN' I P'PINP' i+
JA I N' N9 E%GP97'MIO'NH IP'JIN 'I T'Q MKP
2' 99'LJN' PMKH' I NHP %G'G I'N 'OPMN9 '
O'9MT'NH G'K NT'9P P9' NH'NHP'Q JIO+R
%' *'AT'# $ '

)# 6' HP' U'N9 MN' IJG PM %O'MN' MAT9 I
HP'A MCPI' M99'7 M IO'AT' PI MI G
M %O' JN'9 UP'N 'NHP'L NM9' 7'NHP'GJI+
P I'Q' NH J'HMGN'L %O'G 'JIIMNJ M9'M 7MNHP'[
NH'HP'OPGP %O'N '9 6P'H G'A NH QHN'NHJG'Y
NOGN'NH J'AJN'9 %O'H I'HM97'G ' P99'MG 2 8
7P9N'NHMN'LM I' H KH'2'O O'7 'H I' IKP8
J 6H%O'H I 'MG'2'O O' NH' I T'A9 O8
8 ' J9OGN'HM P'9P7N'N9 T'OPM PGN'HPM N A9 O'NHP P'
NHP'NHMI'I MOP'NHMN'GM MQP'OJUP'NH IP'HP '
O'O G IHP NPO'NH IP' I9T'G I+R

9 2' *'-M N99/

' 6' M IG 7'3IQ9MIO'MIO'I T' I A9P'9 OG+
H JQH' : O'MIO'7 NJIP'HM P'AP P7N'7 I'JG
. KN JG & KHM O'GK J QP' 7' I7 OP9G+
#IO'K9MO'NH G'9MIO' I'GN 9P' 7O G I M9'HJP+
4PNQ P'I P'9PM P'N 'E T'MIO'E T'T J'M99+
HMN'7 I'NH G' IA'HMNH'GL JIQ'M GPK IO'H LP
#'U IQ'NHMN' IMT' I' J9P'MIO' NJP'A NH'
JKKPPO'H G'A NHP' I'H G'PILP T+R
$ ' "' % ' ' '7 ' $

4' 6'I)' HP'M MT' 7'NHP'JJPPI'HMNH'Q N'NHP'7 P9O
T'JIK9PG'A NH'M P'G9MI' I' PGKJ IQ'I P8
#IO'M99' I T'7 99 P G'N 'NHP'PMQP'7 P'
J I'AMKU'MIO'79T'9 UP'GH LG'AP7 P'NHP' IO+
1 '9MI AG'LJ GJPO'AT'HJIQPE GNM PO' 9 PG+
T'G IGS: O'UI G HMN'HMNH'APKHMIKPO'NHPI+R

9 2' *-M N'222+

' CFG G ?@KMG ' A>' F?(KGD□?H' MG?DH□H ' J F□O[' JG' F?PG' DGOGHCME'
□PGH' ?DG' ?MW' C?(GH' >DA@' CFGG ' CA' CFG&'=' AHCGHC□AH I' A' ?DG

' 5 GGP NMN I'L+') +'
N' PP'2IN OJKN T' N KPG'N 'NH GP'L9MT%+$

4

' 6'7 ' HJJ'7M 'TP'3IQ9 6H'LPP G'HM P' P O GL9MT%O'
1J' M IQ'PIG QIG' NH'M'HMLLT' M :
HJJG'MPM 9T'HMNH' J'7J JG' MQP' P PIQ%O'
T'OMJQHNP %G'OPMNH'JL I'NHP'N M N JG' K N8

"A@GA'?HN' 0B□G'A>' GHDE') 'A>'#FG'&GDDE' □PG 'A>' □HN AD'
?HN' A>' ?@MGC'W C' #FG' M?CCGD' □ 'CFG' @A C □@KADC?HC' K?D?MGM'
G ?@K□G' #FG' %B(G' A>' %GPAH F□DG8 'OAKE' A>' CFG' GN□C□AH' A>' 473'
J? 'BH(HAJH'CA' &?MAHG' F?N'□C'LGGH'>?@M□?D' CA' F□@'?'□C' HAJ'□'
CA'?MN' F?(KGD□?H' CBNGHC' LE'□C'DGKBLM□O?C□AH' J ABMN' &?MAHG' F?PG
KDAPGN'CF?C' F?(KGDG8' ?@MGC'J?'>AD@GN'=';AH'?'>ABHN?CAH'M?□N
LE'?HAC□GD'J D□CGDWI' G'F?PG'HA'FG□C?C?AH'H'?E□H'@A C N□ C□HOCME
CF?C'CFGDG'□'HAC?'H MG'KD□HO□K□G'A>'=';HCGDH?M'GP□NGHOG'I'LE'JF□OF
&?MAHG8'FEKACFG□'□'BKKADCGN'CF?C'CFG' GOAHN'?HN' #F□DN' ?DC'
A>' GHDE') ' = JGDG'HAC'AD□'H?ME'JD□CCGH'LE' F?(KG?DG I JF□OF
OABMN'HAC'LG'?KK□GN'CA'KDAPG'CF?C'CFG ?@MGC'A>'473'?M A'AJHGN'
A@G'ACFGD'='M□CGD?DE'K?DHC 88 ?HN'CF?C' F?(KGDG'AHME'='HGJ PGD□-
>□GN'HGJ @ANGMMGN'CD?H KA GN'@?HE'A>'CFG'K?DC' ?HN' DG?CME' ?@-
KM>□GN'?HN'□@KDAPGN'CFG'JFAMG I' G'JMN'GHNG?PABD'PGDE'LD□G>ME'CA'
KDAKABHN'?H'FEKACFG□'CA'CF□'G>>GOC' ' $ 'c G C?(G
CFG'JADN'JF□OF'FG'?KK□G'CA'CFG' GHDE') 'CFG'N□>>GDGHOG□'AHME'□H
?'H?@G' ='#E?C'CFG'GHN'D?NGD'@?E'F?PG' $ '0$ ' ' $' "K ' "
$;'JG' F?MM'FGDG'CD?H'OD□LG'I'?'KGGOF'>DA@'CFG' GOAHN' OGHG'A>'CFG
>□D C'?OC'A>' ?@MGC'='CA'GCFGD'J□CF'CFG'OADDG'KAHN□H ' OGHG'□H'CFG
AD□'□H?M'KM?E'?HN'?M A'?' KGGOFI'□H'CFG'CF□DN'?OC'=J□CF'CFG'AD□'□H?M
KGGO□F'AH'JF□OF'□C□';AD@GN' #FG'>D C'KGO□@GH'J□MM'GDPG'CA'FAJ'
CFG'@GCFAN'C?(GH'LE' F?(KG?DG' FGDG'FG'AHME'HGJ'KAM□'FGN'CFG
M?H B?G A>'CFG'AMN'KM?E'DGSGOCCH' A@G'K?DC'A>'CFG'N□?MA'BG'?HN'
@?(□H' A@G' M□ F□'?NN□C□AH' CA'CFG'K?DC'JF□OF'FG'DGC?□HGN'CFG
GOAHN'□';?' CD□(□H'KDAA>'A>'F□'>?O□M□CE'?HN'PO'ABD'A>'OA@KA'□C□AH'
JF□OF'F?'F?K□ME'G K?HNGN'?'CFAB'F□'OA@KD□'GN'AD□'□H?MME'□H'?
FAD□'KGGOF'□HCA'I'>□>CE'H□HG'='M□HG'HAHG'A>'JF□OF'?KKG?D'>GGLMG'AD
BKGD>MBAB I'

4 ' ' % ' ' ' ' ' 3I ' +

=' OM P P9$[H ' I ' 1LHP9 M'I HMN%G'NHPIP G NH'T J'\
-$' 1'IT'OPM'7MNHP'GJKH'M'KHMIQP' I';IMJ P+
'Q PM'MI'M'9MP MN I'I'M'L IKP+
'L N'7J9'N'H I '7PM'7J9'N ' IP
#'IM OPI%G'PTP'IP%P'9 UPO' I+
'.XHT' HMN%G'NHP'I MNNP ' I T'1LHP9 M'\
-$' 1'T JIQ'L IK@ "MI 9PN'NHP' I9T'79 P' 'T5PI1M U
HMN'EP P9'NHMN'MO IPO'H G'7PMNJ P' I GN
2G'7 9KH%O'MIO'GN 9%I'M MT'H G NM%G AP P7N'279I+

5 GGP NMN I'L+') +
M MA G' I'NHP 9O' "MI 9PN' G'NHP' - 9 I JG '7'NHP'9MNP'L9MT+

"P'7 J7O'I P' M9U I9' N'HP' QM99P T M99'M9 IP' HP P'K IPG'HP'N 'NHP'9PIQNH' 7M99'H G'M I'8 #IO' NHF'H G' NHP'HMIO'NHJG' %P'H G'A $' P'7M99'N 'G JKH'LP JGM9' 7'I'7MKP "P'GMNT'HMO' %O'NH G G'NHP '9MNPGN' AEPKN+ #G'7'NHPT'HMO' %O'NH G G'NHP '9MNPGN' AEPKN+ I M99 H 9P'HP'GN O'AJN'Q LPG I P'ATNHP' GN+ #IO'NHP P'HP'H 9OG' I'T'LJ9GP'N 99' NHF M G QHF "P'O NHF'JIK9MGL'H G'H 9O'MIO'LM NG'M MT' 9PIN'MG' G NHP'I O'N I P' 7NHP'I QHN $ #IO'PIO'H G'AP IQ' HMNO IP'HP'9PNG' I P'Q 8 #IO' NHF'H G'HPMO' P'H G'GH J9OP'NJ I%O+ "P'GPPI%O'N '7'IO'H G' MT'X NH JN'H G'PTPG'8 O ' JN' %O G'HP' PIN' NH JN'NHP 'HP9L #IO'MG'HP' PIN'H G'PTP' MG'GN 99' I'IP Y#IO'N 'NHP'9MGN' APIOPO'NHP '9 QHN' I'IP+ ' ', : NH' I P8 ?' 99'Q 'GPPU'NHP'U IQ+ H G G'NHP' L T'PKGNMGT' 7'9 P'8 XH 6P' 9PIN'L LP NT'7 PO PG' NGP9 E #IO'9PMOG'NHP' 99'N 'OPGLP MNP'JIOP NMU IQG #G' 7N'MG'MTT'LMG6 I'JIOP'HPM PI' HMN'O PG'M7T9 PG%'MG'L LP'7 ' J'MQP'N 'KMGN' PT IO' J GP9 PG'MG'%W G'7 'NHP'T JIQP'G N' '9PM P'NHP ' MIN IIPGG#' XP99'2'M1'G T HPM'%I 'W G'MG'L LP'7 ' J'MQP'N 'KMGN' HMN'2' MG'G ' MGH'AJN' HMN' PI POT'\ /PN%G'N 'NHP'U I Q8 NH'G I MOIPGG I MT'L P+ H JQH' 9O'M' 9 9P'TPN' I P'N JP'N 'NHT'9 P+ O N ' % ' '22+' K+2+ ' OM P P99[S" ' I ' 1LHP9 M' # HMN%G'NHP' I MNN .'$ ' -$' '' X NF' HMN' I'NHP'IM I P' 7HPM PI'\ ' -$' T'9 O'M2' MG'GP IQ' I'1T'KHM I AP / O' "M I 9PN SD NHH'G O JA9P%'M99'J I A MK%O 8 ' IQM NP %O'MIO'O I QT PO'N 'H G'MI9OP8 -M9P'MG H G'GH N8 H G'UIPPG'UI KU I QG'7 J9%O #IO' NF'M'9 U'G 'L NP JG' I'LJ L N #G'7'HP'HMO'API'9 GPO' JN' 'HP99 'GLPMU' 7'H G SHP'K I PG'AP7 P' I P+ ' MO'7 'NHT'9 P\ ' -$' T'9 O'?'O 'I N'UI 8 JN'N J9T'?'O '7PM' N+ HP P'K I PG'HP'N 'NHP'9PIQNH' 7M99'H G'M I'8 #IO' NHF'H G' NHP'HMIO'NHJG' %P'H G'A $' P'7M99'N 'G JKH'LP JGM9' 7'I'7MKP "P'GMNT'HMO' %O'NH G G'NHP '9MNPGN' AEPKN+ #G'7'NHPT'HMO' %O'NH G G'NHP '9MNPGN' AEPKN+ I M99 H 9P'HP'GN O'AJN'Q LPG I P'ATNHP' GN+ #G'HP' JO9'O M ' N+' / 'IQ' GNMT'%O' HP'G 8 #N'9MGN SM'9 NN9P'GHMU'IQ' 7'I'P'M I #IO'NH KP'H G'HPMO' NHJG M IQ'JL'MIO'O i S "P'O NHF'JIK9MGL'H G'H 9O'MIO'LM NG'M MT' HMN' N O O'GPPI'N 'GHMNNP'M99'H G'AJ9U #IO'PIO'H G'AP IQ' HMNO IP'HP'9PNG' I P'Q 8 #IO' NHF'H G'HPMO' P'H G'GH J9OP'NJ I%O+ "P'GPPI%O'N '7'IO'H G' MT'X NH JN'H G'PTPG'8 O ' JN' %O G'HP' PIN' NH JN'NHP 'HP9L #IO'MG'HP' PIN'H G'PTP' MG'GN 99' I'IP Y#IO'N 'NHP'9MGN' APIOPO'NHP '9 QHN' I'IP+ ' ', : NH' I P8 ?' 99'Q 'GPPU'NHP'U IQ+ H G G'NHP' L T'PKGNMGT' 7'9 P'8 XH 6P' 9PIN'L LP NT'7 PO PG' NGP9 E #IO'9PMOG'NHP' 99'N 'OPGLP MNP'JIOP NMU IQG #G' 7N'MG'MTT'LMG6 I'JIOP'HPM PI' HMN'O PG'M7T9 PG%'MG'L LP'7 ' J'MQP'N 'KMGN' PT IO' J GP9 PG'MG'%W G'7 'NHP'T JIQP'G N' '9PM P'NHP ' MIN IIPGG#' XP99'2'M1'G T HPM'%I 'W G'MG'L LP'7 ' J'MQP'N 'KMGN' HMN'2' MG'G ' MGH'AJN' HMN' PI POT'\ /PN%G'N 'NHP'U I Q8 NH'G I MOIPGG I MT'L P+ H JQH' 9O'M' 9 9P'TPN' I P'N JP'N 'NHT'9 P+ O N ' % ' '22+' K+2+ ' OM P P99[S" ' I ' 1LHP9 M' # HMN%G'NHP' I MNN .'$ ' -$' '' X NF' HMN' I'NHP'IM I P' 7HPM PI'

@?CCD' CF?C CFG AMN' ?@MGC J? 'CFG JAD(' A;'=' A@G ?BCFAD' JFA' KDG-
OGNGN' F?(KG?DG 1' ?HN' JFGCFGD' ?HE '>BCFGD' KDAA;' A;' CF=' M@'CGN
H?CBD' D QBDGN' CA' FAJ'=' JCF' JF?C G KDG 'AH' ?H@?CAH ' ?HN'
KMGHNABD' A;' OAMABD'H ' FG '>MGN' BK CFG ABCMHG' CF?C F?N' LGGH'
(GCOFGN' LE' ?' KDGOGN'H ' J D'CGDWI U' H' 'P'H 'CFG G G CD?OC '=' ?MM'
CFA G MHG 'J FJOF'FG' ?NAKCGN' JCFABC' ?HE' ?MCGD?CAH' ?DG' KD'HCGN'H' CFG
K?@KFMGC' ? FG' NG ODLG' CFG KM?E' CA' CFG' KGD>AD@?HOG' A;' JFJOF'
=';H' CFG' ?>CGDHAAH'I' DG ADCGN'=' @GH' CF?C ?DG' CFG'D' AJH' @? CGD ' ? '
GHCMG@GH' A;' CFG' OABDC' CFG' HH 'A;' OABDC' ?HN' CFG' HB@LGD' A;' O?KC?'H '
?HN' AMN'GD ' ?LABG' $AHNAH I' #A' CF=' ?BN'GHOG' CFGH R HAC' CFG
CAH' A;' A@G' GDG' G O'CG@GHC' 'CAF' ?PGHC' 'OAHHGOCGN' JCCF' CFG' FE CADE' A;' CFGD'
OABHCDE' F?N' ?' OF?D@' JFJOF' ?OOADN'H 'CA' ? FG' J ?' CA' N'PGDC' CFG@'
>DA@' DA GD' G O'CG@GHC ' G' ?E' R =' ?E' JF?C ;' 'A;' CFG G ' ? ' OAH-
CA' LG' HA' G CDG@G' LBC' ?' D?'DG G GDO' G A;'PDCBG' 'D C ;'AD' CFG "'K '
A;' CFG@ ' >AD' CFG' @A C K?DC' 'C ' LADDAJGN' ABC' A;' ABD' IH M' F'
FDAH'OMG ' JFGDG'H' ABD' >ADG>?CFGD ' P?M'?HC ?OC ' CF?C F?PG' LGGH' MAH '
LBD'GN' 'H' DB CE' LD?' ?HN' JADG' G?CGH' LAA(' ?DG' DGP'PGN' ?HN' CFGE
CFG@ GMPG 'D?' GN' >DA@' CFG' D?PG' A;' ALM'P'AH' ?HN' LDAB FC' CA' KMG?N'
CFG'D' ? GN' FAHABD ' H' AKGH' KDG GHOG' CF?H' JFJOF' JF?C O?H' LG' ?
F?DKGD' DGKDAA;' CA' CFG G' NG GHGD?CG' N?E' A;' ABD W' H'
KM?E' ?MM' OA GH? G ?MM' OBHH'H ' ND>C ' APGD 'MNGN' J'CF' ABCJ?DN'
FAM'HG ' ?MM' CD?C? G@ ' A;' J ?'D' ?MM' CFG' O?H(GD J'AD@ ' CF?C LDGGN' H'
CFG' D? C' A;' KG?OG ' ?DG' @A C M'PGME' ?H?CA@ GN' #FGE' FAJ' CFG' 'DM'
BOOG ' A;' CDG? AH ' CFG' >?MW' A;' F? CE' OM'@LGD ' CFG' JDGCOFGN' GHN' A;'
B BDKGD 'CFG' @ GDE' A;' O'P'M' N' GHC'AH ' ?HN' FAJ' $B C' +AN' ' ' GPGD-
@AD' H' KBH' FJH ' @BDNGD' HN' CA' KDAPG' GPGDE' AHG' A;' CFG G ?MMG ?-
C'AH ' OABMN' 'KDAKABHN' CFG' O'DOB@ C?HOG ' $ ' , $;'D;' '
@G?HC' CA' F?HNMG' CF#' 'CFG@G ACFGDJ' G' CF?H' A 7' ? FG' ? ' JG
F?PG' GGH ' F?' 'DG>GDDGN' CA' CJA' KM?E ' ? ' G ?@KMG ' A;' CF=' ;'CCD'PC'PG
ON?' A;' OA@KA 'CAH' > ' CFG' D C ?DC' A;' GHDE') ' ?HN' CFG
=' ?@AB ')'OCADG 'I' LG' CFG' KM?E ' CA' JF'OF' FG' DG>GD ' JG' F?PG' B>>-
O'GHC' GP'NGH'OG' CF?C CFG' KAGC'O?M' CDG?C@GHC' A;' ?H' F' CAD'O?M' BL5GOC'
J ?' HAC' ?L' AMBCGME' HGOG ?DE' CA' C' BOOG ' ACF'H ' O?H' LG' DBNGD'
AD' @ADG' 'H?DC>'O'?M' CF?H' CFG' ND?@?C'D' OAHNBOC' A;' CFG' = ?@AB '
) 'OCAD'G I' HACF'H ' DA GD' CF?H' CFG' C? CG' A;' @?HE' A;' C ' N'?MA BG '
: RZ

' 5 GGP NMN i'L'' +
N' 2A 0'' L'') +
' PP'NH'2iN OJK'N T N K'' N '"MI 9PN' MIO' PGLPK M99T P]J NMN IG 7 I'
/ OQ'' MIO' MGHP' i' P7P pIK'' N 'MI' ' ' '"MI 9PN+

56

#FG' AMN' APGHCDE' KM?E' A;'=' A0(' #BG N?E I' G F'L'CGN' LG>ADG' BGGH'
i'T?LGCF' H' GH'MJADCF' ? CMG' H' 5 5 ' N'N' HAC' @ADG' G GHC?'MME
N'>>'GD' H' CFG' OAHNBOC' A;' C' ?OCH' >DA@' CFG' CDBOCBDG' A;' ?' DG BM?D
F' CAD'O?M' ND?@?' CF?H' BOF' ?' KM?E' ? ' CFG' =' ?@AB ')'OCAD'G 'I'
N'>'GDGN' H' ?MM' CF?C OAH C'CBCG ' ND?@?C'D' LG?BCE' ?HN' KDAKD'GCE' >DA@'
CFG' ?M@A C' OAHCG@KAD?DE' F' CAD'G ' A;' F?(KGDG' ?HN' &?DMAJG' ;'
CFG' KM?E ' JFJOF' F?N' LGGH' ?OCGN' KDG'PAB ' CA' 512 ' JFA G' BL5GOC J ?'
= >AD' CFG@A C' K?DC' LADDAJGN' ABC' A;'ABD' I M' F' FDAH'OMG 'I' CFGDG ?DG
CJA' KGO'@GH ' A;' CFG' G?DM'GD' ?HN' DBNGD' ADC' KDG GDPGN' CA' B R CFG
=' ?@AB ')'OCAD'G 'I' ?HN' CFG' =';#DBG' #D? GNE' A;' "'OF?DN' 'I' #FG'
=' ?@AB ')'OCAD'G 'I' ?HN' CFG' =';#DBG' #D? GNE' A;' "'OF?DN' 'I' #FG'
#?DMGCAH ' JFA' KM?EGN' CFG' OMAJH' H' C' NGN' H' CF?C EG?D' &'D' AMN'GD'
CFH(';C' J ?' JD'CCGH' H' 567 ' C' OAHC'HBGN' CA' FAMN' KA G 'AH' A;'
CFG' C? G' ? ' M?CG' ? ' 515 ' G' F?PG' ?MD?NE' HAC'OGN' CF?C KM?E' H' ABD'
?OOABH'C' A;' CFG' ABDOG ' A;' CFG = ' CADE' A;' GHDE') 'I' LBC'C' @?E'
LG' NG 'D?LMG' 'H' DG>GDGHOG' CA' ABD' KDG GHC' KBDKA G ' CA' >BDH' F' ?' KGO-
@GH' A;' CF=' ' G CD?ADN'H?DE' 0A@KA 'CAH' G' GMGOC' CFG' K?D?MMGM' OGHG
CA' CFG' JGMM (HAJH' K? ? G' A;' F?(KGDG8 ' GHDE') ' ?DC '
OC') ' O') 'LG 'HHH'H R

/'?'IP P'N9 JQHN'N 'HPM'T J'GLPMU'MQM I+R

&'D' AMM'GD' F?' AL GDPGN' CF?C 'H' CFG' KD'HCGN' 0AKE' A;' CF=' KM?E
VJFJOF' J ?' GHCGDGN' ?C' C?C'AHGD 8 ?MM 'H' 51/ '@BOF A;'CFG' AD 'H?M
KDA G' F? ' LGGH' OFAKKGN' BK' 'HCA' M'HG ' A;' P?D'AB ' MGH CF ' H' ADNGD' CA'
MAA('M'(G' A@G ('HN' A;'@G? BDG

6'9 ' ' XHT'H ' I'T G I'\
?'MO' NH' JQH'N'NHP'9MGN'N I P'?'MO'T J' I'GKH 9 IQ'
?'MO' Q pi'T J'M 9PGG I'7 'M99
#IO'O 'T J'I 'APQ I'MQM I'\
XHT'NP99'IP'IT'G I+
5 GN'NH J' NH IU'NHP'N I P'G '9 IQ+
HM'NH J' J9OGN'HM P' N'AP7 P'NHP'
PMNH'AP' JN' 7'IT I JNH'\
9 ' ' GN'G P P Q I'9 O'M IO' P99 AP9 PO' 7MNHP
2'KM I P' IN 'T J'KHM I AP'N 'K I7 N'HP' I P9M I KH 9T'
JG' 7T J'A OT'M IO'7 IO IQ'T J'M'NHM'N I P'
-MGN'M99' PK P T' M IO' OPMO'N ' I T'NH IU I Q
: O' G' I T' N IPGG'M IO' HM'N' GH J9O'G'?O
JN' NH' PPL I Q'N PM G' 9M I P I N' NHP' OPMNH' 7T J'I'EIT'7MNHP 8

GHCDE OABMN HAC DGM?CG CA F?(KGDG8 " OF?DN >AD H CF?C JG F?PG HA N KM?E A> CFG =M?@GHC?LMG GHN A> FADG8 J >G J FGDG? H CFG = #DBG #D? GNEI CFGDG ?DG GPGD?M OGHG H JF OF FG ?KKG?D # F AMN KM?E ? KGD>AD@?HOG A> F FGD KDGCGH AH CF?H CFG =?@AB) OCAD G I $ (G CF?C KM?E C OAHC? H @?HE KDA G KGG0FG J F OF ?DG KD HCGN CA F?PG A@G DG G@LM?HOG CA @G? BDGN MHG LBC AH CFG ACFGD F?HN CFGDG ?DG @?HE K? ? G A> MG C@?CG PGD G J F OF ?DG DBH CA GCFGD ? KDA G #FG @A C ?@L CAB K?DC A> CFG J FAMG KGD>AD@?HOG ? ?KGG0F A> "0F?DN LG>ADG CFG L?CCMG $?HN CF JG CD?H OD LG R

ÝŸ7 HP HP99 7 9 7P NHMM HM!QG JL ! NHP K !
HP OM 9T KM PG NHP ! QHN9T O PM I G
HP PNKHPO K P G NHP N PMG ! 7 NHP 7 P
! O H 7 I T A9 OT L MKN KP LMGN+
N UPG GJKH M NP N IT J!OPO K !GK P!KP+
HMN G9PPL 2 MUP 2 HMNG P P 2 g
PNH !UG NHP QH GNG K I P QML !Q 7 P P!QP+
X H I 2 HM P G9M ! ! PMKH !Q 7 M K !+
9M P!KP K IL9M !G M!O K PNH 7 P P!QP 8
T !PLHP G% A9 OG &P P!QP P P!QP 2 O NH K T;
HP HPMO9PGG LPP G K I P L PGG !Q 7 P P!QP 8
! O P P T !P K PG / PM NHP NT M!N O P+
HP GJ! AT OMT GH !PG H N9T 7 P P!QP 8
HP I ! AT ! QHN PK9 LGPNH 7 P P!QP8
HP GNM G M P NJ !%O N K I PNG 7 P P!QP8
HP L9M! PNG KHM!QP NHP K J GPG 7 P P!QP 8
HP A OG G !Q ! N AJN G 7 P P!QP8
HP G 9T 9M I AG G N A9PMN !Q 7 P P!QP 8
HP GK PPKH !Q M P! G NG K M9O!Q 7 P P!QP 8
X H 9P HP OG 7 APMGNG K I P AP99 !Q 7 P P!QP8
! O M99 TPM M99 NHP 9O 2 NH !U+
PG 7 P P!QP M!O ! NH !Q AJN P P!QP
JN N K !K9JOP 2 HM P OPGP %O P P!QP+
2! K ILM!T 2 OM P ! N N JGN IT 7 P!O 8
P !Q M9 !P 2 O PMO NHP GPK PN 7 P 8
2 O JAN IT 7 O 9PGN L G !9J U NHP P 7 ++
T APO G J!K NH PGN P7 M !G IT HPMO+
HP!' GJKH M 9 7P 2 K J!N 7M GP N AP
HM!' NH JGM!O OPMNHG J!N M OM I !PO OPMNH[
" [MG%M OPMNH 2 GM O \ H OM P MNNP I LN IT OPMNH \
MT H OM P G I JKH MG !KP N NH !U IT OPMNH \
H JQH P!P I PG NHP P AP NHMN J9O IT A OT U
4 PN GHM99 NHPT 9PM P M !P P OT !Q I !O+
JN T J 99M !G PAP9G N M N G MG T J M P+
" KM I P NHP 7 P ! L PGG !Q G !PM \
X HP P HP P G9PLN NHP QM G !NHMN GH J9O M APMN NHP I AMKU \
X HP P MG J 7 P!OG N !NP KPLN NHP 7 P \
#99 Q !P]J NP 79PO H G 9 TM9NT]J NP 9M O M APO+
HP!' P!QPM!KP I GKH P7 H NH I GKHM!KP+
X 9O 7 P NH H 9 !OG 9 QHN JL !T J HPMOG+
HMN NHJG APN MT%O T J L !KP AT T J J!N JNH [R

#FGDG ' HAC ?' CD?OG H CFG GMNGD KM?E' A> CFG $ A> F?(KGDG8 "OF?DN ' H CF?C KM?E' FG ' ?' OA?D G' DB>>?H AHME R ?H BH HCGMMGOCB?M P MN?H ' #FG' ?BCFAD F? ' HAC' GPGH' F?N' CFG' (MM' CA' OAKE' CFG' ND?@?C O' H?DD?C PG' A> D' #FA@? ' &ADG' H' CFG' OGHG' A>' CFG' ?DDG C' A>' ? C H ' C ' B>>O GHC' >AD' F@' CA' @?(G' "OF?DN' N KM?E' CFG' LDBCG' >ADOG' A>' CFG' CED?HC' #FG' ?>>GOCGN' OA@KM?OGHOE' CFG' @AO(' K? AH' CFG' LCCGD' ?DO? @' A>' CFG' "OF?DN' A>' CFG' F CAD?H' JGDG' MG>C' >AD' F?(KGDG' CA' @C?CG' ?HN' @KDAPG' "BNG' ?' ' CFG' ND?@?C O' OAH CDBOC AH' ?HN' OA?D G' CFG' G GOBC AH' A>' CFG G' CJA' DGM O' A>' CFG' KGD AN' JF OF' KDGOGNGN' CFG' CD?H C AH' C?CG' A>' CFG' C? G' CFGDG' O?H' LG' HA' NABLC' CF?C' CFG G' F?N' CFGD' DBNGD' KDGNGOG AD R NB@L' FAJ ' J CF' FGDG' ?HN' CFGDG' G KM?H?CADE' DFE@G ' ?N?KCGN' CA' CFG' ?@G' DA ' KAKBM?D' C? CG' CF?C' F?N' A' MAH ' NGM FCGN' H' CFG' &E CGD G ' ?HN' &AD?MC G ' JF OF' GPGH' CMM' FGMN' ?' N P NGN' G@K DG' #FG' DAJ H ' MAPG' A>' CFG' KGAKMG' >AD' =' CFG' CAD?M' FAJ I' ? ' $?HGF?@' O?MM ' CFG' APGHCDE' KM?E' A>' =' AO(' #BG N?E I' J? ' CFG' H?CBD?M DG BMC' A>' CFG' ?OC PG' ?HN' HQB D H ' KD C' A>' CFG' ? G' #FGDG' JGDG' @?HE' JFA' JGHC' CA' CFG' CFG?CDG' CA' LG' H CDBOCGN' H' CFG' KDAMA BG' CA' GHDE') ' JG' >HN' CF?C' CF ' DG?C' ABDOG' A>' CFG' KAKBM?D CE' A>' CFG' G?DME' CAD G ' J? ' CMM' ?OC PG R

6 JKH MG Q P
HP I !PT JN 7H LP NHPT I MT AP9 P P+
MT HP P 7 !O N JNH N +%%

GE JAAN ' H F ' < KAMA E' >AD' OCAD I' CFB ' JD CG ' H' 4 2 R ' =' M?E ' F?PG' @?NG' CFG' HAD?HC' @ADG' ?KKDGFGH PG ' C?B FC' CFG' BHMG?DHGN' CFG' (HAJMGN G' A>' @?HE' >?@AB ' F CAD G ' H CDBOCGN' BOF' ? ' O?HHAC' DG?N' H' CFG' N OAPGDE' A>' ABD' ! H M F' FDAH OMG ' ?HN' JF?C' @?H' F?PG' EAB' HAJ' A>' CF?C' JG?(' O?K?O CE' CF?C' O?HHAC' N OABD G' A>' ?HE' HAC?LMG' CF H ' DGOADNGN' GPGH' >DA@' MM?@' CFG' AHQBGDAD ' H?E ' >DA@' CFG' M?HN H ' A>' .DBCG ' BHC M' CF ' N?E ' LG H ' KA G GN' A>' CFG D' CDBG' B GW I' #FGDG ' ?' CD?N C AH' DGKADCGN' LE' +MNAH' VJF OF' ?DCAH

LGM GPG ' CFAB F' & ?MAHG' KDAHABHOG ' C' CA' LG' ?' >OC AH ' CF?C' F?(- KGDG ' H' ?' OAHPGD ?C AH' J CF' . GH' 0AH AH' BKAH' CFG' BLSGOC' A>' F ' F CAD O?M' KM?E ' ?N' CF?C ' =' >HN H ' CFG' H?C AH' GHGD?MME' PGDE' HAD?HC' A>' F CADE ' FG' JDACG' CFG@' H' ADNGD' CA' H CDBOC' CFG' KGAKMG' H' CF?C' K?DC OBM?D I' C ' HAC' HGOG ?DE' CF?C' JG' FABMN' ODGN C' AD' N ODGN C' CF ' ?HGONACG ' CA' OA@G' CA' CFG' OAHOMB AH' CF?C ' JFGH' F?(KGDG' >D C' LGO?@G' KGD AH?MME' HCGDG CGN' H' KDAP N H ' GHCGDC?H@GHC' ?HN' H-CDBOC AH' >AD' CFG' KGAKMG ' CFGDG' J? ' ?' DG?C' NG@?HN' ?MDG?NE' G C H ' >AD' CF?C' KGO G ' A>' ND?@?' JF OF' BL GQBGHCME' LGO?@G' @KADC?HC' GHAB F' CA' OAH C BCG' ?' OM? ' ?K?DC' >DA@' #D? GNE' AD' A@GNE ' BD' LGM G>' ' CF?C' FG' J?' $ ' ' JFA' ?J' CFG' KA L CE' A>' OAHNBOC H ' CF ' KGO G ' A>' GHCGDC?H@GHC' J CF' ND?@?C O' (MM R J CF' HCG D CE ' >' :HAC' BH CE ' A>' ?OC AH R J CF' ?OC AH' HCGDDBKCGN' HNGGN' LE' CFG' BOOG - AH' A>' GPGHC ' LBC' HAC' N GPGDGN R J CF' >ADOG' ?HN' OAH CGHOE' A>' OF?D?OCGD R J CF' K DCGN' N?MA BG' ?HN' F?D@AH AB ' PGD >O?C AH ' >' FG' JGDG' HAC' CFG' ?BCFAD' A>' CFG' D C' ?DC' A>' GHDE') ' ?HN' A>' CFG' # JA' ?DC ' A>' CFG' =' AHCGHC AH I' CF ' KD?' G' A>' P H ' CFG' >D C' DG?C' @ANGM' A>' CF ' KGO G ' A>' ND?@?' ' HAC' NBG' CA' F@' >' FG' JGDG' CFG' ?BCFAD' A>' CFA G' CFDGG' ND?@? ' C' LGMAH ' CA' F@' ?HN' CA' F@' ?MAHG #FG' QBG C AH' JF OF' JG' KDAKA G' CA' G ?@HG' ' HAC' JFA' >D C' JDACG' F CAD O?M' KM?E ' LBC' JFA' >D C' JDACG' F CAD O?M' KM?E ' H' CFG' KD DC' A>' ?H' ?DC C ' G' J MM' OA@@GHOG' ABD' HQB DE' J CF' DG>GDGHOG' CA' CFG' D C' ?DC' A>' GHDE') ' G' FAMN' CF ' KM?E' CA' LG' F?(KGDG8 ' >D C' F - CAD O?M' KGD>AD@?HOG ' #FG' >AD@' H' JF OF' JG' F?PG' DGOG PGN' C' @?E' LG' ?' OAH NGD?LMG @KDAPG@GHC' AH' C ' >D C' >AD@' ?HN' HNGGN' JG' F?PG' HA' NABLC' CF?C' C' J? ' DG O? C' ? ' JGMM' ? ' CFG' GOAHN' ?HN' #F DN' ?DC ' #FGDG' ?KKG?D ' CA' LG' MCCMG' N>>GDGHOG' A>' AK H AH' ? ' CA' CFG' N?CG' A>' C ' AD H?M' KDANBOC AH ' & ?MAHG' ?E ' H' F ' =' FDAHAMA O?M' DNGD I' =' #FG' D C' ?DC' A>' H ' GHDE') ' JF OF ' ' @? HG ' J? ' >AD@GDME' (HAJH' LE' CFG' H?@G' A>' #FG' CAD O?M' M?E' A>' H ' GHDE') ' F?N ' B KGOC ' LGGH' ?' PGDE' KAKBM?D' K GOG' >AD' ' ' LG>ADG' 512 ' ?HN' KGDF?K ' J? ' >D C' G F L CGN' H' 566' AD' 561 I' ' AMM GD' C?CG ' CFG' GHGD?M' LGM G>' =' CF?C' C' @GDGME' CFG' ' KM?E' AH' CFG' G?DME' GPGHC ' A>' CF?C' DG H ' JF OF' J? ' @A C' M (GME' JD CCGH' H' 561 I' #FGDG' O?H' LG' HA' NABLC' CF?C' CFG' OA@KA C AH' A>' CF ' KM?E' KDGOGNGN' CF?C' A>' CFG' # JA' ?DC ' A>' CFG' =' AHCGHC AH ' I' ?HN' CF?C' CFG G' F?N' LGGH' ?OCGN' LG>ADG' GKCG@LGD ' 512 ' JG' (HAJ'>DA@' CFG' >?OC' A' A>CGH' QBACGN ' CF?C' "ALGDC' +DGGHG ' JFA' N GN' H' CF?C' @AHCF' ?HN' EG?D ' F?N ' H' F ' NG?CFLGN' DGO?HC?C AH' A>' F ' GDDAD ' K?DAN GN' ?' MHG' JF OF' AOOBD ' H' CFG' = GOAHN' ?DC' A>' CFG' AHCGHC AH I' BCC H ' ? NG' >AD' ?' @A@GHC ' CFGH ' JFA' J? ' CFG' ?BCFAD' A>' CFG' D C' ?DC' A>' GHDE') ' AD' A>' CFG' =' AHCGH-C AH I' CFGDG' O?H' LG' HA' NABLC' A>' CFG' G CGHOG' A>' CFG' CFDGG' KM?E ' ?C' CFG' C@G' A>' +DGGHG8 ' NG?CF ' ?HN' & ?MAHG8' OAHSGOCBDG ' CFGDG>ADG ' ? ' CA' CFG' N?CG' A>' CFG' >D C' A>' CFG G' KM?E ' @?E' LG' DGOG PGN' J CFABC' FG C?-C AH ' #F?C' ' ?MM' JG' ? (' ?C' KDG GHC' CA' LG' OAHOGNGN ' & ?MAHG8 ' GHGD?M' CFGADE' ? ' CA' CFG' KGD AN' A>' F?(KGDG8 ' OA@@GHOG@GHC' ? ' ?' D CGD' ' CF?C' FG' F?N' HAC' KDANBOGN' ?HE' AD' H?M' K GOG' LG>ADG' 51 ' & D ' AMM GD' FAMN ' CF?C' FG' =' F?N' HC'C' J D CCGH' ?HE' A>' F ' AD' H?M' KM?E ' KD AD' CA' 513 ' VJFGH' & ?DMAJG' J? ' (MMGN ' ?MCFAB F' ?HCGD AD' CA' CF?C' EG?D' FG' @ FC' F?PG' G@KMAEGN' F@ GM>' H' ?MCGD H ' ?HN' D>KDAP H ' >AD' DGKDG GHC?C AH' A@G' A>' CFG' JAD(' A>' AMNGD' ND?@?C C I' U' #FG' D C' ?DC' A>' GHDE') ' ' N C HOCME' FGMN' HAC' CA' >?MM' J CF H' CFG' OAHN C AH' A>' AHG' A>' CFG' KM?E ' A' @KDAPGN ' C ' ' OA@G' NAJH' CA' B ' CFG' OD C?C O?M' ?BCFAD C G ' LGM GPG ' H' C ' KD@ C PG' DBNGHG ' H' C ' KDG GHC' C?CG ' CFGH ' ?OOADN H ' CA' CFG D' AK H AH ' C' G CGN' H' AD' LG>ADG' 561

8 G' J MM' HAJ' ? (' JF?C' ACFGD' F CAD O?M' KM?E ' A>' ?HE' KAGC O?M' KDG-CGH AH' JGDG' H' G CGHOG' H' 561W' C' LG H ' DG@G@LGDGN' CF?C' F?(-KGDG' J? ' CFGH' CJGHCE >PG' EG?D ' A>' ? G' ?HN' ?' F?DGFAMNGD' H' CFG' .M?O(>D?D ' #FG?CDG ' #FG' AMN' KM?E' A>' =' #FG' #DABLMG A@G' "G H' A>' OAFH' H ' A>' !H M?HN' I' J? ' " ' CFGH' H' G CGHOG ' C' J? ' KD HCGN' H' 51 ' "BNG' ?' CF ' KM?E' @?E' LG' NGG@GN' JFGH' OA@K?DGN' J CF' CFG' >H FGN' H ' OAFH' A>' F?(KGDG ' C' ' BHQBG C AH?LME' ?' PGDE' @BOF' F FGD' KGD>AD@?HOG' CF?H' CFG' =' ?@AB ') OCAD G I' AD' CFG' =' #DBG' #D? GNE' A>' "OF?DN' I' #FG' +GD@?H' OD C O ' OAH NGD' C' CA' LG' ?H' G?DME' KDANBOC AH' A>' F?(KGDG' F@ GM>' OFMG GM' ?HN' #GO(' @?HC?H' CF ' AK H AH' J CFABC' ?HE' QB?M>O?C AH ' * MD O' FAMN ' CF?C' CFG' OA@O' K?DC ' ?DG' HAC' F ' ? ' CFGE' N KM?E' AHME' DBNGHG ' ?HN' PBM ?D CE' H CG?N' A>' CFG' = >?OGC AB ' D?OGI' A>' F?(KGDG' ?HN' FG' CF H (' CF?C' FG' O?H' CD?OG' ?H' AMNGD' S M?E' H' CF ' AMN' KM?E' G' O?HHAC' BL OD LG' G CFGD' CA' CFG' BHOAHN C AH?M' AD' CFG' QB?M>GN' AK H AH ' ?HN' JG' C?(G' MG?PG' CA' DGKG?C' JF?C' JG' F?PG' KDGP AB ME' ?N ' CF?C' =' JFAGPGD' DG?MME' J FG ' CFADAB FME' CA' BHNGD C?HN' CFG' DG ABDOG ' JF OF' F?(KGDG' KA G GN ' H' CFG' ODG?C AH' A>' OF?D?OCGD ' H' CFG' OAHNBOC' 74' ?' CADE' ?HN' CFG' G@KMAE@GHC' A>' M?H B? G' J MM' NA' JGMM' ? ?H' ?HN' ? ?H' CA' OA@K?DG' CFG' AMN' KM?E' A>' < H ' 0AFH8' ?HN' CFG' H ' 0AFH' A>' ABD

' #!!M9G' 7' NHP' NMQP ' 9 L

ND?@?C C c U ?N F?(KGDG FAJGPGD OA@@GHOGN F KAGC O?M O?DGGD ?>GJ EG?D M?CGD CFG AMN =H 0AFHc JABMN F?PG A>>GDGN ?PGDE DG@?D(?LMG KA HC H CFG KDA DG A> CFG F CAD O?M ND?@?? C OA?D GHG H A@G NG DGG ? AO ?CGN JCF ?KAJGD ?HN >DGGNA@ >DA@ JFOF C GG@ CA DG BMC ?HN ? N C HOC ?CFH ? KA LMG >DA@ CFG @LGO MG PBM ?D CE A> CFG , ?KAB) OCAD G & ?MAHG JCFABC ?HE ?BCFAD CE ? H CF KM?E CA +DGGHG AD GGMG G HAJ ?HN CFGH BHQBG C AH?LME @GGC JCF ?K? ? G JFOF @?E LG O?MMGN KAGC O?M ?HN JFOF @?E HAC BHJADCF ME LG 0A@K?DGN JCF BHNABLCGN K? ? G A> CFA G JD CGD #FGDG @BOF A> GGMG8 C H GM CAAR F CD? H ?>CGD KAGC O?M @? G JCFABC DG ?DN CA KDAKD GCE A> CB?C AH AD OF?D?OCGD #FG ?BMOAHLD N G A> CFG AMN KM?E >AD G ?@KMG C?M(?>CGD CF ?>? F AH R

6 PNH !9KG2 HPM M!H 99 PKH G J!O
HMN -H9L G NHP G !J!N M2O!Q
HP HGN9 !Q9PM PG JL !NHP N P IA9 !Q N PPG
XH GN9P !K !KP N2 M I & KHM O G !
HP AJAA9 !Q IJ IJ 7NHP MNP %G7M99
&PK OG $ -- % % 6 %C
OG !NHP 79 QHN IMUP IJG K NH NHP !QG
O99 !Q NHP M NH Q9 T 7 IT A NH
OG AJAA9PG 9PM PG M!O I J!NM !G PKH M99
& !Q ! I !P PM G NHMN 2 M I & KHM O G !+R

#FG PGD >O?C AH CFDAB FABC ' OAH CDBOCGN BKAH CFG AMN @AHACAHAB @ANGM EGC JG FABMN ?E CFG LM?H(PGD G HAC A @AHACAHAB ? CF?C A> GGMG

#FGDG HA ACFGD F CAD O?M KM?E ? K D H CA CFG OF?D?OCGD A> ?JAD(A> ?DC JFA G KDANBOC AH @?E LG KM?OGN H AD LG>ADG 561 LBC CFG =!NJ?DN $I A> GGMG #FG =!NJ?DN I A> &?DMAJG J? BHNABLCGNME M?CGD #FG ?HAHE@AB =!NJ?DN I LGWAH ?M A JG CF H(CA ?M?CGD KGD AN

#FG =!NJ?DN I A> GGMG LG?D CF CCMG R =#FG >?@AB FDAH OMG A> H !NJ?DN CFG D C DH?@GN !NJ?DN $AH F?H(G P CF F "GCBDHG >DA@ CFG AME $?HN M A CFG $ >G A> $MGJGMMGH "GLGMM H ?MG $? CME CFG H (H A> BGGHG !M HAD JFA BHO(?C F?D H ODA G ?HN DA G ? ?HG ?C ACCGD F CF HA)H?@GN BGGHGF CF I C P GP NGHC CF?C ?KM?E JF OF NG?M J CF CMG =H(H A> BGGHG !M HAD I ?PGD?C?LMG KADC AH A> CFG = ?@AB FDAH OMG A> !NJ?DN I @B C LG AHG A> CFA G KDANBOC AH >DA@ PF OF CTNACCDGM CFG AD>AM(@KMGCAH A> .GH 0AH AH8 <#FG %GP M ?H I ALC?HGN F >?OC R

6 T IT 7MN9 T J M P KJ I !Q !NHP KH !K9P G +
F D 2 K 7NPGG2 HM P N7 I NHP L9MT A UG
#!O NH !U NHPT M P I P MJNHP!N K+R

!MG?HAD CFG QBGGH A> !NJ?DN ? H?@G CPF OF CA CF FABD >?@ M?D CA B ?MM CFDAB F CFG G QB CG @AHB@GHC?M DG@?H A> CFG ?>>GOC AH A> FGD FB L?HN JF OF C MM NAC CFG DG?C DA?N >DA@ #ACCGH-F?@ CA ADCF?@KCAH #F?C FG =BH(?C F?D H ODA I LG>ADG F?D H ODA P? GDGOCGN CA FGD @G@ADE ?>B>>O GHCME DG@?D(?LMG O DOB@ C?HOG H GGMG8 KM?E LBC C @ADG DG@?D(?LMG CF?C ? B@ H CA LG ?=?@AB FDAH OMG I ?HN H AHG AD CJA A> CFG GPGHC >AMMAJ H CFG FDAH OMG FG F? DGKDG GHCGN CFG QBGGH ?MCA-GCFGD CA LG ?>GHN H >G@?MG F?KG R KDABN ?NBMCGDAB ODBGM CDG?OFGDAB ?HN LMAANE =FG J? ? ANME ?HN @ANG C KD HOG I ?E AM H FGN =>BMM A> K CE ?HN AHG CF?C FA PGN @BOF >?PABD CA CFG !H M F H?C AH DG?NE CA DGM GPG GPGDE @?H8 D G> CF?C B C?HGN PDAH ?HN CA @?(G CFG@ >D GHN CF?C PGDG ?C N OADN A >?D ? H FGD M?E I #FG OF?D?OCGD A> CFG !MG?HAD A> GGMG FGMN CA LG C?(GH >DA@ ?L?MM?N GHC CMGN =? ?DH H GOG CA !H M?HN ? ?H C D NG ?HN O(GNHG I YO ?HN CFAB FC CA LG PD CCGH H CFG C@G A> BGGH &?DE G NABLC G OGGN H ME JFGCFGD CFG L?MM?N KDGOGNGN CFG KM?E LBC ?C ?HE D?CG CFG HO NGHC A> G?OF ?DG CFG ?@G #FG =@?EAD A> $AHNAH8 J>G I A> CFG L?MM?N F?N PGH A>>GKOG CA BGGH !MG?HAD LE ?KKG?D H H =$AHNAH CDGGC H C?CGME ADC I ?HN CFG QBGGH8 DGPGH G ?OOADN H CA CF ?BCFAD CE J? ?>CGD CFG >AMMAJ H DG@?D(?LMG >? F AH R

6 HP GP!N HP !N XM9PG NH GLPPO+
#!O+UPLN HP GPP7NN HP P8
#!O JGPO HP GN99 I P K JP99T
HM!P P IM!OO HPM+
HP IMOP HP P JOQP M9 MT8
HP IMOP HP !J GP JL KH9O P!G IM99+
#!O9MA J !QHN M!O OMT+

2!N OJKN T NKP N !Q? H! L+

JN NH G K !NP!NPO ! N NHP]JPP!+
JN GH %O HP I GN OPGL NP8
HP A J!O NH G9MOT N M L GN+
#N N P9 P %K9 KU MN ! QHN+
#!O MG L 9MOT GHP GN O A J!O+
HP]JPP! @ !M!Q T I O
O GPN N G!MUPG J!N HP A PMGN+
HMN GJKUMO M MT HP A9 O+R7

U

G CD?H OD LG CFG OADDG KAHN H OGHG A> GGMG8 =!NJ?DN R

6 : ' ' 7NG NHP N IP N LJQP J IP9M!KH 9T+
#!O AP P P!QMO JL !NH G / !O !IMT PGG HP P+
MNHP !M[
7
7 $ #N HM!O IMOM I+
,: ' ' !Q7 NH J / !O ! IMT PGG HP P+
7 $ 2 99 IMOM I+ ?U J
: ' ' P99
PNH !U NHPP 7G IP N NJ PG7 NHP OM IP+
#!O LJQP NHT KH 9P N NHP JNP I GN+

+ *,#' # "3&2 #+

I GN PGG IMT PGG T J HM P MNP!OM!KP J QMO
#!O NHP P7 P N P]JNP T J K JNPGT
1J I !O G N APGN M! 77 KP !T J GN M QHN+
2 TGP97 IT 97P M!O GP KP I QHNT]JPP!+
P HJ IA9T MN T J IMEPGNT%G K I IM!O+
: ' ' HP! I GN PGG IMT PGG GMT HPNHP 99 T J AP J !J GP
9MJ!O PGG
2 HP IMT N L9PMGP T J IMEPGNT
P!NP NM !T J HM!O IM O7 T J !J GP+
HP 99 MNP!O NHP K MO9P KM P7J99T+
: ' ' 1 ! !J GP8 NHP AWAP !PPOG ! Q PMN KU !Q8 N KM! 9J99 NGP97+
MNHP !M A !O HP ! NHP KHM M!O 9PN IP GPP H GHP999APK IP M !J GP+
! MNHP !M O M 7 NH HP A PMGN M!O 9PN NHP GP LP!N GJKU HG799+ # 9TG 8
! GHP G M !J GP+ JKU ! G PPN AWAP+
2 #H]JPP! G PPN]JPP! GPPU ! N IT A9 O N GL99+
O 2 GHM99 O P AP7 P NH G MOOP HM P H G799+
: ' 5 P OP ! N IT I !O G7J99T L9PMGMO+
IP MNHP !M N / !O ! 99 P+
#!O9PM P J 2 %%8 $ $ % 2*
7 $ OM P P99 G PPN 2 %%C ') $ '" " *
J

2 OM P P99 L JO]JPP! $ $ 2 $*
HP GK J QP 73!Q9M!O M!O N 3!Q9 GH %@
$* HJGAM!O G PPN ? H! PM IAP IMT 7 / !O !
#H OOGN NH J U! H M T G LP L9PWMO+
! J8OGN NH J K ! P N XM9PG M!O O IP 7NH G LM !+
JN 1[2 O P8 IT GH G M99 ! M !+ 7 %$ % B

&D ?MM?@ F? OF?D?OCGD TGN CFG DA P AM?C AH A> F CAD O?M CDBCF H CF ' KM?E ? =?' F NGAB @ DGKDG GHC?C AH A> CFG P DCBAB ! MG?HAD A> ? C MG KDAL?LME >DA@ CFG L? G @AC PG A> DGHNGD H CFG K?H F H?C AH ANAB CA CFG PBM ?D I #FG JFAMG KM?E H CDBCF ?NNDG GN CA CFG MAJG C C? CG A> CFG PBM ?D ? @BOF ?>?BMC A> CFG ? G ? A> CFG HFGDGHC >?M G C? CG A> CFG JD CGD FGDG CFG M?H B? G HCGHNGN CA LG C?CGME ?HN KAGC O?M C LGOA@G CB@N ?HN G CD?P? ?HC AD G ?@KMG H ! N P?DN =!H F .2 @GGC CFG , H HG MADN A> OACM?HN4 I ?HN !MG?HAD AH CF AOO? AH CFB ?NNDG G FGD FB L?HN CA F DG?C OAHCGHC@GHC

6 HP P99OJ GLM!Q9PO NH JQH NH Q 9OP!GL NG+
&P79PKNG ! 7 !P ! M7 GNT ! QHN
HM!9 P9T / !QGHM!UG !H G39 ! %G PTP
PO NHT P99 ! P P T LM N 7NHPP S
HT LP G !%G QJM OPO NH M N L 7]JPP!G+
#!O P P T]JPP! MG A M P MG39 ! +
: P Q9 T N NHPGP Q9 JG K TGM9]JM PG+
XHP P P P T AP M! AEPKN P!NP NM !G
17 KH OP KP M!O L !KP9T IMEPGNT+
HJG 9 UP M K GGJG O !Q !NHP OPPL
2 OP !H ! J M!O !3!Q9M!O G M IG8
#!O 72 O !N G ! IT OP9 QHN+
XH GP K ILM!T G KH P7PGN97P !OPMNH8
O I7 NH H GP K M99 LG2 GJKU NHP G PPN
XHP P NH M P OM !NT JL O G KMJO8PG IMOP+
HP!9 P O P AM P PO G !U G I+
#!PM NH8T A9 GG N GN 9 U !H I+
1!NHPP G PPN PO N GHM99APK IP NHT P99
J!NP JG N AP J!N NHP APMJNP JG
1MP L T NHP LM9 IG G PPN7 J!NM !G 7 IT A9 GG+
#!O2 99 GNM!O !N LN P7 M U GG+R

#FG F CAD O?M ?OC AH A> CF KM?E R >' CFGDG LG ?HE KADC AH A> C CF?C O?H LG KDAKGDME O?MMGN AR H CFG F FG C NG DGG OAH>B GN ?HN GOOGHCD O 0C DGM?CG ? >?D ? JG O?H BHNGD C?HN CA CFG HP? AH A>

BHNABLCGN' KDANBOCDAH ' G' F?PG' ?MDG?NE' ?NPGDCGN' CA' CF□ ' ' LB' JG AHME' @GC' &'?MAHG8 ' C?CG@GHC' CF?C' B0F' PGD □>□O?C□AH' J? ' CFG' ?L AMBCG ?NH' N□ CJH B□ FJH ' 0F?DP?0CGD' A?' CFG ' □D C' ?DC A?' GHDE') ' LE' FAJ□H ' CF?C' □H' F?(KGDG8 ' BHQBG □AH?LMG' ?NN□CAH ' CA' CFG' GOAHN' ?NPAO?0E' ? B@G' CF?C' CFGE' ?DG' HAC' ?NN□CAH ' ?HN' CFGDG>ADG' JG' DG GDPG' CFG' QBG □AH' A?' PGD □>□O?C□AH ' □H' JFJO□' J□CFABC' CFG' KAGC□O?N' GHC□DG' ?BCFAD' A?' GHDE') ' C□MM' JG' OA@G' CA' G ?@□HG' CFG' KAGC□O?N' CDBOCBDG' A?' CFG' #'J A' ?5C ' A?' CFG=' AHCGHC□AH I' □H' JFJO□' J□CFABC' CFG ?NN□CJH□AH?N' K? ? G ' CFG' >DGGNA@' A?' PGD □>□O?C□AH' C?HN ' ABC' □H @A C' NGO□NGN' OAHCD? C' CA' GPGDE' KDANBOC□AH' CF?C' G □ CGN' LG>ADG' 512 G'F AMN ' CF?H ' CF?C CFG ' □D C' ?DC A?' GHDE) ' □H ?MM CFG G GHC□?M ' A?' C□ ' ND?@?C□O' OAH CDBOC□AH ' □ ZJ□CF' DG>GDGHOG' CA' CFG ALSGOC' JFJO□' ?BCFAD' F?N' □H' B□ FJH ' OF?DP?0CGD' A?' CFG ' GD□G ' A?' FG' CAD□O?N' GPGHC ' J□CF' KAGC□O?N' CDBCF' □@@G? BD?LME' BKGDA□D' CA' ?HE' ACFGD' 0FDAH□OMG' F□ CADE' JFJO□F' G □ CGN' LGC□JGH' 565' ?HN' 517' C' F?' LGGH' 0?MMGN' ? ' JG GG' ?' =' ND@@ ?HN CDB@KGC CFH I' #FG' G G□H JFJO□F□C J? ' KDANBOGN' J? ' AHG' □H' JFJO□F' CFG' @A C' ?OO@KM□ FGN' A?' C□ ' OABDC□GD ' ?□N' = ' HGPGD' FG?DN' CFG' AMN' AH ' A?' GDOE' ?HN' %AB M? ' CF?C ' >ABHN' HAC @E FG?DC' @APGN' @ADG' CF?H' J□CF' ?' CDB@KGC' ?HN' EGC □C □ ' BH ' LBC' LE A@G' LM□HN' ODAJ□NGD ' J□CF' HA' DAB FGD' PA□OG' CF?H' DBNG ' CEMG ' JF□OF LG□H ' A' GP□M' ?KK?DGMMGN' □H' CFG' NB C' ?HN' OAL J GL' A?' CF?C' BHO□P□M' ? G' I' ?HN□C' J ?' FG' JFA' >□D C' G□TGN' BKAH' CFG' DG?C' CFG@G >AD' F□ ' AJH ' ?HN' =' CD□@@GN' I' □C' H' F□ ' AJH' =' AD GAB ' GMAQBGHOG I' J□CGD' A?' CFG' @@A C' G CD?PP? ?HC' NGP□?C□AH ' >DA@' CFG' KM?H' A?' CFG' DG?C' DA@?HOG' @@ABCF ' A?' BOF' C?CGME' KGD AH? G ' ? ' CFG' i@KGDAD' A?' >D□O?' CFG' AM' ?HN' CFG' N?H' A?' i EKC ' CFG' D□HOG' A?' &'G □OA ' CFG' □H ' A?' CFG' MG ' ?HN' CFG' @?N' DM?HNA' G' □PG' ?H' ?PGD? G' KGO□@GH' A?' CFG' PGD □>□O?C□AH R

' =' A' @AD6' CF?H' >PG' ND?@? ' CFG' BHNABLCGN' JAD(' A?' +DGGHG' F?PG' 0A@G' NAJH' CA' KA CGD□CE' D□□H ' >AD' LD6?N' ?HN' J□CF' ?' KGH J□FA G' DG?N□HG ' J? ' HACAD□AB ' FG' BHNABLCGNME' KDANBOGN' NBD□H ' CFG GD□G ' A>' EG?D ' JFGH' FG' J? ' ?' KDA>G GN' ?BCFAD' ?' @BOF' DG?CGD HB@LGD' A?' KM?E ' □H' ?MM' KDAL?L□M□CE' @?HE' A?' CFG@' JGDG' HGPGD'ZKBL-N□ FGN' ?HN' KGDF?K ' A?' A@G' A?' CFG@' J□FO□F' JGDG' DG?MEE' KD□HCGN' HAC ?' □H MG' 0AKE' F?' G 0?KGN' NG CDBOC□AH'□C' ' CFG G >PG' ND?@?C□O' K□GO6 ' HAHG' GD6 KD□HCGN' C□MM' ?>CGD' +DGGH8 ' NG?CF' □H' 512' =' DM?HNA' BD□A A'I'LG?D ' HA' H?@G' AH □C ' C□CMG' =' MKFAH B ' □H ' A?' □H ?HNA' I'□ ' @?NG' LE' " ' + ' CFG =' $AA(□H ' +M? ' >AD' $AHNAH'I' LG?D' CFG' 5A□HC' H?@G ' A?' $AN G' ?HN' +DGGHG ' J□CM C = ' D□?D' .?0AH1' ?HN' CFG = 0ACC□ F' □ CADE' A?' 0?@G ' CFG' ABDCFI' KBDKADC' CA' LG' JDCCGH' LE' "'ALGDC' +DGGHG ' C'□ ' >DA@' CFG G KM?E ' CFGH' CF?C JG @B C' >AD@' ABD' G C□@?CG' A?' +DGGHG8 ' KGOBM□?D□CG ' ? ' ?' ND?@?C□ C' ?HN' CFGH0G' □HQB□DG' J□CF' J F?C' SB C□OG' FG 0?H' LG' ?OOABHCGN' CFG' ?BCFAD' A?' AHG' 1D' LACF'A?'CFG' #'J A' ?DC 'A?' #FG'=' AHCGHC□AH'A?CFG' AB G '?A?' ,AD('?HN' $?HO? CGD I

#FG' BLSGOC ' A?' +DGGHG8 ' >□PG' KM?E ' JABMN' ?KKG?D' >DA@' CFG□D' CCOMG' CA' LG' B>>□O□GHCME' P?D□GN' H' =' DM?HNA'I' CFG' DABHNJAD(' □ ' A?' 0ABD G ' CA' LG' CD?0GN' CA' D□A CA ' LB□ CFG' BKGD CDBOCBDG KDG GHC ' CFG @A C' G CD?PP? ?HC' NGP□?C□AH ' >DA@' CFG' KM?H' A?' CFG' DG?C' DA@?HOG' J□CGD' A?' C?ME ' #FG'KA@KA □CE' A?' CFG' N□OC□AH' □ ' HAC' ?@□ ' □H CFG' @ABCF ' A?' BOF' C?CGME' KGD AH? G ' ? ' CFG' i@KGDAD' A?' >D□O?' CFG' AM' N?H' A?' i EKC ' CFG' D□HOG' A?' &'G □OA ' CFG' □H ' A?' CFG' MG ' ?HN' CFG @?N' DM?HNA' G' □PG' ?H' ?PGD? G' KGO□@GH' A?' CFG' PGD □>□O?C□AH R

')

'-H9L' OIPTMG 5P7PIKP 7 - PN T#

n HP &P ‡ #‡ 5TAP' : PPIPMG 5 M1MK X UC' 9‡ ‡L‡ W9+

/ % ' ,LMKP TP i'N J1LHMIN M G8
MJP piJ3%9P MMI'M 1%O i'N99 H'GL IL
MGH'MN'NHPA QHNIPEG 7T J'HM OT9 UG+
O 'T JNHP KP TGM P'NHP KM N9 P G+
HMN' MN i'&MGi %G TM9 I OHN IPGG'
G MGN'LPMT'U IQC'MIOQ9 T i'T J'7MNPG+

% # ' iQ 7 ip PH' $' $ ' iQG 7 9KM' PNP' '
-MLH9NQ iM'T'J1' $ ' $ 8'0T&'/ $ ' iQ 7?P JGN9PI+

6 5GK JNP JG IPi'iNJ PMG 7M 99+
HP P 7 IMi'NHNM'7 GNK PMMPO'K9 GP+
MGP 7PIN9P GPM'GL J'iQ'7 I'A9NMXJ #NPMG9 iG
- JO'O6OMi'7J9'K J99'MiOJ'JiEJGA+
XH GP CG'M P'GHNOPO N'HpiK4MiN iQ 9PG+
X GP'NHMi' POJGM IMPNH'N99 J'I iQC8
#iO i'MHP 'HPM NG GNHPIP9PGG N PNMHP T+
J'K J9 IT #iT'LM iN'NHP '7J PG7 'NH'
O 'HP99G'H'i'HP99'K ILM POO'N'MHP 'HPM NG+

HMW'GMG'HM'P'IMOP'%'J'7'NJIPG'K9'IAG'HQH
'Q'P'MMP'IQ'i'&4MG'i%G'PMKP99PIKP+
XHMW'O'NHPT'NH'iUN'L9MT'A'A7'9'NH'IP\
1'MP'NHGT'MMO'G'7'9'K'i''79MP+
IKP'NHMW'NHPT'HMO'NHP'9PMO'IQ'7'J'AMIQ+
#G'NHMW'NHPT'NH'IUNHW'I'QHT'#'IJMQJ
5M'PG'O'i''NHP'NHM'N'G'NHPH'PI'JL'1
XHT'GLPMJWGW'J'i'N'.XHM7'IQ'7MINK7W
5'O'IMJP'NH'GP'KM'P9PG3'UIQG'N'PINJ'P'N'YR

=#FG'OACCD'F'□'CADE'A;'07?G'=')'M?H'?C'MANNGH'I'JABMN'
>DA@'□C'CCMG'M2N'B'CA'□@?'HG'CF?C'+DGGHG'?L?NHANH'H'FI'KF?H-
C?'□G'>AD'DG?MCCG'F?N'?KKMGW'F□@'GM>'?C'M?'C'CA'?'GHB□HG'FI'CAD□O?M
ND?@?'.BC'CFG'JADN'='M?H'?C'MANNGH'I'HNO?CG'AHME'JF?C'OAC-
C□F'07?@G'J?'@G?HC'#FG'CADE□'?MCA'GCFG?'DA@?HOG'H'JFDOF
07MWGW'N?'□'>AD?(GH'LE'F□'KGGD''JF□M'C'F□'J□G'JFA'BHNGD'AG'
?'@E'CGD□AB'?'?'□H?C□AH'J□CF?'CMM'@ADG@E'CGD□AB'D6OAPGDE'□'?C
M?'C'DG'CADGW'CA'FGD'DGKGHC?HC'FB'L?HN'&D'%E0G'?E',DA@'JF?C
ABDOG'ABD'?BCFAD'NGD□PGW'CFG'@?CGD□?M'A'C□OCAH'?BCFAD'ABD
HAC'LGGH'?LMG'CA'N□'OAPG3'HAD'OABMW'&D'%?P□N'$?□H'A?'i□NHLBD'F'
J'FA'□'A'KDA>ABHNWE'PGD'GW'□H'CFG'?HO□GHC'MCGD?CBDG'A?'F□'OABHCDE'
?>>ADNGW'F□HC'CA'CFG'KAGC'>AD'□C'OA@KA'□CAH'I'□?'KBDKA'GWE'CA'
N□PC'C'CF□'KG□GOG'A?'?HE'KDGCGH'□AH'CA'CFG'OF?D?OCGD'A?'?H'F□'CAD□O?W
ND?@?'JG'F?PG'?'ADC'A?'OFADB'A?',LGDAH'I'?HN'=',HC□O'I'?HN'?'
=',CA□'I'JFA'C?W('OACOF',GC'CFG'KW?E□',HAC'J□CFABC'□HN□O?C□AH'
CF?C'FAJGPGD'□HO?K?LWG+DGGHG'@F□FC'LG'A?'KDANBO□H'?'DG'BW?D'F□-
CAD□O?W'ND?@?'FG'OABWN'AOO?'□AH?WE'?N?KC'F□'CEWG'A'?'CA'G'KDG'
KW?□H'CFAB'FC'□H'□HCGWC'□LWG'JADN'#FG'>AWAJ□H'KGGOF□'AHG'A?
CFG'@A'C'>?PABD?LWG'KGO□@GH''□C'NAG'HAC'G'F□LC□C'@BOF'KAJGD'LBC
NC'CH'B□'F□H'□F?D?OCGB□'CO'R

6'1'U'IP□'KWIGWH'J?IOJP'N'GPPNHT'K'JW
17?'IP□W'NG'MIO□EJOQ'IPING'OGL'GPPCGWO+
XH'9GW'M9O?O'KWW'NHG'NH'IQ'K9'IAG'G'H'QH
#G'PWGH'AP'M9G'MIAN'i'G'G'AWO?1
HT'7WHP'9P7W'NHPP'NH'PGWMP'MIO□K'i
#'9PM'IPO□K'JIK9W'O'PRW'NHT'K'JW
HPQP'KM'PPRCGT'1'U'IQ'NH'J'KWGWPGW'7+
'PINP'NM'i'M'N'M'i''7GTK'LHMING+
H'J'P99'IMTWGW'GPP'N9WH'JQH'NH'J'9W'i'N'GPP
HMW'P'P'T'PTP'MIO'PM'A'NH'GPPG'MIO'HPM'G

6'OMA'JG'K'IPH'NHP8'HMW'G'NHMW'NH'JGWTPGW\
XHMW'O'O':'O'NH'IPOL'LHPGT'N'JG
XHT'O'J'KP'TG'PIO'JIN'NHP'MG+

HPKP'NM'i'GQIG'7'IP'iK'IN'IPIKP+
T'JM'N'N99'PO'JIN'NHP'3IQ9'GH'U'IQ'
27'JQPO'P99'7'i'N'M'I'QHNT'7'PR'

JBG'A;'CFG'L□LM□A'D?KFGD'F?PG'LGGH'DGHNGDGN'?OOG'□LMG'GHCGD?W
DG?NGD'LE'CFG'P?MB?LMG'M?LABD'A;'&D'%EOG'#A'CFA'G'JFA'?OG
>?@□M?D'J□CF'CFG'G'JAD('JG'J□MW'?KKG?W'J□CFABC'FG'□?C?AH'□H'?EIH'
C?F?'CFG'OF?D?OCGD'A;'+DGGHG8'@□HN'?HN'F□'F?L□C'A;'OA@KA'□CAH'
DGHNGDGN'F□@'BCCGDMEZ□HO?K?LMG'A;'KDANBO□H'HAC'CFG'#J'A'?DC'A;'
CFG='AHCGHC□AH'I'AD'AHG'?DC'LBC'?'H'MG'B'C?□HGN'OGHG'A;'G□C□GD'
?DC'HN'EGC'?'LGMG;'F?'LGGH'MAH'GHCGDC?HGN'H'iH'M?HN'CA'
JF□OF'GPGH'A@G'J□'G'?HN'SBN□O□AB'C?W□'OM□H'CF?C'+DGGHG'?HN'
□AH'AD'CF?C'+DGGHG'JDACG'AHG'?DC'?HN'GGMG'CFG'AC□FGD'?DC'AD
CF?C'?HE'D?CG'+DGGHG'F?N'A@G'F?DG'H'CFG'G'ND?@?'('=FD'J?'
?'CFGADE'KDAK?'?CGN'LE'&?MHG'H'F□'=';%□'GDC?C□AH'I'?HN'□C'DG□C'
HAC'BKAH'CFG'M□'FCG□C'G'?@□H?C□AH'A;'CFG'JAD('A;'CFG'G'J□C□GD'LBC
AMGWE'AH'CFG>?D>?@GN'K?'?'G'H'+DGGHG8'KA'CFB@AB'K?@KF□WGC'
CFG='+DA?C8'ADC□A;'□C'I'H'J□FO□F'FG'KA□HC'ABC'F?(KGDG'?'
='?'ODAJ'LG?B□>GN'J□CF'ABD'>G?CFGD'I'#FG'FEKAC□FG□'?KKG?D'CA'
B'CA'LG'M□CCWG'MG'CF?H'?L'BDN'?HN'EGC□C'K?DC□?WE'?HO□CAHGN'LE'
BOF'F□'F'?BCFAD□CE'CF?C'JG'O?HHAC'K?'□C'APGD'H'□MGHOG'&D'?W'
?@'?E'R='□'?H'DE'?WWB'□AH'CA'F?(KG?DG8'K'M?'□?D□@'□'?G-
'□?DC'A;'GHDE')1U'H'?'HAGG'BKAH'CF□'K?'?G&D'?WW?@'KG?('
@ADG'N□'C□HOCWE'R='&D'AWW□GD'?E'+DGGHG'KA'□LWE'F?PG'F?N'
?'F?HN'□H'CFG'<#DBG'□'CADE'A;'"□OF?DN'%B(G'A;'AD(&'.BC'JFE
CFA'G'LBD'CA'OWG?PG'CFA'G'KBSZGC'','@G?H'CF?C'KG?('>DA@'ABD'
@ABCF'CFA'G'?HC□O'?DH□FGN□H'ABD'OAWABD'I'*K'CA'CF□'KA□HC'
CFG'@G?H□'KGD>GOCWE'OWG?D'#FG'KBKKGC'CFG'?HC□O'R'LE'JF□OF'
H?@G'AHBLC'A;'FI'@G?H□H'I'G'PGHCBD'CA'CF□H('CF?C'CF□?@'JADN'A;'
NGD□PG'CFG□D'OF□G;'□@KADC?HOG'>DA@'CFG'M?LABD'A;'CFG'KOUC'□H'CFG
JADN'JF□OF'CFGE'BCCGDGN'?HN'CFG'OAWABD'J□CF'JF□OF'CFGE'JGDG'?D

'"GN'T'7/NPMJP'9#'£L'=#
1/£22+ 43

7 ? E ' ' 7 7

H FGN R F?N AHOG OMG?PGN CA F@ M(G LBD . BC ?' 0F?H G F?N C?(GH KM?OG R =' ' C HAC CD?H G CF?C ' CA JFA@ CFGE ?MM F?PG LGGH LGFAMN H R ' C HAC M(G CF?C EAB ' CA JFA@ CFGE ?MM F?PG LGGH LGFAMN H ' F?MM ' JGDG EG' H CF?C 0? G CF?C ' ?>C HAJ ' LG ' LACF A>' CFG@ ' ?C AHOG >AD ?(GH W I' #F ' ' ?' M?@GHC?LMG KOCBDG A>' AHG JFA G KAJGD ' J? CGN LE' N K?CAH ?HN GH>GGLMGN LE' O(HG ' JGDG HA MAH GD DGQB DGN LE' CFA G CA JFA@ CFGE F?N AHOG LGGH GDP OG?LMG ' ' FG J? ' >AD ?(GH ' A' FG FAMN ' CF?C F ' >DGHN ' J MM LG' >AD ?(GH ' HN' OF G>ME' >AD JF?C DG? AH W =' , G ' CDB C CFG@ HAC ' >AD CFGDG ' ?H BK C?DC ODAJ ' LG?BC>GN JCF ABD >G?CFGD ' CF?C ' JCF $ ' ' $ ' 0 5 ' ' ' : ' $. BKKA G ' FG ' ? ' JGMM ?LMG CA' LA@L? C ABC ?' LM?H(PGD G ? ' CFG LG C A>' EAB ' ?HN ' LG H ' ?H ?L AMBCG 0AF?HHG ' >?OCACB@ ' ' H F ' AJH OAHOG C CFG AHME F?(G OGHG CH CFG OABHCDE I' #FGDG O?H LG HA NABLC CF?C F?(KGDG J? ' FGDG KA HCGN ?C ' CF?C CFG C?DP H ' @?H KA(G JCF G OGGN H ' L CCGDHG ' A>' CFG BOOG >BM ?BCFAD ' CF?C FG ?>>GOCGN CA' NG K G F@' ? ' ?' KM?EGD ' CF?C ' >'='LG?B-C>GN JCF ABD >G?CFGD ' I' F?N ?' CDAH GD @G?H H ' CF?H =' ?DH FGN JCF ABD OAMABD I' C OAHPGEGN ?' P? BG OF?D G A>' LADDAJ H ' >DA@ ACFGD KAGC ' ?HN CF?C FG K?DAN GN ?' M HG >DA@ CFG = #DBG #D? GNE A>' " OF?DN %B(G A>' , AD(I' #F ' ' M CGD?MME GPGDE JADN CF?C O?H LG BKKA GN CA ?KKME CA F?(KGDG ' +DGGHG KDAOGGN ' CA G FADC F ' >DGHN ' =' CA LG G@KMAEGN H @ADG :KDA>C?LMG OABD G IR =' $GC CFG G ?KG ' @C?CG EABD K? C G OGMGHOG ' ?HN HGPGD @ADG ?OQB?HC CFG@ JCF EABD ?N@DGN HPGHC AH IR =' GG(' EAB' LGCCGD @? CGD I' C ' KGD>GOCME OMG?D CF?C CFG G JADN ' DG>GD AHME CA CFG KM?EGD ' GHGD?MME ' ?HN ' KA LME ' CA CFG K?DC OBM?D OA@K?HE A>' JF OF F?(KGDG J? ' ?' @G@LGD ' ' BOF ' ?HN BOF AHME ' @B C FG C?(G F ' F?DG H ' CFG H?@G ' JF OF +DGGHG ?KKM G ' CA CFG@ ' A>' =' ?KG IR =' DBNG DAA@ IR ' = LBO(D?@' GHCMG@GH IR =' KG? ?HC IR ?HN = K?HCGN @AH CGD I' C JMM LG' JGMM CA PG CFG OAH CDBOC AH CF?C F? ' LGGH KBC BKAH CFG G JADN ' H CFG >AD@ H JF OF CFG =' FEKACFG ' I' J? ' >D C KDAKABHNGN LE' & ?MAHG R

F?(KG?DG =' F?P H ' CFGDG>ADG ' KDAL?LME HAC MAH ' LG>ADG CFG EG?D 512 ' JFGH +DGGHG JDACG F ' %E H ' ! FADC?C AH CA ?' D GHN ' HGJ ' @ANGMMGN ?HN ?@KM>GN CFG G CJA K GOG ' VCFG # JA ?DC ' A>' CFG ' AH-CGHC AH 8 ' ?HN KDANBOGN AH CFG C? G JF?C H CFG >AM A' GN C AH A>' F ' JAD(' ?DG O?MMGN CFG GOAHN ?HN #F DN ?DC ' A>' H ' GHDE')

HN' FAJ' NAG ' FG G F L C W G' K?DAN G ' ?' M HG >DA@' AHG A>' CFG KDANBOC AH ' A>' JF OF FG F?N LGGH A' KMBHNGDGN ' CA O?DDE CFG KA HC FA@G R CA MG?PG HA NABLC ? ' CA CFG C H ' A>' F ' ?MMB AH ' . BC ' ? ' F? ' LGGH @A C SB CME' AL GDPGN ' CFG GK D?@' JABMN F?PG J?HCGN C ' C H ' >' CFG M HG K?DAN GN F?N HAC LGGH CF?C A>' CFG PGDE' JD CGD ?CC?O(GN ' . G CF ' ? ' C @?E ' CFG NE H ' @?H ' >AD A@G O?B G AD ACFGD ' OFA G CA PG M' F ' NGGK' JDAH ' H' ?' ?DO? C O' ?MMB AH ' G' MG>C CFG @?HB OD KC OAHC?H H ' CF ' ?MMB AH CA LG KBLM FGN LE' ?' >D GHN ' ?HN C J? ' A' KBLM FGN ' C J? ' = ?' KGD MAB ' FAC ABC A>' ?H' GMNGD BH I' . BC CFG @?CCGD N N HAC CAK FGDG ' #FG' GN CAD A>' CFG KA C-FB@AB ' JAD(' ?OCB?MME' ?KAMA GN CA CFG =' BK C?DC ODAJ' R = ' ?@' ? ' ADDE' ? ' >' CFG AD H?M >?BMC F?N LGGH @E' >?BMC ' LGO?B G @E GM>' F?CF GGH F ' NG@G?HABD HA' MG ' O P M CF?H FG G OGMMGHC H CFG ' QB?M CE' FG KDA>G G ' LG NG ' N PGD ' A>' JAD F K' F?PG DGKADCGN F ' BKD FC-HG ' A>' NG?M H ' JF OF ?D BG ' F ' FAHG CE ' ?HN F ' >?OGC AB ' D?OG H JD C H ' CF?C ?KKDAPG ' F ' ?DC I' e #F ' ?KAMA E' J? ' HAC JD CCGH' LE' FGCCMG' ?C A@G N C?HC KGD AN ' C O?@G' ABC H' CFG ?@G EG?D' J C] ' CFG' K?@KFMGC' JF OF' OAHC?HGN' CFG' H BMC' #FG' CGD@ ' JF OF' FG' B G ' R =' BKD FCHG ' A>' NG?M H I' ?HN =' >?OGC AB ' D?OG H' JD C H ' I R GG@' ? ' >' @G?HC N C HOCME' CA' DG>BCG CFG P? BG ?OOB ?C AH' A>' =' LG?BC>GN' J CF' ABD >G?CFGD I' C ' KGD>GOCME' OMG?D' CF?C FGCCMG' OABMN' HAC' F?PG' B GN' CFG G CGD@ ' >' F?(KGDG' F?N' LGGH' CFG' JFAMG ?MG' KMBHNGDGD' G CFGD' A>' +DGGHG' AD' A>' ?HE' ACFGD' JD CGD' CF?C C ' ? B@GN' FG' J? ' LE' CFA G' JFA' NGKD PG' F@' A>' CFG' ?BCFAD F K' A>' CFG' # JA' ?DC ' A>' CFG' =' AHCGHC AH I' >' FG' F?N' LGGH' CF ' KMBHNGDGD' ?HN' >' FGCCMG' F?N' L? GME' ?KAMA GN' >AD' ?' CDBCF' BCCGDGN' LE' F ' NE H ' >D GHN ' JABMN' CFG' @?CCGD' F?PG' DG CGN' CFGDG W GDG' CFGDG' HA' GGMG ' ?HN' & ?DMAJG ' ?HN' ? FG ' H' CFG' JADMN ' CA' KDAOM?@' CFG' N FAHABD' A>' CFG' CF G>' ?HN' CFG' ?KAMA C W ^

#FG' AHME' HCGMM LMG' CFGADE' CF?C O?H' LG' KA LME' KDAKABHNGN' A>' CFG' @AC PG' >AD F?(KGDG8 ' K D?OE' A>' CFG' # JA' ?DC ' A>' CFG' =' AHCGH-C AH I' @B C ? B@G' CF?C' CFG' KM?E ' H' CFG D' AD H?M C?CG' F?N' LGOA@G' CFG' KDAKGDCE' A>' CFG' F?DGFAMNGD ' A>' CFG' .M?O(>D ?D ' #FG?CDG R CFG' DBNG' DAA@ ' ?KG ' LBO(D?@' GHCMG@GH ' KG? ?HC ' K?HCGN' @AH CGD ' A>' +DGGHG ' ?HN' CF?C F?(KGDG' CFDB C F @ GS>' HCA' CFG' O?K?OCE' A>' CFG' @KDAPGD' A>' CFG G' KM?E R CFG' @?H? GD?M GN CAD ' G' (HAJ' CF?C ?BCFAD ' JGDG' K?N ' H' A@GJF?C M?CGD' C@G ' CA' @?(G @KDAPG@GHC '

H' AMN' KM?E ' . GH' 0AH AH ' FGMN' CA' F?PG' JD CCGH' @BOF' A>' CFG' GOAHN' ?DC' A>' EN8 ' ='0GDAHE@A I' ?HN' H' GH MAJG8 ' K?KGD ' JG' >HN' F@' K?N ' H' 472 '?' B@' AH' ?OOABHC' A>' CFG G' = ?NNC AH I' #FG' ?@G' K?KGD ' G F L C' K?E@GHC ' CA' %G((GD' ?HN' " AJMGE' >AD' = HGJ' ?NNC AH ' I' CA' =' MNO? CMG I' ?HN' =' F?GCAH I' ?HN' =' #? A I' ' G' F?PG' ABD GMPG ' LGM GPGN' CF?C F?(KGDG8 ' #@AH' J? ' ?H' ?MCGD?C AH' A>' ?H' AMN' KM?E ' @?NG' LE' F@' M?CG' H' MC>G' . BC CFG' ? B@KC AH' A>' F?(-KGDG8 ' KM? ?DE' >DA@' CFG' =' AHCGHC AH I' JF OF' ' AB FC CA' LG' KDAD N' LE' +DGGHG8 ' =' F ' C GD8 ' FG?DC' JD?KK8N' H' ?' KM?EGD8 ' FNG I' @B C A' AH' CA' G C?LM F ?' O? G' A>' NGM HQBGHOE' ? ?H C F?(KGDG' BHGQB?MMGN' H' CFG' F CADE' A>' MCGD?CBDG ' +DGGHG' J? ' ?OOB GN' A>' F?P H ' AMN' CFG' ?@G' KM?E' CA' CJA' CFG?CDG ' R =' &? CGD' " ' + ' JABMN' C' HAC' @?(G' EAB' LMB F' >' EAB' AMN' DM?HNA' BD A A' CA' CFG' QBGGH8 ' KM?EGD ' >AD' CJGHCE' HALMG ' ?HN' JFGH' CFGE' JGDG' H' CFG' OABHCDE' AMN' CFG' ?@G' KM?E' CA' $ADN' N@D?M8 ' @GH' >AD' ? ' @BOF' @ADG W ? ' HAC' CF ' KM? OAHGE O?COF H ' & ' + ' W I > ' . BC CF ' J? ' ?' PGH?M A>>GHOG' OA@K?DGN' J CF' F?(KGDG8 ' &?MAHG ' JFA' ?OOB G ' F?(KGDG' A>' F?P H ' LB MC F ' DGKBC?C AH' BKAH' CFG' ?KKDAKD?C AH' A>' CFG' CJA' KM?E ' A>' CFG' =' AH-CGHC AH I' " .' CGMM ' B ' CF?C ?' 3 ' ' CFGE' JGDG HAC F?(KG>G8 ' ' >BDH FGN' LE' CFG' O DOB@ C?HOG' CF?C CFGE' ?DG' ?NZ H' CFG D' C CMG K? G ' CA' F?PG' LGGH' =' BHNDE' C @G ' ?OCGN' cLE' CFG' ! ?DM' A>' G@LDA(G' F ' GDP?HC I' BCC H ' CFG' CJA' ?D B@GHC ' CA GCFGD ' CFGH ' JG' >HN' CF?C F?(KGDG' HAC' AHME' ?KKDAKD?CGN' CFG' DGKBC?C AH' A>' ?HACFGD ' LBC ' CFG' KM?E ' LAN ME' >DA@' CFG' ! ?DM' A>' G@LDA(G8 ' KM?EGD ' ?HN' CD?H >GDDGN' CFG@' CA' CFG' OA@K?HE' CA' JF OF' FG' LGMAH GN' AJ' ' CF ' ?H J GDGN' # @KME' LE' FAJ H ' CF?C CFG' C?CG@GHC H' CFG' C CMG K? G ' HAC H' CFG' M FCG C NG DGG HOAH CGHC J CF' CFG' LGM G>' CF?C ' ? ' PGDE' G?DME' KDANBOC AH ' CFGE' @ FC F?PG' LGGH' F?(KGDG8

$ M9 !P O PG HP P M GLPK M9 MLL9 KMN !' N ' NHP NP I' $(" % MG 7 N P P IPM!N N ' PWL PGG NHP M IL97 KMN ! 7 NHP 9O L9MTG KHM OPO MQM !GN HMUGLP P HP JP I' HMO APP !' JGPO AT MGHP 7 P TPM G AP7 P S620 ' N M N ' IMGJP G' NHMN IN JOP NHP JGP9 PG N ' J' PM G MG NHP M K!T I GJG 7 P9 JJP !KP' H ' @ I J!NPO ! ' NHP GMQP 7M QM!KP' NH !U N ' JNA M P APNP ' LP!G NH $ '%8 '' ' '' % ' ' ")! % < - % ' '- J * ' 5 0% -$ *) 7' ' 8 ?JQT' +

? - P7M P.N ' !O ''PM N G 5 PM I+

I HP P MG M!' !O GN !KN PKH ' 7 : PP!PMG K IL9M !N AT G IP 6 & +R ! (+&'

/' : PP!P QM P NHP O J!O N ' M9 H ' NP JL I' H I+

MT' I ` P8 NHP 1P I' NHMN G' +PK9 LGMO H G 7M IP -J 9 !MO H G L9J IPG SKM!' NHPT OP!T NHP GM IP R

6 P AP9 P P NHMN NHP P !P P ' TPN MLLPM PO M!T O PMN MJNH ' I' NHP , 9O H ' MG ! N PLJNPO ' I' NHP !GPN 7 H G KM PP ' N ' AP M L9MO M GN8 ' M!T O PMN 9 NP M T LP 7 TM!KP L OJKPO AT IP H GP PLJMN I' HMO N AP TMOP NHMN MG ! NHP9O $ N ' AP NP' AT G IP !P P9GP NHM!' NHP IM!' H OO NP N8 NHP P MG G IP !P APH !O NHP KJ M ! < % LTGNP JG MGG GM!N S H GP L GG A9P PW GP !KP MG M K !G 9M ' N ' NHP P! JG M!O NHP ! M9 O!M!N 3WM I L9PG I' I' ' OMT M P K I I ! P! JOH 6 & +R MG L AWA9T !P 7 NHPGP G JM99 K N KG 27 HP G HP9O 7 ' M!T MJNH NT P IMT GPN MOM !GNH I' NHP !O O!M!N OP! M9 7 MGHP NHM HP HMO M!TNH !O N ' O NH : PP!PMG 6 : M G X NH 7 X N R HKH HP OP! J!KPG MG M 6 %(' '2 - -$' MGHP' AP N P IP IAP PO MG NHP 7 P!OM!O K IL M! ! ' NHP J!9A NJ!M P : PP!P+

2 M9 !P' AT G P99 9 L ' 5P7P!KP 7 !PT MKH !Q @)=] J NPO AT' ' 5TKP ! HG / 7P 7 : PP!P' L W8+

7 ? E ‘ ‘ 7 7

F?N HAC KD?OC GN ‘ ?HN JF OF ‘ FG ?E ‘ FG J? ‘ CJ CCGN J CF LG H ‘ BH?LMG CA KDANBOG

C J? ‘ OA@@GHN?LMG H ?HE @?H CA ?NAKC ?H G GHC?MME F FGD CEMG CF?H CF?C J CF JF OF CFG C? G F?N LGGH >?@M?D ‘ LBC C OGD-C?HME DGQB DGN HA DG?C G>>ADC H ‘ KAGC CA CD?H >GD CFG CEMG JF OF F?N LGGH KAKBM?D H CFG HHGD #G@KMG ?HN +D?E8 ‘ HH CA .M?O (>D?D ‘ ?HN CFG BDC? H ‘ #FG O? G ‘ ?KKG?D CA B ‘ K?D?MMGM J CF @?HE O? G ‘ A>‘ KBLM O?C AH H ?HACFGD >AD@‘ #FG CEMG JF OF J? ‘ >D C @?NG KAKBM?D LE . GKKA ‘ >AD G ?@KMG ‘ J? ‘ KDGP AB ME KDG GHCGN CA CFG !H M F C? CG H F CMGOD?>C ‘ LBC LGO?B G F CMGOD?>C J? ‘ (HAJH CA ?‘ >GJ ‘ JF M C . GKKA J? ‘ DG?N LE CFAB ?HN ‘ F?MM JG ?E CF?C . EDAH >D C CFAB FC CFG HCDANBOC AH A>‘ CFG CEMG A>‘ . GDH JABMN LG ?‘ @A C P?MB?LMG @KDAPG@GHC H ABC KAGCDE W CF CFG F FG C DG KGOC >AD &D ‘ AMM GD8 ‘ AK H AH ‘ C ?KKG?D ‘ CA B ‘ CF?C CFG DGKBC?C AH A>‘ &?DMAJG @B C DG C ‘ HAC BKAH F ‘ KAKBM?D DGP P?M A>‘ ND?@?C O LM?H (‘ PGD G ‘ >‘ FG N N A DGP PG C ‘ LBC BKAH CFG G CGHC CA JF OF FG @KDAPGN CFG @ANGM JF OF J? ‘ DG?NE CA F ‘ F?HN ‘ HN FGDG JG O?HHAC FGMK CF H (H ‘ CF?C CFG HPGOC PG LACF A>‘ ? FG ?HN +DGGHG ‘ HAC N DGOCGN A @BOF ? ?H C CFG KAKBM?D HCDANBOC AH A>‘ LM?H (‘ PGD G ‘ ? ‘ ? ?H C ?‘ K?DC OBM?D KGO G ‘ A>‘ LM?H (‘ PGD G JFA G PGDE NG>GOC ‘ F?N KGDF?K ‘ OAHCD LBCGN CA C ‘ KAKBM?D CE ‘ ? FG LG CAJ ‘ F ‘ ?C DG BKAH = P?H MAD AB ‘ CD? GN?H ‘ JFA OAHCGHN HAC A GD AB ME CA G OGM H ?OC AH ? ‘ CA G@LAJGM CFG OMABN ‘ H ?‘ KGGOF A>‘ OA@K?D AHR ?DC @? CGD ‘ JFA ,‘ CF H (‘ CA ABCLD?PG LGCCGD KGH ‘ J CF ?‘ JGMM H ‘ LA@L? C I‘ YO 4H ,‘ LG H ‘ HAC G CG@KAD?M H CFG HPGHC AH A>‘ ?HE ACFGD @G?H ‘ CA PGHC CFG D @?HFAAN I‘ +DGGHG ‘ AH CFG ACFGD F?HN ‘ ‘ AHG =‘ JFA G G CG@KAD?M PG H H ?HE FB@ABD JMM G OGM ABD DG?CG C ?DC @? CGD 8 NGM LGD?CG CFAB FC I‘ +DGGHG F @? GM>‘ ?MCFAB F FG NGD NG ‘ CFA G =‘ JFA GC CFG GHN A>‘ OFAW?D @‘ H ?H ?H ! H M F LM?H (‘ PGD G I‘ KA HC ‘ G KGO ?MME ?C PGD G JFGDG FG >HN ‘ =‘ GPGDE JADN >MM H ‘ CFG @ABCF M (G CFG >?LBDNGH A>‘ . AJ LGMM I‘ ?HN ‘ FG ?NN ‘ = N?D H ‘ +AN ABC A>‘ FG?PGH JCF CF?C ?CFG C #?@LBDM?HG I‘ &D ‘ AMM GD F? ‘ KDAPGN ‘ PGDE OAHOMB PGME JG CF H (‘ CM?C &?DMAJG J? ‘ CFG ?BCFAD A>‘ =‘ #?@LBDM?HG?HN CFGDG O?H LG HA NABLC CF?C @BOF A>‘ CFG HPGO-C PG A>‘ ? FG ?HN +DGGHG @?E SB CME ?KKME CA CF ‘ KGD>AD@?HOG ‘ C ‘ PGDE NG>GOC ‘ &D ‘ AMM GD ? OD LG ‘ CA CFG O DOB@ C?HOG ‘ BHNGD JF OF C J? ‘ JD CCGH R = G @?E ? GDC CF?C ‘ JFGH JD C H ‘ ‹ #?@LBDM?@G 8 &?DMAJG OAHCG@KM?CGN ?‘ @A C @KADC?HC OF?H G ?HN @KDAPG@GHC H ! H M F ND?@?C O KAGCDE ‘ * HC M C ?KKG?DGN ‘ G K ‘ ‘ $ ‘ " ‘ ‘ JGDG JD CCGH ‘ A@GC @G ‘ H KDA G ‘ LBC @A C OA@@AHME H DFE@G ‘ ?HN CFG ALSGOC A>‘ &?DMAJG J? ‘ CA BL C CBCG LM?H (PGD G ‘ ‘ GH B ‘ J? ‘ N?D H ‘ ?HN AD H?M ‘ FG >GMC CF?C KDA G J? ‘ FG?PE ?HN BH-?CCD?OC PG ‘ ?HN DFE@G BHH?CBD?M ?HN JG?D A@G ‘ ?HN FG NGCGD@HGN CA @?(G ?‘ LAMN G>>ADC ‘ CA CFG BOOG ‘ A>‘ JF OF JG (HAJ HAC FAJ @BOF CA ?CCD LBCG A>‘ CFG ?>CGD G OGMMGHOG A>‘ GPGH F?(G KG?DG F @ GM>‘ ‘ &?DMAJG F?N ?‘ KBDKA G CA ?OOA@KM F ‘ FG F?N BHNGDC?(GH CA JG?H CFG @BMC BNG >DA@‘ CFG ! H ‘ PG H ‘ A>‘ DFE@ H ‘ @ACFGD ‘ J C 8 JF OF ‘ ?OOADN H ‘ CA +A AH ‘ JGDG A ?CCD?OC PG ‘ ?HN H ADNGD CA ?OOA@KM F CF ‘ ALSGOC C J? ‘ HGOG ?DE CA PG A@GCF H ‘ H G OF?H G >AD JF?C FG CAA (‘ ?J?E ‘ GHOG CFG ‹ JGMM H ‘ LA@L? C 8 A>‘ CFG CEMG H JF OF @BOF A>‘ CFG CJA ?DC ‘ A>‘ ‹ #?@LBDM?HG CFG +DG?C 8 ‘ JD CCGH I‘ .G CF ‘ ? ‘ C @?E JG DG?CME NABLC JFGCFGD >‘ F?(‘ KGDG F?N >AMMAJGN H CFG CGK ‘ A>‘ = #?@LBDM?HG I‘ F ‘ = ?>CGD-G OGMMGHOG I‘ JABMN F?PG LGGH A D?K NME @?CBDGN ‘ C J? ‘ JFGH FG DGSGOCGN CF ‘ @ANGM ‘ >‘ FG GPGD >AMMAJGN C ‘ CF?C FG @APGN AHJ?DN J CF >DGGNA@ CA F ‘ AJH BDK? H ‘ MADE

#FG D C ?DC A>‘ =‘ #?@LBDM?HG I‘ J? ‘ KD HCGN H 517 ‘ G F?PG HAC DGOG PGN C GHC DG H CFG >AD@‘ H JF OF C J? ‘ ?OCGN ‘ #FG KBL-M FGD ?E ‘ H ?‘ KDG>?CADE ?NNDG ‘ =‘ ‘ F?PG KBDKA GME A@CCGN A@G >AHN ?HN >D PAWAB ‘ G CBDG ‘ N DG H ‘ ?HN ‘ H @E KAAD AK H AH ‘ >?D BH@GGC >AD CFG @?CCGD ‘ JF OF ‘ CFAB FC @ FC GG@ @ADG CGN AB ‘ BHCA CFG J G CF?H ?HE J?E GM G CA LG DG ?DNGN ‘ CFAB F F?KME CFGE F?PG LGGH A>‘ A@G P?H OAHOG CGN >AHNM H ‘ DG?CME ?KGN ?C ‘ JF?C C @G CFGE JGDG FAJGN BKAH CFG C? G H CFGD D?OGN NG>AD@C G 8 C ‘ @KA LMG CA AKGH =‘ #?@LBDM?HG I‘ ?C ?HE K? G J CFAB C >GGM H ‘ CF?C JG F?PG M FCGN BKAH ?‘ JAD (‘ A>‘ KAJGD ‘ G GHOABHCGD KGD-KGCB?M H C?HOG ‘ A>‘ CFG @A C G CD?P? ?HC C? CG ‘ CFG H>M?CGN CEMG HP?NG ‘ J CFAB C HCGD@ AH ‘ CFG NGL?C?LMG DABHN LGC JGGH CFG BL M@G ?HN CFG D N OBMAB ‘ CFG OM?D?OCGD ‘ ?DG NG C CBCG A>‘ HCGDG C ‘ J CF CFG G OGKC AH A>‘ CFG AD GAB ‘ ?P? G JFA KGDKGCB?MME >MM ‘ CFG OGHG ‘ JG MAA (‘ H P?H >AD CFG M FCG C ?KKDA?OF CA @KMOCE . BC CMM JG ?UG HAC JG?D GN J CF CFG >GGLMG KM?C CBNG ‘ CF?C LGMAH ‘ CA CFG FGDN A>‘ @C?CAD ‘ F?(KGDG F?‘ AHG AD CJA AAN H?CBDGN F C ‘ ?C CFG LA@L? C A>‘ = #?@LBDM?HG I‘ ?HN CAM8 ‘ ?MMB AH CA CFG = K?@-KGD8N S?NG ‘ A>‘ ?I ‘ NABLME KA HCGN ‘ JFGH JG (HAJ CF?C CFG S?NG ?DG CJA (H ‘ JFA ?DG CFB ‘ NG OD LGN H CFG C? G N DGOC AH R

=‘ !HCGD #?@LBDM? HG ‘ ND?JH H F ‘ OF?D AC LE #DGL T H ?HN AD? ‘ J CF L C ‘ H CFGD @ABCF ‘ DG H ‘ H F ‘ MG>C F?HN ‘ H F D FC F?HN ?‘ JF K ‘ J CF JF OF FG OABD GCF CFG@ I‘ C ‘ BHHGOG ?DE >AD B ‘ CA GHCGD BKAH ?HE GK?D?CG G ?@H?C AH A>‘ CF ‘ G CD?ADN H?DE KGD>AD@-?HOG J CF DG>GDGHOG ‘ CA &?DMAJG8 ‘ 3 4‘ >AD JF?CGPGD N >>GD-GHOG ‘ C @?E G FL C CA CFG LM?H (‘ PGD G A>‘ =‘ GDDG ‘ ?HN ADDG I‘ CFGE ?DG HAC NG>HGN GHAB F CA OAH C CBCG ?‘ CEMG ‘ F ‘ PGD G ? ‘ EGC 9P? ‘ OAH>G GNME BH>AD@GN ‘ CF DG ?DN CA CFG ACFGD KA HC ‘ A>‘ &?DMAJG8 ‘ KAGC O?M OF?D?OCGD CF?C LG?D BKAH CFG ?BCFAD F K A>‘ CFG =‘ AHCGH-C AH A>‘ CFG AB G ‘ A>‘ , AD (‘ ?HN $?HO? CGD I‘ CFGE @?E LG LGCCGD G ?@HGN ?>CGD ?‘ D?K N HAC OG A>‘ ?MM F ‘ JAD (‘ CF?C F?PG OA@G NAJH CA B

#FG KM?E ‘ CF?C O?H LG BHFG C?C H ME ? HGN CA &?DMAJG ?DG R ‘ CFG #JA ?DC ‘ A>‘ = #?@LBDM?HG I‘ CFG = &? ?ODG A>‘ ?D I‘ =‘ ?B CB I‘ CFG =‘ OGJ‘ A>‘ &?MC? I‘ ?HN =‘ ! NJ?DN I‘ #FGDG O?H LG HA NABLC ‘ JF?CGPGD LG CFG NG>GOC ‘ A>‘ CFG G KGD>AD@?HOG ‘ CF?C CFGE ?DG CFG JAD (‘ A>‘ ?‘ PGDE DG@?D (?LMG @?HR AHG CF?C CAAN ?K?DC >DAHW CFG @? ‘ A>‘ F ‘ OAHCG@KAD?D G ‘ CA @KDG ‘ CFG KGOBM ?D C G ‘ A>‘ F ‘ GH B ‘ BKAH GPGDECF H ‘ FG CABOFGN ‘ #FG JMN @? H >OGHOG ‘ CFG BHLD NMGN K? AH ‘ CFG >GDOGHG ‘ A>‘ MAPG AD F?CDGN ‘ CFG DGPGMM H ‘ H LMAAN ?HN ODBGMCE JCFABC >G?D AD DG@AD G ‘ CFG KD NG H LG H ‘ ?OOABHCGN ?‘ OABD G A>‘ +AN R CFG G ?CCD LBCG ‘ A>‘ CFG OF?D?OCGD A>‘ #?@LBDM? HG JGDG KDGO GME BCGN CA CFG KAJGD JF OF &?DMAJG KA - G GN >AD CFG D NGPGMAK@GHC ‘ H CFG >BDH?OG A>‘ F ‘ @? H?C AH HAC AHME CFG @? G ‘ ?HN >‘ BD?C PG ?MMB AH ‘ LBC CFG JFAMG @?CGD?M A>‘ F ‘ KAGCDE R CFG ?OC AH ‘ CFG OF?D?OCGD T?C AH ‘ ?HN CFG CEMG R LGO?@G ?MM A>‘ CFG ?@G JF CG FG?C ‘ ! PGDECF H ‘ H =‘ #?@LBDM?HG I‘ LBDH ‘ #FG OF?D?OCGD ‘ J?M (‘ ?LABC M (G CFG N?@HGN H =‘) ?CFG (I‘ J CF FG?DC ‘ A>‘ DG?M >DG H CFG D LA A@ ‘ #FGE KG?(‘ H M?H B? G BOF ? ‘ HA FB@?H LG H ‘ ?OCB?MME G@KMAE UZHAC LGO?B G CFGE ?DG D GHC?M ‘ LBC LGO?B G CFGE ?DG HAC @GH ?HN JA@GH ‘ #FGE MAA (‘ CA B ? ‘ CF H ‘ ?K?DC >DA@‘ CF ‘ G?DCF R HAC LGO?B G CFGE ?DG OMACFGN H =‘ L?DL?D O KG?DM ?HN AMN I‘ LBC LGO?B G CFG D >GGM H ‘ ?DG HAC ABD >GGM H ‘ ?HN CFG D CFAB FC ‘ HAC ABD CFAB FC ‘ #FG QBGGH A>‘ CFG FGDA ‘ NE H ‘ H F ‘ KDG GHOG ‘ CFAB F FG C GN (H ‘ CA F ‘ OF?D AC JFGGM ‘ ?HN OABD GN CFG@‘ J CF JF K ‘ FG ‘ DGKDG GHCGN ? ‘ ?OOG LMG CA CFG A>CGD G@AC AH ‘ ?HN CFG MAPGD CFB ‘ KABD ‘ >ADCF F ‘ M?@GHC R

6 - JO7JT M!O !N 9P MA9P7N+
HMN OM PG N IP!N NHP A OT 7 IT 9 P+
#!O GK J QP NHP GK J QP 7NHP I I N7 9 : O
‘M P NH GP GLHP PG HP P JL O JGHO N ‘G N
X J!O !O NHP 9O NH !OP‘M!O NH 9 P
MO9T GJLL9 PO NH LM9P M!O QHMGN9T OPMNH+
XH GP OM NG OL L P KP NHP KP!N P 7 IT G J9+
"P ‘GMK PO APMJNT HMNH P!KHM!NPO HPM P!8
#!O HMO GHP 9 %O AP7 P NHP G PQP 7 T
"P9P!‘@ H GP APMJNT GJ I I !PO : PPKP N ‘M IG‘
#!O O P ‘M NH JGM!O GH LG N ‘ P!PO G
"MO ! N APP!‘ !M I%O !‘ " IP %G " MOPG8
"P ‘!M IP HMO APP!‘ !‘P %T9 !P HP NP+
1 ‘HMO NH GP M!N !‘L PNG 7 ‘ H GP A NH
19O & IP MG L JO‘AJN QMCMO M H9P !‘HP +
‘ /PGA M ! ‘ !!M HMO APP!‘ !M I%O8
fP! K MNP HMO APP!‘ NHP M QJ IP!N
17P %T PL Q M I‘ ‘P9PQT‡ $ ‘ % (‘% % DE 2, #F)‘ %‘
X HMN[G GHP OPMO 1 PKHP99PG‘O M ‘NHT G O
#!O J!O NHP PM NH‘NHMN N I MT K9PM P !‘N M !
#!O P OPGKP!O !N ‘NH% !7P !M9 MJ8NG+
‘HM9P NHP 7MNM9 G GNP G AT NHP HM +
#!O NH ‘NHP I‘ !‘NHP N L9P I M 7HP99+
O ‘NMU !O HP!KP IT 7M ‘ fP! K MNP+
MGM!P M!O HP OM I MG‘N ‘M IG[
&M GP KM M9 P G H QHP ‘NHM!‘NHP K9 JOG+
#!O NH NHP KM!! !‘A PMU NHP 7 M IP 7HLM %!‘8
MNNP ‘NHP GH ! !O LM9MKP 7NHP GJ!+
#!O GH P‘M99 NHP GNM T7 I M IP!N+
O ‘M I% JG? P HMNH G!MNKHMO IT 9 P7 I‘HP!KP+
PM! !O N ‘ I MUP HP ‘GMMP9T]JPP!‘ 7HPM P!+
XHMN : O G P P‘H 9OG NHPP !‘HG M IG+
: !O NHPP !PKNM‘M!O M IA GM+
PH 9O IP HP P‡ 5 !P fP! K MNP
&M !Q‘ I LMN P!N‘OPGLP MNP‘M!O I MO
PMU !O IT GNPP9PO 9M!KP‘ NH H KH 2‘AJ GN
HP JGNT APM IG 7?M!JG%NP I L9P O G+
/PN !O JN OPMNH M!O NT M!! C !O M+
‘ I M KH NH IP J!OP‘NH G A9 OT 79MO[
#!O 7NH JL N PGN M I AJ 9M !P NHP : PMN
IP O !7 I‘HPM %!‘M!O 9 P NH IP MQM !+R

#FG =‘ & ? ?ODG A>‘ ?D I‘ JF OF & D ‘ AMM GD CF H (‘ =‘ J? ‘ KDANBOGN AAH ?>CGD 566 I‘ ‘ G GHC ?MME J CFABC ND?@?C O HCGDG C ‘ C J? ‘ ?‘ BLSGOC H JF OF &?DMAJG JABMN H?CBD?MME DGPGM ‘ >AD H CFG KDA DG ‘ A>‘ CFG ?OC AH LMAAN OABMN LG @?NG CA >MAJ ? ‘ >DGGME ? ‘ J?CGD ‘ F?DMG

$?@L'JCCCME ?E ' L ' @?NG ? ,M FC A;'H A@G A;'CFG G'AM' ND?@? ' ,? ' 'H ?' @ANGDH' GHC:@GHC?M 0A@GNE' ?HN' ? ' $ ' ' :PGH' ?J?E'CMM' C' DG@'HN 'B 'CF?C C ' HACF=H 'LBC' 0ABHCGD ' A' $ ' ' KCMC CMM' C' ?>GOC 'B 'HA' @ADS'CF?H'C 'DGKDG GHC?C?PG 'CFG K?'HC A;' CFG KDAKGDCE @?H' HF CFG CFG>?DG I' *HQBG C'AH?LME' CF=' J?' ;' 0F?D?OCGD' C'O' A;' CFG CD?H C'AH' C?CG A;' CFG' ND?@N ' ?HN' #=';'#CB ' H ' NDAHOB 'I' ' ;' @@G@AD?LMG'G ?@KMG A;' C' .B?' &?DMAJG G KGO:?MME DGPGL'HF CFG G G F:L'C'AH ' ?HN'HF CFG ='0GJ' A;' &?DMAJG

JDCCGH'H DFE@G', 0?HHAC BG ' >' F?(KG?DG F?N'HAC'H' AC?GD' KME?E ' @?H MGN' F ' DFE@G ' ?HN' LM?H(PGD G'H' CFG ?@G @?HHGD ' FABMN' F?PG' B KGOCGN' CF?C CF ' N'?MA BG' F?N' LGGH' ?' K?DC' A> ' A@G ACFGD'KAG@' JFDOF' J? ' HGPGF>H' FGN'?HN' CF?C'LG'H ' MACF' CA' CFDA'J' F ''M?LABD' ?J?E ' FG 'H GDCGN'C' FGDG I' CFABC' ?OOGKC?H 'OAFH AH8' CFGADE' JG @?E'LGMCGPG' CF?C' F?(KGDG'?NAKCGN'DFE@GR CFG '=' FGDA'D PGD G'I' A>' %DENGH R'H' CF=' ' AM?CGN'?HN' G CGH 'PG'@?HHGD'CA' DGHNGD' CFG OAHMBNH ' OGHG ' A>' #?MLAC' @ADG'G@K F?C'O' ' J? ' CFG' FGDA' A>'CFG'KM?E' $ '0?DDCGN'J'CF'F@'CFG'F= FG C' E@K?CFE'A>'CFG'?BN'GHOG' #FC' KDCHO'KMG' BKAH' JFCF' %DENGH' NG>GHNGN' = FGDA'O' PGD G1' H CD? GNE'@B C' F?PG'LGGH' CFG' APGDHCH ' KDCHO'KMG ' CA' @'H'HG' EAB' ?DG ?MDG?NE' A'>?D' AHJ?DN' A>'EABD' J?E'CF?C EAB'F?PG'>AD ?(GH'CFG '@'C?C?AH' A>' ADN'H?DE' OAHPGD G1U' #F?C' F?(KGDC'CFADAB FME' BHNGD CAAN' CFG '>?D' F= FGD' ND?@?C'D KAJGD ' A>'CFG ACFGD'H CDB@GHC'=' @G? BDG' J'CFABC' DFE@G1' DGQBDG ' HA' KDAA>' .BC'H' CFG'HCDANBOC'AH' A>'CFG OGHG' LG>ADG' B R' CFG' MAH G C' B C?'HGN' OGHG'H' FGDA'O' PGD G' J'FOF' F= ' KME' G' FCLC' AD' ? '>?D' ? ' JG' (HAJ ' J'FOF'?HE' OAHCG@KAD?DE' ND?@? G' FCLC R C' ' @?H>G C' CA' B ' CF?C FG' @?NG ?H' G KGD'@GHC' BOF' ? ' ?' PGDE' EABH ' KAGC' JABMN' ?MAHG' PGHCBDG' CA' @?(G' .BC'H' CF' G KGD'@GHC' JG LGMCPG' CF?C FG' O?DDCGN' CFG' KA'GD ' A>' CFG'H>GD'AD'H CDB@GHC' >?DCFGD' CFGADE' ? ' JG' F?PG' FGMN' A>' GCFGD' CMM' FG' DG?OFGN' KGD'AN' A>' F= '?CG C' KDANBOC'AH ' HN' JFE' A'W' .GO?B G' FG F?N' ?' N'>>GDGHC' CFGADE' A>' CFG' QB?MCG ' H' JFOF' CFG' CDGH CF' A>' ND?@?CD' KAGCDE' OAH ' CGN ' ?HN' FG' (GKC'CA'F= ' AJH' CFGADE' BHC'M ?H' AKKA 'CG' @ANGM' J? ' KDG' GHCGN' CA' F=@

^)

FGH' 'DM=?@' F?(KGDG' J? ' ?LABC' >PG' EG?D ' A>' ? G' ?' D?HC' A>' ?D@ ' J? ' @?NG'LE' CFG' AMMG G' A>' GD?MN ' CA' F= ' >?CFGD' J? ' BHQ@G CAH?LME' GH ? GN' H' CD?NG' A>' A@G' ADC'H' CD?C>ADN BKAH ' PAH' FG' J? ' ?H' ? D'OBMCBD' C'H' ?MM' M=(GM=FAAN ' LBC' FG' MPGN' H' ?H ? G' JFGH' CFG' KDNG' A>'?HOG' CDE' J? ' HAC' M= FCME'DG ?DNGN ' ?HNZ'JFGH' ? N= C'HOC'AH' BOF' ? ' CF=' J? ' A>' DG?M' ?HN' CFG' DG? AH' >AD' CFG' OAH>'D@?C'AH' D?HC' J? ' 0AH>'D@GN' H' 511 ' ?HN' CFG' DG? AH' >AD' CFG' OAH>'D@?C'AH' A>'?D@ ' C?CGN' J'CF' @'HBCG' K?DC'OBM?D'CE' H' CFG' = G G@KM>'O?C'AHI' CFGH' D?HCGN' LE' D' 'MM=?@' %GCF=O(' ?HN' CFG' DG?C' ?@NGH R 1/# 22+

#iO7 NJIP9MA'J'G' NH'NHP'MGN'J p PIN
HPi' ?HNG' i'HP'HMiO'NHP'Q PMPGN'GMNP' IMUP+
XH'KH'7 'K iNPiO iO I iM'KHG'GHP'KMI' IMUP+
XHMNPNP'KMI'J QPM IAN ' JG'T JNH'N '7QHN+
HP'L IL 'JG9T'O'GLPMTG'AP7 P'NHP 'G'QHN8
2M G'PIL P'M99'LP I'NMPON'NHP G 'O+
#iO'7MP'K 'J9O'IPN'MI'M'ILP'GKPIP'NM7 O+
% -$'O J'GP P'M9M I PGN'NHP7 P9OM P'9PO+
XH'KH'H'QH' i'PJ'JW9H LPG'7 J'L iKPG'HPM798
2iOJG'MiO' :MiOPG' J' OP PIL PNG A JiOG+
P99'NHP 'OTNO'KJ PING'XNHNHP 'iMN PG% JiOG
3MKH'LJLP P' iOiO'NG'HP JiG+
" G A9 'OT'M IG'MA JN'HG'G9MJOQH'NP %O'G iG+
F 2 '' ?' P99 PIPIAP'T J7' P9 9O'NHP'GN I+
XHPi'7 GN'NHPA NHP'GOO'HP '7MN iG7 I
XHPi'PMKH'AT'KJ'GKO'KMAMG 7 Ipi'GN P
$ 'O M 'NH%'iOJ9QPiN'U iQ'N'LM N N9 PHR

/' ' XHPi'7 I'NHP'OMJLH iNG'K PG'NHT'G O GN JKJ7 P
2N' M I%O'NHT'7MNHP'G'HPM'N' NHL JO OPG P
17A 9O 7MK%O' KN T' HPi'9PMOPi'MiO MP9KP MQP+
>JKJPi%O' NH'7J'JNH7J9 GL9PPi'MiO MP9KP MQP+
PMN'O i'#9PiK i'J 9PMiG' JOOJiOT
#iO7 I'NHPL OP 7 :N99M PGXJPO NHPP+
HP P?J9 AMGNM O J 9PMiG SNHMN'O P ,A9 O
O I'NHPP'I7A TB MiO'HMO'NHP IMOPiH O
17'NHT'7 GN7'ONN SZ'G i'PiK JiNP POG
#iO' iNP KHN'iO'iQ A9 G'?']JKJ9T'GHPO
IP 7HG AMGNM O A9 O8 MiO' i'OGQMP+
PGL UP'H I'NHJG' ¥ iNMI iMPO'AMGP+
PMi'MiO 'OHN'L 8 ?J'NHMN'LJ P A9 O 7 I ip
XH'KH'NH JO OGN7 KP7 I' MGA N' I7'AM P A T'%
"P P'LJL G iQ NHP AMGNM O N '0PGN T+
M IP i'GN iQ PGXJP+ LPMJ'NHT'7MHP %G KM P8
N'NH J'i N 'PN $'?Hi\ " 'OOGN'NH J7M P\
X 9N'NH J TPN'9PM P'NHP AMM9P'A T'MiO'J9T
'NH J'M N'GPM9NO'NHP G i' 7KH M9 T'\R

6' i ' "PM %#'GPPIG'NHP PIL P 7NHP PMGN'9MT
1i'NHP GJKKPGG 7NHG IL NMiN'OMT'
HP 'M IG'M P'N'NHP9MGN'OPK G i'APiN+

7 ? E ' ' 7 7

,' HA J'EG' CF?C' □H' ?M' H?C□AH ' ?HN' (□H NA@ ' CFG' DGOADN' ?HN' DG@G@-LD?HOG' A>' CFG' P?M□?HC' >?OC ' ?HN' P□DCBAB ' N□ KA □C□AH ' A>' JADCFE' @GH' F?PG' LGGH' (HAJH' ?HN' N□PBM GN' LE' OGDC?□H' F□GMN ' A>' ?D@ ' ?HN' CA(GH ' A>' OF□P?MDE ' CFG' D?HC' ?HN' CG C□@AHE' JFGDGA>' ?KKGDC?□HGCF' BHCA' B ' LE' P□DCBG' A>' ABD' A>>□OG ' >DA@' CFG' QBGGH8 ' @A C' G OGMMGHC' @?SG CE' ?HN' FGD' F□ FHG 8 @A C' HALMG' ?HN' P□OCAD□AB ' KDA GH□CAD ' JFGDG>ADG' LG□H ' AM□O□CGN ' ?HN' LE' ODGN□LMG' DGKADC' □H>AD@GN' CF?C' 0AFH' F?(KG?DG ' HAJ' A>' CD?C>ADN BKAH PAH ' □H' CFG' 0ABHCE' A>' ?DJ□O(' GHC ' JFA G' K?DGHC' ?HN' DG?C D?HN>?CFGD ' M?CG ?HCGOG AD' >AD' F□ ' >?□CF>BM' ?HN' ?KKDAPGN' GDP□OG' CA' CFG' M?CG' @A C' KDBNGHC' KD□HOG' □H ' G□HE') ' A>' >?@AB ' @G@ADE' J? ' ?NP?HOGN' ?HN' DGJ?DNGN' J□CF' M?HN ' ?HN' CGHG@GHC ' □PGH' CA' F□@' □H' CFG G' K?DC ' A>' ?DJ□O(-F□DG ' JFGDG' CFGE' F?PG' 0AHC□HBGN' LE' A@G' NG OGHC ' □H' AAN' DGKBC?-C□AH' ?HN' ODGN□C I' YO ' YO ' C' □ ' HAC' N□>>□OBMC' CA' □@? □HG' CFG' EABCF>BM' F?(KGDG' □CC□H ' ?C' F□ ' @ACFGD8 ' >GGC ' CA' M□ CGH' CA' CFG' C?MG' A>' F□ ' ='?HCGOG AD8 ' I' KDAJG ' ' AD' CA' K□OCBDG' CFG' LAE' MGN' LE' F□ ' >?CFGD' APGD' CFG' >□GMN' A>' .A JADCF R CA' LG' FAJH' CFG' DG?C' @AD? ' JF□OF' M?E' LGCJGGH' LACF' ?D@□G R ?HN' " ?N@AAD' M?□H ' JFGDG' CFG' L?CCMG' LG ?H ' R ?HN' %□O(AH8 ' AA(' JFGDG' CFG' CED?HC' F?D?H BGN' F□ ?D@E R ?HN' CFG' P□MM? G' A>'%?NM□H CAH ' JFGDG' CFG' D?PG ' A>'CFG' M?□H' C□MM' □HNGHCGN' CFG' DABHN' GDG' J? ' CFG' OGHG' A>' F□ ?HCGOG AD8 '= >?□CF>BM' ?HN' ?KKDAPGN' GDP□OG 8 ' H' CFG' FB@LMG' FAB G' A>' F?(KGDG8 ' LAEFAAN' CFGDG' J? ' □H' ?MM' KDAL?L□M□CE ' CA' LG' >ABHN' ?' CF□O(' QB?C' >AM□A' PAMB@G ' CFGH' A@G' CF□DCE' EG?D ' KD□HCGN ' □H' JF□OF' @□ FC' LG' DG?N' = JF?C' @□ GDE ' JF?C' @BDNGD ' ?HN' JF?C' G GOD?LMG' KM? BG ' CF□ ' >?@AB ' DG □AH' F?CF' B>>GDGN' LE' CFG' N□P□ □AH' ?HN' N□ GHC□AH' A>' CFG' DGHAJHGN' FAB G ' A>' $?HO? CGD' ?HN' ,AD(I' #F□ ' CA' CFG' GHGD?C□AH' A>' F?(KGDG8 ' LAEFAAN ' J? ' HAC' ?' C?MG' LBD□GN' □H' CFG' NB C' A>'? G ' □C' J? ' AHG' JFA G' CD?N□C□AH ' JGDG' >?@□M□?D' CA' CFG' FB@LMG C' A>' CFG' M?HN ' J>>□M C' CFG' @G@ADE' A>' □C ' L□CCGD' F?CDGN ' C□MM' DB>>MGN' CFG' K□D□C ' A>' CFG' F□ FG C ' = AD' JF?C' HALMG@?H' M□PGCF' ?C' CF□ ' N?E ' AD' JF?C' GHCMG@?H' A>' ?HE' ?HO□GHC' CAO(' A>' KDA GHE' □ ' OMG?D ' JFA G' M□HG? G' F?CF' HAC' LGGH' □H>G CGN' ?HN' KM? BGN' J□CF' CF□ ' BHH?CBD?M' N□P□ □AHWI' H' CF?C' AMN' PAMB@G' >DA@' JF□OF' JG' QBACG ' ='CFG' H?@G ' A>'CFG' F□ CAD□G ' 0AHC?□HGNI' ?DG' CFB ' GC' >ADCF R = ' ‹ #FG' A M ' % ' A>' □H ' GHDE' CFG' ABDCF 8 ' ‹ #FG' ' & ' A>' □H ' GH□E' CFG' □>CF 8 ' ‹ #FG' % N " ' (' A>' □H ' GHDE' CFG' □ CF 8) ' ‹ #FG' % G ' ? M ' ' '1 0 ' $ ' $ F) ' 7 ' ' ' □H ' !NJ?DN' CFG' □>CF 8) ' ‹ #FG' % ' - ' ' □H ' "□OF?DN' CFG' #F□DN 8) ' ‹ #FG' AM□C□O' +APGDH?HOG' A>' □H ' GHDE' CFG' GPGHCF 8) ' ‹ #FG' #D□B@KF?HC' "G□ H' > □H ' GHDE' CFG' ! □ FCF 8 I' #F□ ' LAA(' J? ' ?MM8 ' FDAH□OMG ' AJ' N□M□ GHCME' CFG' EABH ' @?H' F?(KGDG' F?N' CBN□GNUCFG' LAA(' ?HN' FAJ' O?DG>BMME' FG' F? ' >AMMAJGN' □C' □H' >ABD' A>' F□ ' OFDAH□OMG' F□ CAD□G ' JG' F?PG' □PGH' ?LBHN?HC' G ?@KMG' □H' CFG' □ CAD□O?M' MMB CD?C□AH ' A>' CFG G' KM?E ' □CF' CFG' MAO?M' ?HN' >?@□ME' ? AO□?C□AH ' CFGH ' CF?C' @B C' F?PG' LGMAH GN' CA' F□ ' G?DME' EG?D ' CFG' BLSGOC' A>' CFG G' >ABD' ND?@ ' AD' D?CFGD' CFG' BLSGOC' A>' CF□ ' AHG' DG?C' ND?@?' □H' >ABD' K?DC ' @B C' F?PG' □DDG □ C□LME' KDG GHCGN' □C GM>' CA' CFG' @□HN' A>' F?(KGDG' ? ' AHG' JF□OF' FG' J? ' G KGO□?MME' QB?M□>□GN' CA' CFDAJ' □HCA' CFG' >AD@' A>' ?' OFDAH□OMG' F□ CADE' ' C' J? ' ?' C? (' KGOBM□?DME' >□CCGN' >AD' CFG' EABH ' KAGC' NBD□H ' CFG' >□D C' >□PG' EG?D ' A>' F□ ' OAHHGOC□AH' J□CF' CFG' CFG?CDG' □ CAD□O?M' ND?@? ' □H' CFG' DBNG C' >AD@' KDG GHCGN' BHGQB?MMGN' ?CCD?OC□AH ' CA' CFG' ?BN□GHOG ' JFA' >MAO(GN' CA' CFG' D□ □H ' C? G' □CFABC' ?□DE' BHNBG' DGM□?HOG' AH' F□ ' AJH' KAJGD ' FG' @□ FC' LGM□GPG' CF?C' FG' OABMN' KDANBOG' A@GCF□H ' @ADG' JADCF□ME' ?CCD?OC□PG' CF?H' CFG' DBNG' N□?MA BG' JF□OF' B FGDGN' □H' CFG' = >ABD' JADN ' ?HN' ?' LBO(MGD' I' A>'CFG' AMN' C? G ' G' F?N' HAC' FGDG' CA' □HPGHC' ?' KMAC ' AD' CA' ?□@' ?C' CFG' BH□CE' A>' ?OC□AH ' A>' C□@G ' ?HN' A>' KM?OG ' JF□OF' CFG' @ADG' DG>□HGN' OD□C□O ' A>'F□ ' N?E' FGMN' CA' LG' G GHC□?M' CA' CD? GNE ' #FG' >AD@' A>'?' OFDAH□OMG' F□ CADE' @□ FC' ?KKG?D' CA' DGQB□DG' M□CCMG' LGEAHN' ?' KAGC□O?M' G KA □C□AH' A>'CFG' @A C' ?CCD?OC□PG' >?OC ' A>'CFG' DG?M' FDAH□OMG ' C' J? ' □H' CF□ ' K□D□C ' JG' CF□H(' CF?C' F?(KGDG' ?KKDA?OFGN' CFG' G GOBC□AH' A>' CFG' □D C' ?DC' A>' GHDE') ' C' ?KKG?D ' CA' B ' ?M A ' CF?C' □H' CF?C' PGDE' G?DME' KGD>AD@?HOG' FG' □H' A@G' NG DGG' FGMN' F□ ' GH□B ' □H' BLADN□H?-C□AH' CA' CFG' HGOG □CE' A>' G GOBC□H ' F□ ' C? (' D?CFGD' J□CF' DG>GDGHOG' CA' CFG' OF?D?OCGD' A>' F□ ' ?BN□GHOG' ?HN' CFG' GHGD?M' H?CBDG' A>' F□ ' BLSGOC' CF?H' >AD' CFG' >BM>□M@GHC' A>' F□ ' AJH' ? K□D?C□AH ' ? ' ?' KAGC' #FGDG' J? ' LG>ADG' F□@' AHG' A>' HPA' OABD G ' G' @□ FC' F?PG' OFA GH' ? ' CFG' DG?CGD' HB@LGD' A>' F□ ' OAHCG@KAD?D□G ' 0FA G' CA' OAH □NGD' CFG' NA@□-H□AH ' A>' KAGCDE' ?HN' A>' 0A@@AH' GH G' CA' LG' >?D' BHNGDGN ' ?HN' BH0AH O□AB ' AD' NABLC>BM' A>' CFG' >ADOG' A>' □@KM□O□CE ' FG' @□ FC' F?PG' DG AMPGN ' J□CF' CFG@' CA' BL C□CBCG' JF?C' JABMN' @ADG' BHQBG C□AH?LME' D?C□>E' (' DBNG' KAKBM?D' C? CG R CFG' >ADOG' A>' G CD?P? ?HOG ' H' CFG' ACFGD' F?HN ' □C' J? ' AKGH' CA' F□@' CA' CD?H >GD' CA' CFG' ND?@?C□O' F?KG' CFG' K□D□C C□DD□H ' DGO□C?M ' A>' CFG' AMN' OFDAH□OMG' JD□CGD ' □H' JFA G' H?DD?-C□PG ' ?HN' G KGO□?MME' □H' CF?C' KADC□AH' A>'CFG@' □H' JF□OF' CFGE' @?(G' CFG□D OF?D?OCGD ' KG?(' CFGDG' □ ' ?' @?HME' ?HN' CD?□ FC>ADJ?DN' G?DHG CHG ' JF□OF' □H' □C GM>' HAC' GMNA@' LGOA@G ' KAGC□O?M ' F?(KGDG' OFA G' CF□ ' M?CCGD' OABD G ' FGH' JG' LG □H' CA' CBNE' CFG' GHDE') ' JG' >□HN' □H' CFG' □D C' ?DC' CF?C' CFG' ?OC□AH' NAG ' HAC' ?KKG?D' CA' KDA DG ' CA' ?' O?C? ' ' CDAKFG ' CF?C' CFG' ?BCFAD' M□H GD ' ?LABC' CFG' NGC?□M ' ? ' AHG' JFA' J? ' O?MMGN' BKAH' CA' G F□L□C' ?H' GHC□DG' GD□G ' A>'GPGHC ' D?CFGD' CF?H' CFG' @A C' ND?@?C□O' KADC□AH ' A>'CFG@' CFGDG' ?DG' CFG' ?MCGDH?C□AH ' A>' BOOGZ' ?HN' MA ' ?HN' MA ' ?HN' BOOG ' C□MM' JG' A@GJF?C' NABLC' CA' JF□OF' □NG' CA' ? □ H' CFG' P□OCADE ' #FG' OF?D?OCGD ' ?DG' >□D@ME' ND?JH ' LBC' J□CFABC' ?HE' PGDE' BLCMG' N□ C□HOC□AH ' ?HN' CFG□D' GHC□@GHC '?HN' ?OC□AH ' ?KKG?D' AOO? □AH?MME' □HOAH □ CGHC ' AD' ?C' ?HE' D?CG' HAC' B□NGN' LE' ?' NGCGD@□HGN' KBDKA G' □H' CFG' JD□CGD' C' □ ' G? E' CA' KGDOG□PG' CF?C' CF□ ' @ANG' A>' NG?M-□H ' J□CF' ?' OA@KM□O?CGN' BLSGOC' J? ' CFG' @A C' H?CBD?M' ?HN' ALP□AB ' CA' LG' ?NAKCGN' LE' ?H' BHKD?OC□ GN' KAGC ' JFA' J? ' JAD(□H ' J□CFABC' @ANGM ' .BC' ?MCFAB F' CFG' G>>GOC' @?E' LG ' CA' ?' OGDC?□H' G CGHC ' BHND?@?C□O ' CFGDG' □ ' □@KDG GN' BKAH' CFG' JFAMG' KGD>AD@?HOG' ?' JAHNGD>BM' ?□D' A>' CDBCF' & BOF' A>' CF□ ' @B C' F?PG' DG BMCGN' >DA@' CFG' G CD?ADN□H?DE' QB?M□CE' A>' CFG' KAGC8 ' @□HN ' JF□OF' OABMN' CG?D' A>>' ?MM' CFG' >M□@ E' OAH-PGHC□AH?M' N□ B□ G ' A>' □HN□P□NB?M' OF?D?OCGD ' ?HN' KGHGCD?CG' CFG' DG?M' @AP□H ' KD□HO□KMG' A>' GPGHC ' J□CF' ?' D?DG' ?OBCGHG ' ?HN' ?' D?DGD' □@K?D-C□?M□CE ' H' ABD' P□GJ ' CF?C' JFAMG' KADC□AH' A>' CFG' □D C' ?DC' A>' GHDE') ' JF□OF' NG?M ' J□CF' CFG' OF?D?OCGD' ?HN' ?OC□AH ' A>' 0A?H' A>' DO' □ ' ?' DG@?D(?LMG' G ?@KMG' A>' CF□ ' KAJGD' □H' F?(KGDG' G' >□HN' FGD' NG OD□LGN' □H' CFG' FDAH□OMG ' BHNGD' GPGDE' >AD@' A>' P□CBKGD?C□AH R ' ?' @AH CDAB ' JA@?H ' ?' @AH CGD' ?' D?@K ' ?' NGP□M□ F' J□COF' ?HN' ?C?H□O?M' GHOF?HCDG ' ?H' AD ?H' A>' CFG' NGP□M' FG' J? ' CFG' @?□H' □H CDB@GHC' CFDAB F' JF□OF' !H M?HN' F?N' MA C' D?HOG ' ?HN' CFB ' CFG' KGAKMG' C□MM' F?CGN' FGD' @G@ADE ' FG' OM?□@GN' CA' LG' □HPG CGN' J□CF' BKGDH?CBD?M' KAJGD ' ?HN' CFB ' FGD' H?@G' J? ' HAC' AHME' G GOD?CGN ' LBC' >G?DGN' G□CFGD' CFG' K?CD□AC□ @' HAD' CFG' BKGD C□C□AH' A>' F?(KGDG8 ' ? G' JABMN' F?PG' GHNBDGN' CF?C' CFG' BOGMMG' FABMN' F?PG' LGGH' N□ @□ GN' >DA@' CFG' OGHG' J□CFABC' PGH G?HOG' C?(GH' BKAH' FGD' □@? □HGN' OD□@G ' AD' CF?C' OAH>G □AH' FABMN' HAC' LG' @?NG' LE' FGD' JF□OF' JABMN' G OBMK?CG' CFG' ?BCFAD ' A>' FGD' NG?CF ' F?(KGDG' F? ' OAHNBOCGN' FGD' F□ CADE' BK' CA' CFG' KA□HC' JFGH' FG' □ ' F?HNGN' APGD' CA' CFG' C?(G' CFGD' JD□CGD ' JABMN' F?PG' LBDHC' FGD' BKAH' CFG' OGHG ' ?HN' CFG' ?BN□GHOG' JABMN' F?PG' FABCGN' J□CF' CFG' ?@G' NGM□ FC' CF?C' CFGE' >GMC' JFGH' CFG' .?D?L? ' A>' &?DMAJG' J? ' CFDAJH' □HCA' CFG' O?MNDAH ' F?(KGDG' >AMMAJ□H ' CFG' F□ CAD□?H ' F? ' □D□?NG' FGD' BCCGD' ?' OAHCD?N□OCADE' OAH>G □AH' A>' AHG' A>' CFG' OF?D G ' ? ?□H C' FGD' FAHABD ' LBC' FG' F? ' C?(GH' O?DG' CA' FAJ' CF?C' CFG' LDBC?M□CE' A>' FGD' !H M□ F' KGD GOBCAD ' >ADOGN' >DA@' FGD' ?H' □HOAH-□ CGHC' ?PAJ?M' □>' □C' N□N' HAC' B G C' ?' >?M G' AHG ' >AD' CFG' KBDKA G' A>' ?PGDC□H ' ?' ODBGM' ?HN' □H C?HC' NG?CF ' H' CFG' CDG?C@GHC' JF□OF' FG' DGOG□PG ' >DA@' ,AD(' ?HN' ?DJ□O(' CFG' KAGC' F? ' HAC' G F□L□CGN' AHG' □H MG' O□DOB@ C?HOG' CF?C' @□ FC' G O□CG' E@K?CFE' >AD' 0 ' #FGE' ?DG' OAMN ' ?HN' ODBGM ' ?HN' □H AMGHC ' LGO?B G' ?' NG>GHONG ' ODG?CBDG' JFA@' CFGE' F?N' NDG?NGN' □ ' □H' CFG□D' KAJGD ' GD' K?DC□H ' @?MGN□OC□AH' F? ' ?' □C ?KKG?D ' CA' B ' G KGO□?M' DG>GDGHOG' CA' CFG' O?M?@□C□G ' JF□OF' ?J?□C' CFG' ?BCFAD ' A>'FGD' NG?CF' R

6' MT' !P P'Q9 JG'GJ!' P79PW'H G'APM I G'ǂ
L !'NHP'K'J!N T' HP P'T J IMUP'MA OP'%
JN'OM U!PG'M!O'NHP'Q9 IT'GHMOP' 7'OPMNH
3! !'T J>R

.BC' □H' ?MM' CFG' KDGP□AB ' OGHG ' F?(KGDG' F? ' N>?JH' CFG' OF?D?OCGD' A>' CFG' &?□N' J□CF' ?H' BHN□ B□ GN' E@K?CFE' >AD' FGD' OABD? G ' FGD' K?CD□AC□ @' FGD' F□ F' □HCGMMGOC ' ?HN' FGD' GHCFB □? @' >' FG' F?N' LGGH' CFG' NG>GHNGD' A>' !H M?HN ' ?HN' HAC' A>' D?HOG ' CFG' KAGC' OABMN' HAC' F?PG' □HPG CGN' FGD' J□CF' F□ FGD' ?CCD□LBCG ' C' □ ' □H' FGD' @ABCF' CF?C' FG' KBC ' F□ ' OFA□OG C' CFAB FC ' ?HN' F□ ' @A C' @B □O?M' PGD G ' C' □ ' FG' JFA ' ?E R

6' :9 T'G9 UP'M K KGP' !'NHP' MNP
XH KH !P P'KPMGPNH N '?P!9M QP' NGP97
99'AT'A MO'GL PMO !Q' N'O GLP GP'N ' !MJQHN+R

C' □ ' FG' JFA' AM□O□C ' CFG' ?MM□?HOG' A>' .BD BHNE' □H' ?' CD?□H' A>' □@K? -□AHGN' GMAQBGHOG' JF□OF' LGMAH ' CA' AHG' >□ FC□H ' □H' ?' F□ F' O?B G' J□CF' BHOAHQBGD?LMG' CDB C' ?HN' J□HH□H ' APGD' GHG@□G ' LE' CFG' >□D@' DG AMPG ' A>' ?' P□ ADAB ' BHNGD C?HN□H ' ?HN' ?H' BH F?(GH' J□MM' #FG' M□HG ' LG □HH□H R

6' / U !'NHT'K J!N T'9 U !'7P N 9P O M!KP R

@□ FC' F?PG' □PGH' CFG' CAHG' CA' GPGDECF□H ' CF?C' F?' LGGH' BL GQBGHCME' JD□CCGH' □H' FAHABD' A>' CFG' &?□N ' C' J? ' F□ ' ?OOBD?CG' (HAJMGN G' A>' CFG' KD□H ' A>' OF?D?OCGD' JF□OF' □H' A' EABH ' ?' @?H' ?KKG?D ' ?M@A C' □HCB□C□PG ' CF?C' @?NG' F?(KGDG' ?NAKC' CF□ ' NGM□HG?C□AH' A>' 0A?H' A>' DO' G' (HGJ' CF?C' J□CF' ?MM' CFG' □H>MBGHOG' A>' FGD' BKGDH?CBD?M' KDGCGH □AH' CF□ ' G CD?ADN□H?DE' JA@?H' OABMN ' HAC' F?PG' J?EGN' CFG' NG C□H□G ' A>

(□H NA@ ' ?HN' @ABMNGN' KD□HOG ' ?HN' J?DD□AD ' □A' FGD' J□M' BHMG ' FG F?N' LGGH' ?' KGD AH' A?' PGDE' D?D' H?□BD?M' GHNAJ@GHC ' FG J?' DGKDG GHCGN' LE' CFG OFDAH□OMGD ' ? ; ' @GDG P□D? A ' ? ' LAM\' ?HN' F?@G-MG ' CDBM\' ?' @AH CGD' ?' J□COF' LGO?B G' CFGE ?NAKCGN' CFG' PBM ?D' P□G'J' A?' FGD' OF?D?OCGD R CFG P□GJ ' □H' CDBCF' A?' CFA G CA' JFA@' FG J?' AKKA GN' %$ ' JGDG' DAB F' AM\NGD ' J□CF ?M\ CFG P□DCBG ' ?HN' ?M\ CFG □HNGGN' A?' OF□P?MDE' LBC' J□CF' CFG' CFG' LD?HN' BKAH' CFG@' A?' ?M\ CFG P□OG A?' CFG□D' ? G ' CFG' ODGC?□BDG ' A?' LDBCG' >ADOG ' CFG' OF?@K□AH ' GH?M\ KM?E ' CF?C' F?PG' ?HN' BHDG?M□CE' A?' GPGDE' NG-KDANBO□AH ' CGG□F□H ' J□CF' G CD?P? ?HOG' ?HN' BHDG?M□CE' A?' GPGDE' NG-ODK□AH ' >D C' GHNG?PABD' CA' LG' OADDGOC ?HN' CA' LG' □HCGM□ □LMG' G' F?PG' ?MDG?NE' HA□OGN' CF?C CF□? J A' +GHCMG@GH' A?')GDAH?'KA G 'CF□ ' N□ C□HO□PG' OF?D?OCGD' = #F□ ' 0A@GNE' F? ' CA' ABD' @□HN ' ?' PGDE @ANGDH' ?□D' #F□ CFAB F□ ' ?DG' H?□BD?M' ?HN' ALP□AB ' CF□ □@? G ' ?M@□M□?D' ?HN' GHGD?M' #F□ @A C' OGMGLD?□GN' K? ? G ' F?PG' ?' OF?D?OCGD' A?' D?OG' D?□FGD' CF?H A?' LG?BCE ' CFG GMG ?HOG A?' ?' EABCF>BM' KAGC

7 ? E ' ' 7 7

?BN□GHOG'W #FGDG' J?' CA' LG' FAJH' ?' N?D(' OF?AC□O' @? ' A>' O□P□M ! CB@BMC' A>' >?OC□AB ' CD□>G ' A>' >□GDOG'?HN' LMAANE' F?CDGN ' A>' NG KGD?CG' ?@L□C□AH' A>' KAM□C□O?M' KDA>M□ ?OE' A>' KAKBM?D' □ HAD?HOG' A>' JG?(' APGDH@GHC' #FG' CDB MG' J?' CA' LG' OAHC□HBGN' JF□MG' G?OF' >?OC□AH' F?N' □C' ?MCGDH?C□AH ' A>' BOOG ' G?OF' J?' CA' G F□L□C' CFG' ?@G' NG-@AD?M□ □H ' G>MGOC ' A>' CFG' ?@G' >DGHT□GN' ?@L□C□AH' JF□OF' NDAPG' CFG@' AHJ?DN' CFG' OABD G' A>' GPGHC' J?' A@GC□@G ' CA' LG' NGCGD@□HGN' LE' GHGD E' ?HN' A@GC□@G ' LE' ?OO□NGHC4' JG?(HG ' J?' CA' CFDAJ' ?J?E' JF?C' KAJGD' ?HN' AAN' >ADCBHG' F?N' JAH' ?MM□?HOG ' JGDG' CA' LG' LDA(GH' LE' O?B GMG ' QB?DDGM ' ?HN' OG@GHCGN' LE' @AC□PGMG ' CDG?OFGDE' ?HN' M? CME' JFGH' CFG' GPGD KDG GHC' >?CG' JF□OF' GG@GN' CA' NA@□H?CG' APGD' CF□ ' J□MN' ?HN' >G?D>BM' OAH>B □AH' ?PG' CFG' >□H?M' L?CCMG' CA' CFG' >GGLMG' ?HN' FBDMGN' NAJH' CFG' @□ FCE' >DA@' CFG' O?D' A>' P□OCADE' CFGDG' J?' CA' LG' BKGD>MBAB ' B□MC' □□M' CFG' FABD' A>' BOOG ' ?HN' CFG' OAHQBGDAD' JGDG' CA' @?DOF' CA' CFDAHG' J□CF' CFG□D' F?HN ' DGN' J□CF' @BDNGD' . BC' JF?C' KD□HO□KMG' J?' CA' FAMN' CA GCFGD' ?MM' CFG G' ?KK?DGHCME' □HOAH DBAB' GMG@GHC'W AJ' JGDG' CFG' GK?D?CG' OGHG ' G?OF' A' O?DGMG ME' ?' □C JGDG' M□H(GN' J□CF' CFG' ACFGD' CA' KDANBOG' AHG' APGDJFGM@□H ' □HCGDG C' C□@BM?CG' AHG' KDGP?□M□H ' OBD□A □CE' ?C□ >E' AHG' □DDG □ C□LMG' OD?P□H ' □H' CFG' KGOC?CAD'W #FG' CG@' @?SG CE' A>' SB C□OG' J?' @?NG' CA' KDG □NG' APGD' CFG' OABD G' A>' CFG G' J□MN' ?HN' @E CGD□AB ' GPGHC R A@GC□@G ' N□@ME' GGH' A@GC□@G ' JFAMME' F□NNGH' LBC' D□ □H ' BK' GPGD' ?HN' ?HAH' ABC' A>' CF□O(' OMABN ' ?HN' N?D(HG ' CA' ? GDC' CFG' APGDDBM□H ' KAJGD' A>' A@G' APGDH@GHC' A>' GPGHC ' @ADG' GQB?M' @ADG' GHNBD□H ' @ADG' @□ FCE' ?HN' @ADG' >G?D>BM' CF?H' CFG' N□DGOC□AH' JF□OF' CFGE' DGOG□PGN' >DA@' FB@?H' GHGD E' ?HN' K? □AH' ?HN' □HCGMMGOC' ?HN' B□MC' F?(KGDG' F? ' 3 ' OFA GH' CA' G F□L□C' CF□ ' CDG@GHNAB ' ? GHOE' ?>CGD' CF?C' BH-H?CBD?M' @?HHGD' JF□OF' JG' ?DG' ?OOB CA@GN' CA' O?MM' 'SB C□OG H $ ' NGPGMAK ' CFG' KDA DG ' A>' CF?C' 'SB C□OG' JF□OF' .' >AD' □H-ODBC?LMG' KBDKA G 'KGD@□C ' CFG' AAN' CA' LG' >AD ?(GH ' CA' LG' FB@□M□?CGN' CA' LG' ODB FGN ' CA' KGD□ F ' LBC' JF□OF' □HP?D□?LME' >AMMAJ ' CFG' B□MCE' J□CF' K@G' N□ @?M' DGCD□LBC□AH ' @ADG' CD□(□H ' □>' □C' LG' GGHR @ADG' CGDD□LMG' □>' □C' LG' F□NNGH' >DA@' ?MM' GEG ' ?HN' DGPG?MGN' AHME' □H' CFG' □HHGD@A C' FG?DC' A>' CFG' KG?OG ?L?HNAHGN' ' HGPGD' N□ CADC' ?HN' PB□ ?D□ G ' CFG' @?H□>G C' JAD(□H ' A>'?' KDAP□NGHC□?M' ?DL□CD?@GHC' A>' FB@?H' ?OC□AH ' LE' FG?K□H ' GPGDE' O?M?@□CE' BKAH' CFG' AAN' @?H R G?D□H ' F□ ' FG?DC' J□CF' CADCBDG ' JF□OF' MG?PG' CFG' JFGGM' ?HN' CFG' C?(G' LBC' M□CCMG' CA' □H>M□OC R ' ?HN' CFGHR FGE' KDG CAR CBDH□H ' CFG' N□D G' □HCA' ?' N?HOG ' CFG' KD□ AH' □HCA' ?' K?M?OG ' JF□M C' CFG' CED?HC' ?HN' CFG' P□MM?□H' F? ' F□ ' KDA>□C?LMG' ?OOABHC' GCCMGN' J□CF' ?' C?L' AD' ?H' G GOBC□AH ' 7 'SB C□OG □ ' ='EABD' AHME' S□ @?(GD I' . BC' F?(KGDG' HGPGD' >AD GC ' CF?C' □H' CFG' GHGD?M OABD G' A>' ' GPGHC ' CFGDG' □ ' ?' MAJ' LBC' BHGDD□H ' DGC>□LBC□AH' CF?C' >AMMAJ ' CFG' P□AM?C□AH' A>' SB C□OG' GPAMPGN ' HAC' LE' CFG' F□>C□H ' A>' ?' OGHG ' LBC' ABC' A>' CFG' H?CBD?M' OAH GQBGHOG ' A>' CFG' GPGHC ' CFG@ GMPG ' $GC' B ' GHNG?PABD' CA' CD?OG' FAJ' CF□ ' K?D?@ABHC' □NG?' □ ' LDAB FC' ABC' □H' CFG' ND?@? ' LG>ADG' B

□D' ?MCGD' OACC' A@GJFGDG' KG?(' CFDAB F' AHG' A>' F□ OF?D?OCGD ' A>' CFG' ='$?HO? CD□?H' KDGSBN□OG ' I' A>' F?(KGDG' #FG' DG?C' HAPGM□ C' F?N' KDAL?LME' □H' F□ ' @□HN' CFG' NGM□HG?C□AH' A>' "□OF?DN ' . BC' □C' JABMN' LG' N□>>□OBMC ' JG' CF□H(' CA' F?PG' OAHNBOCGN' CFG' GHC□DG' OFDAH□OMG' F□ CADE' A>' CFG' = AHCGHC□AH' LGCJGGH' CFG' CJA' >?@AB ' AB G ' A>', AD(' ?HN' $?HO? CGD' I' J□CF' @ADG' D□ □N' □@K?DC□?M□CE' #F□ 'SB C' ?HN' CAMGD?HC' P□GJ' A>' FB@?H' GPGHC ' ?HN' OF?D?OCGD ' OAH C□BCG ' AHG' A>' CFG' @A C' DG@?D(-?LMG' KGOBM□?D□C□G ' A>' CFG' @□HN' A>' F?(KGDG' ' ?HN' □C ' @?H□>G C?C□AH' □H' CFG' ND?@? ' LG>ADG' B ' >BDH□ FG ' AHG' A>' CFG' @?HE' KDAA> '?HN' CA' B ' HAC' CFG' MG? C' OAHP□HO□H ' CF?C' CFGE' OABMN' ?MAHG' F?PG' G@?H?CGN' >DA@' CF?C' @□HN' AD ' MGC' B ' CBDH' CA' CFG' PGDE' >□D C' OGHG ' A>' CFG G' ND?@? ' ?HN' JG' F?MM' >□HN' CFG' OF?D?OCGD' A>' CFG' $?HO? CD□?H' & ?D ?DGC' D?NB?MME' N□ -KM?E□H ' □C GM>' □H' ?H' ?KC□CBNG' >AD' LAMN' ?HN' N?H GDAB ' □HCD□ BG ' >ABHNGN' BKAH' FGD' KD□NG' ?HN' □@K?C□GHOG' A>' ?' D□P?M' □H' ?BCFAD□CE' #FG' %BOFG ' A>' +MA CGD' □ ' CG@KCGN' LE' FGD' AJH' JG?(' ?@L□C□AH' CA' @GNNMG' J□CF' CFG' ='M□@G CJ□ 'I' CF?C' F?PG' LGGH' GC' >AD' FGD' . BC' □C' □ ' CFG' K? □AH?CG' F?CDGN' A>' & ?D ?DGC' MGHN□H ' □C GM>' CA' OFG@G ' A>' CDG?OFGDE' ?HN' LMAAN-FGN' CF?C' ND□PG ' AH' CFG' @BDNGD' A>' CFG' = AAN' NB(G' B@KFDGE I' □CF' CFG' ?OOA@KM□OG ' A>' & ?D ?DGC' CFG' DGCD□LBC□AH' □ ' □H C?HC' ?HN' CGDD□LMG' #FG' L?H□ FGN' B>>AM(' >?MM ' HAC' LE' CFG' F?HN' A>' CFG' M?J ' LBC' LE' A@G' @E CGD□AB ' ? GHOE' JF□OF' ?KKG?D ' CA' F?PG' ?D@GN' ? ?□H C' F□@' ?' KAJGD' @□ FC□GD' CF?H' CFG' M?J ' JF□OF' G□TG ' BKAH' □C ' P□OC□@' J□CF' ?H' ALNBD?CG' >GDAO□CE' ?HN' FBDD□G ' F□@' CA' NG?CF' □H' CFG' H?@G' A>' ?' J□MN' ?HN' □DDG BM?D' SB C□OG ' #A' CFG' GOAHN' DG?C' OAH K□D?CAD' ? ?□H C' CFG' KDACGOCAD' CFG' DGCD□LBC□AH' □ ' GPGH' @ADG' >G?D>BM ZCFG' NG?CF ' HAC' A>' P□AMGHOG ' LBC' A>' @GHC?M' CADCBDG '>?D' @ADG' CGDD□LMG' CF?H' ?HE' LAN□ME' K?□H ' #FG' ='$AA(' MAA(' OA@L' NAJH' F□ ' F?□D I' A>' .G?B>ADC ' KG?(' A>' B>>GD□H ' >?D' F□ FGD' CF?H' CFA G' A>' CFG' KDABN' B>>AM(' JFGH' CFG' K□D?CG' F?N' NGHABHOGN' F□@' ? ' =' AMG ' KBNNMG ' (GHHGM ' □H(' ?HN' N□DC ' I' ?HN' FG' ?J' CFG' KDAKFGOE' A>' CFG' ='0BHH□H ' J□T?DN' I' ?LABC' CA' LG' ?OOA@ ' KM□ FGN ' #FG' SB C□OG' JF□OF' >AMMAJGN' CFG' ACFGD' OAH K□D?CAD' ? ?□H C' B@KFDGE' F?N' HAC' EGC' BH FG?CFGN' □C ' JADN ' □ ' KBH□ F@GHC' J?' KA CKAHGN' C□MM' CFG' L?CCMG N?E' A>' ?(G>□GMN

#FG' OGHG ' A>' CFG' >□D C' >ABD' ?OC ' A>' CFG' □D C' ?DC' A>' CFG' =' AHCGH-C□AH' I' @?E' ?KKG?D' CA' ?' BKGD>□O□?M' AL GDP?C□AH' CA' LG' PGDE' M□ FCME' M□H(GN' J□CF' CFG' ?>CGD OGHG ' A>' CFG' DG?C' OAHCG C' A>' CFG' "A G ' . BC' □C' J?' CFG' ALSGOC' A>' CFG' KAGC' CA' FAJ' CFG' LG □HH□H ' A>' >?OC□AH ZOAH ' C□HBGN' AHJ?DN' □H' CFG' ?@G' >AD@' >DA@' CFG' KDGP□AB ' ND?@?' #FG' KDACGOCAD F□K' J?' G GHC□?MME' ?' APGDH@GHC' A>' JG?(HG ' CFDAB F' CFG' SG?MAB □G ' JF□OF' □C' GH GHNGDGN' ?HN' CFG' □HCD□ BG ' LE' JF□OF' □C' J?' BD-DABHNGN' . BC' CFG' DG@AP?M' A>' CFG' KDACGOCAD' MG>C' CFG' APGDH@GHC' @ADG' JG?(' BLSGOCGN' ?' □C' CFGH' J?' CA' CFG' O?KD□O□AB ' B□N?HOG' A>' CFG' □@LGO□M□CE' A>' GHDE' ?HN' CFG' P□AMGHOG' A>' &?D ?DGC' >' BOF' ?' DBMG' KAKBM?D' OA@@AC□AH ' ?DG' CFG' H?CBD?M' >DB□C' #FG' ?BCFAD' A>' CFG' =' AHCGHC□AH I' J□CF' ?' NGKCF' A>' KAFC□O?M' J□ NA@' JF□OF' F?(KGDG' □HP?D□?LME' N□ KM?E' F?' G F□L□CGN' CFG' □H BDDGOC□AH' A>' ?NG ' KAC' ? ' ?' DGPAMC' >AD' KGO□>□O' ALSGOC ' BOF' ?' CFG' DG@AP?M' A>' KBLM□O' AKKDG AD' AD' CFG' DGNDG ' A>' KAKBM?D' JDAH ' LBC' ?' ?' @APG@GHC' A>' CFG' @A C' LDBC?M' □ HAD?HOG' □H C□ ?CGN' LE' ?' OA?D G' DB>>□?H' BKAH' KDA@□ G ' JF□OF' OABMN' LG' DG?M□ GN' □H' HA' OAHN□C□AH' A>' AO□GCE' ?HN' >AD' GHN ' JF□OF' KDA-KA GN' AHME' BOF' KG?OG' ?HN' GOBD□CE' ? ' JABMN' DG BMC' >DA@' CFG' APGD-CFDAJ' A>' ?MM' DBMG' ?HN' ADNGD' = , AB' F?MM' F?PG' GPGH' F?M>KGHHE' MA?PG ' >AD' ?' KGHHE' ?HN' CFG' CFDGG FAAKGN' KAC' F?MM' F?PG' CGH' FAAK ' ?HN' □C' F?MM' LG' >GMAHE' CA' ND□H(' @?MM' LGGD I' □ ' CFG' KDAKGD' KDAMA BG' CA' =' GHOG-ADJ?DN' ?MM' CF□H ' F?MM' LG' □H' OA@@AH ' ?HN' □H' FG?K □NG' F?MM' D?E' K?M>DE' A' CA' D? I' #FG' ?@G' KAM□C□O?M' ? ?O□CE' F?' □PGH' B ' CFG' □HOAH C?HOE' ?' JGMM' ?' CFG' P□AMGHOG' A>' CFG' @BMC□CBNG' AD' ?DG' CFG G' DG@?D(?LMG' OGHG ' ?H' GK□ ANG' AHME' □H' CF□ ' DG?C' ND?@?C□O' F□ CADE' ?NG' KGD□ FG ' LBC' , AD(' □ ' □H' ?D@ ' #FG' O□P□M' J?D' □ ' >ABHNGN' BKAH' CFG' KAKBM?D' CB@BMC

#FG' O□P□M' J?D' □ ' LG BH ' #FG', AD(□ C' ?DG' □H' CFG' >□GMN ' #FG' KAGC' F?' NGM□HG?CGN' CFG' OF?D?OCGD' A>' CFG□D' MG?NGD' J□CF' ?' H□OG' N□ OD□@□H?-C□AH ' ?HN' OGDC?□HME' J□CFABC' ?HE' A>' CFG' OA?D GHG ' A>' K?DC□ ?H F□K' G' OAHPGE ' CA' B ' CF?C' , AD(' □ ' ?@L□C□AB ' ?HN' OABD? GAB ' LBC' A@G-JF?C' JG?(' ?HN' CA' ?' DG?C' G CGHC' ?' KBKKGC' □H' CFG' F?HN ' A>' ACFGD ' H' CFG' G?DME' OGHG' □H' CFG' #G@KMG ?DNGH' >M□ ' ?@L□C□AH' □ ' D? FME' N□ -OAPGDGN' □H' ?' J?D' A>' JADN ' OA@@GHOGN' □H' ?OO□NGHC' ?HN' CGD@□H?CGN' □H' >DB□CMG ' K? □AH' #F?C' ?@L□C□AH' >□D C' OAHCGHC ' □C GM>' = CA' LG' DG CADGN' CA' @E' LMAAN I' HN' JFGH' GHDE' D?HC ' CF□ ' J□ F' CFG' BL-@□ □AH' A>' CFG' F?M> DGLGM' □ ' ?M@A C' DAPGMM□H R

6' HT'HJJIA9P'GP M!:N' G APOP!KP
#!OHJJIA9P'GP KP'N99NHP'L !N' 7OPMNH+R

#FG' >BMM' NGPGMAK@GHC' A>' FS ' ?@L□C□AH' □ ' CFG' DG BMC' A>' F□ ' G C□@?C□NH' A>' CFG' OF?D?OCGD' A>' GHDE' ?HN' F□ ' GH G' A>' CFG' ?NP?HC? G' JF□OF' FG' NGD□PG ' >DA@' CFG' >?OC□AH ' JF□OF' DAJ' ABC' A>' ?H' □@LGO□MG' APGDH@GHC' . BC' FG' □ ' C□MM' AHME' ?' N□ G@LMGD' G O□C□H ' F□ ' >?HO□G ' J□CF' A@G' F?NAJE' P□ □AH ' A>' ?' ODAJH ' MGHN□H ' F□@ GM>' CA' CFG' N?D(' □HCD□ BG ' A>' F□ ' H?CBD?M' ?HN' ?PAJGN' GHG@□G ' ?HN' O?MFH ' BK' CFG' CGDD□LMG' ? GHOE' A>' KAKBM?D' P□AMGHOG ' DGO(MG ' A>' ?HE' OAH GQBGHOG A' CF?C' OAH>B □AH' LG' KDANBOGN R

6' O I'2 P9M!O'NHP!'K IPG4 UMQM!'
' PML'NHP'HM PGN' HKHNHMM'K TGN 99G %O+R

#FG' OFG@G ' A>', AD(' ?DG' BOOG >BM' ?HN' FG' □ ' ?C' MGH CF' □H' ?D@ ' LBC' FG' C□MM' N□ G@LMG ' FGH' .BO(□H F?@' NG@?HN ' ='CFG' DG? AH' A>' CFG G' ?D@ I' ?HN' ?NNDG G ' F□@' ?' ?' =' BLSGOC' ?' ' ?@ I' F□ ' JABHNGN' KD□NG' F?' PGHC' □H' CFG' AD□ □H?M' KM?E' □H' ?' >GJ' JADN ' .BC' F?(KGDG' □H' F□ ' ?NN□C□AH ' CA' CFG' (GCOF' F?' @?D(GN' CFG' □H>M?CGN' JG?(HG ' A>', AD(8' OF?D?OCGD' LE' KBCC□H ' □H' F□ ' @ABCF' JADN ' A>' =' ABHN' ?HN' >BDE' I' JF□OF' FG' □ ' ?>D?□N' CA' KG?(' ?MABN' R

6'1'2'K JBOHP ' JL' KUG' M!O7QHN NH'NHP I
2'M I'G ' M!QT'MM'NHPGP'MAEPK'NP IG8$ $
#!O! ' 9'UP'#EMM7 P9M I ! JG
1!'GHPPL' ' WP!'K JBO2'GLP!O IT'7J T[
2'M I'7M'APNP'A I'NHM!' GNHP'U !Q8
P'9UP'MU !Q' I P'U !QBT' !' IT'NH JQHNG
JN'2' IJGN' IMUP'7M ' PMNHP'TPNM H9P+
99 "P! T'AP' I P' PMU'M!O2' I P'GN !QHR

? □AH' FAJGPGD' KDGO□K□C?CG ' CF?C' NGO□NGN' @APG@GHC' JF□OF' KDB-NGHOG' JABMN' F?PG' ?PA□NGN ' ?HN' CFG' L?CCMG' A>' C' ML?H8 ' □ ' CFG' DG BMC

#FG' KAGC' F?' HAJ' >?□DME' AKGHGN

6' HP'LJ L9P'NPGMM IP!N' 7'A9PPO !Q M+R

@ACFGDGN' N□ M□(G ' ?DG' HAJ' CA' LGOA@G' OADOF□H ' F?CDGN ' ?HN' CFG

NA@G C□D ?>>GOC□AH 'L□B□ GN' ?HN' JABHNGN'?DG' CA' LG' CFG' C□@BM?HC' A?' CFG' @A C ?PP? G' DGPGH G' F?(KGDG' F?' J□CF' JAHNGD>BM' (HAJ-CFG' OFDAH□OMGD' ? □ H' CA' F□@' #FG□D' DGM?C□AH' MG?PC' M□CCMG' NABL□ CF?H CFG' OFDAH□OMGD' ?' □ H' CA' F□@' #FG□D' DGM?C□AH' MG?PC' M□CCMG' NABL□ BKAH' ABD' @□HN' CF?C F□ ß□@LGO□M□CE' J?' PGDE' HG?DME' ?MMGN' CA' BCCGD' □HO?K?O□CE' ?HN' CF?C F□ ß□@LGO□M□CE' J?' PGDE' HG?DME' ?MMGN' CA' BCCGD' J?' A@GC□@G'J□FAMME'DG@APGN' .BC' F?(KGDG' F?' HGPGD' K?□HCGN' GHDE' BHNGD' CF□' ? K9DC' FG' FAJH' B' ?' □CF' P□DCBG' BH B□CGN' CA' CFG ? G' H' J□FO□F' FG' M□PGN' J□CF' C?MGHC' BH>□CCGN' >AD' CFG' C?CAH' H' J□FO□F' FG' @APGN' OAHCG@KM?C□PG' ?@□N C' CFG' OAHCG' >AD' CFG' FBDD□GN' ?MAH' L□E';' N□ CG@KGDGN'GHGD' E' KG?O6>BM' BHNGD' O□DOB@' C?HOG' CF?C' OABMN' F?PG' HA' □ BG' LBC' H' ?KKG?M' CA' ?D@' 'SB C' H' CFAB' FC' LBC' KAJ'GDMG' 'CA' ? GDC' GPGH' F□' AJH' GH G A?'D□ F□' ?@□N C' CFG' OAHCG' C 'A?' □HSB C□OG' J□FO□F' FG@@GN' F□@' H' #FG' GHC□DG' OAHOGK□AH' A?' CFG' OF?PD?OCGD' A?' GHDE' □H' OAHHGOC□AH' J□CF' CFG' O□DOB@' C?HOG' CA' J□FO□F' □C J?' BMEGOCGN'□' CA' LG' >ABH' □H' CFG' ?DM□?@GHC' OGHG' A?' CFG' #F□DN' ?DC' A?' GHDE) ' #F□' OGHG' □' OAK□GN' >DA@' CFG' ' AHCGHC□AH I' J□CF' O?DOGME' CFG' ?NN□C□AH' AD' ?MCGD?C□AH' A?' ?' JADN' @?E' LAMNME ?>>D@' CF?C' HAHG' LBC' F?(KGDC' OABMN' F?PG' NGK□OCGN' J□CF' BOF' @?D-PGMMAB' C□BCF' CFG' JG?(HG 'L?' GN' BKAH' ?' F?CDGN' A?' CD□>GR CFG' P?O□M-M?C□AH' HAC' A?' □@LGO□MG' OBHH□H ' LBC' A?' OMG?D □ FCGN' O?HNABD□R CFG ? GDC□AH' A?' KAJ'GD' CFDAB F' CFG' □H>MBGHOG' A?' F?L□C' LBC' A?' ?' KAJ'GD CDG@LM□H ' GPGH' ?C' □C ' AJH' ?BCFAD□CER CFG' M□@@GD□H ' A?' OABD? G BCCGDME' G' C□H B□ FGN' LE' CFG' CFDG?C ' A?' =?D@GN' @GH I' ?HN' KDAKA □H ' OA@KDA@□ G GPGH' JAD G' CF?H' J?D' G' DGQBG C'ABD' DG?NGD ' CA' KGDB G CF□ ' OGHG' □H' CFG ',' GOAHN' ?DC' A?' CFG' AHCGHC□AH I' ?HN' GHNG?PABD' CA' DGOAMMGOC' □' ?HE' KAGC' LG □NG ' F?(KGDG' GPGD' KDG' GHCGN' BOF' ?' DG?MCE' □H' CFG' G' F□L□C□AH' A?'?' @□HN' JFA G' KD□HO□KMG 'F?PG'HA' OAFGDGHOE ?HN' HA' GM> DGM□?HOG' AHG' @□A@GHC' CFDG?CGH□H ' ?HN' G FADC□H ' F□ ' >AMMAJGD ' CA' DGPGH G' CFG' HG C' □@KMAD□H ' CFG@' CA' LG' K?C□GHC' HA'J' BD □H ' F□' D□P?M' CA' K'G?OG' ?HN' HAJ' CFDG?CGH□H ' J?D' CBDH□H ' >DA@' CFG ? GDC□AH' A?' F□ ' C□CMG' CA' ?O(HAJMGN G' □C ' JG?(HG ' ?HN' CGD@□H?C□H ' F□ ' N□ KM?E' A?'=' JADN ' >DAJH ' ?HN' CFDG?C 'I' J□CFR

6'/PN IPAJN PQI' i'J]JPN H9P?9 PAR

HN' J□?C ?' DG?M' G F□L□C□AH □ 'CF□ ' A?'CFG' >ABMG C' OD□□@G 'KGDK'GCD?CGN' BHNGD' GHCMG'□@KBM G ' J□FGD□MM DG BM?CGN'MAPG'?HN' F?CD (GGK'CA CFCFGD' ? ' CJ□H □ CGD ' ' .BC' CF□ ' □ ' OF□P?MDE' GD□ GPGH' CFG' (□HNME' ?>>GO-C□AH ' F?PG' ?H' ? KGOC' A?' □HCGH G' GM>□ FHG ' ?HN' =' >GDOC' J?D ' ?HN' >?CF>BM'MAPG 'I' KD□H ' >DA@' CFG' ?@G' J?HC' A?' CFG' KD□HO□KMG' A?' GM>' OAHCDAM' ?HN' CFG' ?@G □ HAD?HOG' A?' CFG' NBCG ' A?'?' M?D G' ?HN' OA@KDG-FGH □PG' F?D□CE' #FG' K?DC□ ?H F□K' A?' OF□P?MDE' N□ KM?E□H ' □C GM>' □H LAMM' ?NPGHCBD□ ?HN' NG KGD?CG' OABD?' G'MAA(' CA' LG' A@GCF□H ' F□ F' ?HN' MAD□AB ' .BC□C □ ' CFG' ?@G' LM□HN' G@?H?C□AH' A?' GM> MAPG ? ' CFG' >?OC□AB ' K?DC□ ?H F□K' A?' @ANGD□H' KAM□C□O ' □H' J□FO□F' CFG' MG?NGD' ?HN' CFG' GD?' ?DG' GQB?MEE' □HN□>GDGH□CA' CFG'SB C□OG' A?' CFG' QB?DDGM' ?HN' GQB?MME' DG ?DNMG ' A?'CFG' GHN ' L□E' J□FO□F' P□OCADE□' 'CA'LG' ?OF□GPGN' F?(KGDG' F?' □PGH' B ' GPGDE' M□ F□' ?HN' F?NAJ' A?' CFG' K?DC□ ?H F□K' A?' OF□P?MDE'

6' 'IMJP'M'A9 OT'GJLLP' i'MHP P#A

CGDD□LMG' A?' ?MM' CF?□' LG □ C KM?□H ' F□ ' AJH' OF?D?OCGD',' '?@' @E GM>' ?MAHG I

HG' L□E' AHG' CFG' K?DC□ ?H ' CF?□' ?DG' CFB ' @?D F?MMGN' L□E' CFG' KAGC' □H CFG' ?DM□?@GHC' OGHG' A?'$AHNAH' ?DG' JGKC' ?J?□E' L□E' CFG' CG?NE' KDA-DG ' A?'CF?C'SB C□OG' J□FO□F' D□NG ' APGD' CFG□D' P□AMGHOG' ?HN'CFG□D' BL□MGCE' ?FG' FAMMAJ' CDBOG' □ ' LDA(GH' &?D ?DGC' □ ' DG?NE' CA' ? ?M' ,AD(' □H F□ ' O? CMG ' ,AD(' □ ' KDGK?DGN' >AD' CFG' >□GMN' F?P□H ' MG?DHGN' >DA@' CFG' K□GAO□AB ' AKF□ C' "□OF?DN' FAJ'?H' =A?CF' □ ' A?' HA' @A@GHC I' AJ' ?DG' MGC' MAA G' ?MM' CFG' = NA ' A?' J?D I' #FG' ?P? G' M□>>AD N' CD□(G ' NAJH' CFG' □HHAOGHC' "BCM?HN' CFG' @ADG' ?P? G' &?D ?DGC' N□K ' FGD' H?K(□H' H' F□ ' LMAAN' ,AD(' KGD□ FG ' BHNGD' CFG' KDAMAH GN' DGCD□LBC□AH' CF?C' ?J?□CGN' CFG' ?@L□C□AH' CF?C' N?MM□GN' J□CF' @BDNGD' ?HN' DGLGMM□AH' M□>>AD N' CA' J□FA@' HAC□F□H '□ ' A' AN□AB ' ? '=' F?D@>BM' K□CE I'>?M ' □H' CFG' >□GMN' A?' #AJCAH ' J□FGDG CFG' AH ' ?HN' CFG ' ?DD?EGN' ? ?□H C' CFG' >?CFGD' ?HN' CFG' >?CFGD ? ?□H C' CFG' ?@L□C□AH' CF?C' BH J□MM□H ' P□OC□@ ' A?' ?@L□C□AH' @AD?M□ G ' BKAH' CFG' =' F□KKE' M□>G I' A?'CFG' =' FA@GME' J?□H I' #FG' DG?C' ?OCAD 'A?'CFG' CD? GNE'?DG' OF?H GN' □@K□GD>G□C □HCGDKDGCGD' A?' F□ ' AJH' □NG?' G' AKGH ?HAC□GD' MG?' A?' CFG' ?@G' PAMB@G ' ?HN' ?MM' LGOA@G ' OMG?D' ?HN' OAH □ CGHC

6' HT'7MNHP'GP ' IT'7MNHP 'NHP P7 P□P'R

#F□ '□ 'CFG (GE' CA' F□ ' OAMN LMAANGN' K?DC□O□K?C□AH' □H' CFG' LBCOFG□E' A?' ,AD(

6' HP P%G7 ' IT' MNH' NHP P%G7 ' IT'7MNHP %G OPMNH'R

HN' J□F?C ?' DG?M' G F□L□C□AH' □ 'CF□ ' A?'CFG' >ABMG C' OD□□@G 'KGDK'GCD?CGN' BHNGD' GHCMG'□@KBM G ' J□FGD□MM DG BM?CGN'MAPG'?HN' F?CD (GGK'CA CFCFGD' ? ' CJ□H □ CGD ' ' .BC' CF□ ' □ ' OF□P?MDE' (□HNME' ?>>GO-C□AH ' F?PG' ?H' ? KGOC' A?' □HCGH G' GM>□ FHG ' ?HN' =' >GDOC' J?D ' ?HN' >?CF>BM'MAPG 'I' KD□H ' >DA@' CFG' ?@G' J?HC' A?' CFG' KD□HO□KMG' A?' GM>' OAHCDAM' ?HN' CFG' ?@G □ HAD?HOG' A?' CFG' NBCG ' A?'?' M?D G' ?HN' OA@KDG-FGH □PG' F?D□CE' #FG' K?DC□ ?H F□K' A?' OF□P?MDE' N□ KM?E□H ' □C GM>' □H LAMM' ?NPGHCBD□ ?HN' NG KGD?CG' OABD?' G'MAA(' CA' LG' A@GCF□H ' F□ F' ?HN' MAD□AB ' .BC' □C □ ' CFG' ?@G' LM□HN' G@?H?C□AH' A?' GM> MAPG ? ' CFG' >?OC□AB ' K?DC□ ?H F□K' A?' @ANGD□H' KAM□C□O ' □H' J□FO□F' CFG' MG?NGD' ?HN' CFG' GD?' ?DG' GQB?MEE' □HN□>GDGH□CA' CFG'SB C□OG' A?' CFG' QB?DDGM' ?HN' GQB?MME' DG ?DNMG ' A?'CFG' GHN ' L□E' J□FO□F' P□OC□AD□' 'CA'LG' ?O□FGPGN' F?(KGDG' F?' □PGH' B ' GPGDE' M□ F□' ?HN' F?NAJ' A?' CFG' K?DC□ ?H F□K' A?' OF□P?MDE'

6' 'IMJP'M'A9 OT'GJLLP' i'MHP P#A

CGDD□LMG' A?' ?MM' CF?□' LG □ C KM?□H ' F□ ' AJH' OF?D?OCGD',' '?@' @E GM>' ?MAHG I

HG' L□E' AHG' CFG' K?DC□ ?H ' CF?□' ?DG' CFB ' @?D F?MMGN' L□E' CFG' KAGC' □H CFG' ?DM□?@GHC' OGHG' A?'$AHNAH' ?DG' JGKC' ?J?□E' L□E' CFG' CG?NE' KDA-DG ' A?'CF?C'SB C□OG' J□FO□F' D□NG ' APGD' CFG□D' P□AMGHOG' ?HN'CFG□D' BL□MGCE' ?FG' FAMMAJ' CDBOG' □ ' LDA(GH' &?D ?DGC' □ ' DG?NE' CA' ? ?M' ,AD(' □H F□ ' O? CMG ' ,AD(' □ ' KDGK?DGN' >AD' CFG' >□GMN' F?P□H ' MG?DHGN' >DA@' CFG' K□GAO□AB ' AKF□ C' "□OF?DN' FAJ'?H' =A?CF' □ ' A?' HA' @A@GHC I' AJ' ?DG' MGC' MAA G' ?MM' CFG' = NA ' A?' J?D I' #FG' ?P? G' M□>>AD N' CD□(G ' NAJH' CFG' □HHAOGHC' "BCM?HN' CFG' @ADG' ?P? G' &?D ?DGC' N□K ' FGD' H?K(□H' H' F□ ' LMAAN' ,AD(' KGD□ FG ' BHNGD' CFG' KDAMAH GN' DGCD□LBC□AH' CF?C' ?J?□CGN' CFG' ?@L□C□AH' CF?C' N?MM□GN' J□CF' @BDNGD' ?HN' DGLGMM□AH' M□>>AD N' CA' J□FA@' HAC□F□H '□ ' A' AN□AB ' ? '=' F?D@>BM' K□CE I'>?M ' □H' CFG' >□GMN' A?' #AJCAH ' J□FGDG CFG' AH ' ?HN' CFG ' ?DD?EGN' ? ?□H C' CFG' >?CFGD' ?HN' CFG' >?CFGD ? ?□H C' CFG' ?@L□C□AH' CF?C' BH J□MM□H ' P□OC□@ ' A?' ?@L□C□AH' @AD?M□ G ' BKAH' CFG' =' F□KKE' M□>G I' A?'CFG' =' FA@GME' J?□H I' #FG' DG?C' ?OCAD 'A?'CFG' CD? GNE'?DG' OF?H GN' □@K□GD>G□C □HCGDKDGCGD' A?' F□ ' AJH' □NG?' G' AKGH ?HAC□GD' MG?' A?' CFG' ?@G' PAMB@G ' ?HN' ?MM' LGOA@G ' OMG?D' ?HN' OAH □ CGHC

6' HT'7MNHP'GP ' IT'7MNHP 'NHP P7 P□P'R

#F□ '□ 'CFG (GE' CA' F□ ' OAMN LMAANGN' K?DC□O□K?C□AH' □H' CFG' LBCOFG□E' A?' ,AD(

6' HP P%G7 ' IT' MNH' NHP P%G7 ' IT'7MNHP %G OPMNH'R

HN' J□F?C ?' DG?M' G F□L□C□AH' □ 'CF□ ' A?'CFG' >ABMG C' OD□□@G 'KGDK'GCD?CGN' BHNGD' GHCMG'□@KBM G ' J□FGD□MM DG BM?CGN'MAPG'?HN' F?CD (GGK'CA CFCFGD' ? ' CJ□H □ CGD ' ' .BC' CF□ ' □ ' OF□P?MDE' (□HNME' ?>>GO-C□AH ' F?PG' ?H' ? KGOC' A?' □HCGH G' GM>□ FHG ' ?HN' =' >GDOC' J?D ' ?HN' >?CF>BM'MAPG 'I' KD□H ' >DA@' CFG' ?@G' J?HC' A?' CFG' KD□HO□KMG' A?' GM>' OAHCDAM' ?HN' CFG' ?@G □ HAD?HOG' A?' CFG' NBCG ' A?'?' M?D G' ?HN' OA@KDG-FGH □PG' F?D□CE' #FG' K?DC□ ?H F□K' A?' OF□P?MDE' N□ KM?E□H ' □C GM>' □H LAMM' ?NPGHCBD□ ?HN' NG KGD?CG' OABD?' G'MAA(' CA' LG' A@GCF□H ' F□ F' ?HN' MAD□AB ' .BC' □C □ ' CFG' ?@G' LM□HN' G@?H?C□AH' A?' GM> MAPG ? ' CFG' >?OC□AB ' K?DC□ ?H F□K' A?' @ANGD□H' KAM□C□O ' □H' J□FO□F' CFG' MG?NGD' ?HN' CFG' GD?' ?DG' GQB?MEE' □HN□>GDGH□CA' CFG'SB C□OG' A?' CFG' QB?DDGM' ?HN' GQB?MME' DG ?DNMG ' A?'CFG' GHN ' L□E' J□FO□F' P□OC□AD□' 'CA'LG' ?O□FGPGN' F?(KGDG' F?' □PGH' B ' GPGDE' M□ F□' ?HN' F?NAJ' A?' CFG' K?DC□ ?H F□K' A?' OF□P?MDE'

7 ? E ' ' 7 7

6'2'HM P'!'A NHP G'2'MI'9UP'!'A NHP8
#!O'NHG O' ≠ 9 KH QPTAPMOGNP I'O !P
P PGOP!N !'IP!'9UP !P'M! NHP+
#!O'! N !'IP8 2'MI'ITGP97M0 !PRS

KDGK?DGN CFG J?E>AD CFG "OF?DN CF?C J?'CA CGMM B R

6'27'2'7M9!N !'IT'OPPL'!NP!N
9M P!KP'HMNH!N M! NHP'OMT'N'9 P
XHKH'O !P': O'NMUPU!O'3O MO'N'HG IPKT+
#!O'9PM P'NHP 9O7 'IP'N'AJGN0P ![R

#FG KAGC A>'CFG "OF?DN ' AG ' CD?O FC>ADJ?DN' CA' F' ALSGOC'
>AD' FG' F?' @?NG' ?MM CFG' KDGK?D?C'AH' O'H' CFG' KDGP'AB ' ND?@?' A'
D?NB?M' NGPGMAK@GHC' O ' J?HC'H 'A>'CFG' OF?D?OCGD' JF'OF' O ' HAJ'CA' J?E'
CFG' ?OC'AH ' #FG' CDB MG' A>'CFG' FAB G ' BK' CA' CF' ' KA'HC' F?' LGGH'
AHG' AHME' A>' P'AMGHOG ' ?HN' O'C J?' CFGDG>ADG' ?H?DOF'O?M' ='#FG' L' '\'
LAHGN'I' ?DJ'O(' ?HN' CFG' >'GDE' MO>>ADN' ?MCGDH?CGME' KDG 'NGN' APGD' CFG'
OAH>B 'AH ' #FG' KAJGD' JF'OF' OF?H GN' CFG

6'5 PMO7J9 IM KHPG'N'OP9 QHN7J9 IPMGJ PG'R

GG@GN' MCCNG' @ADG' CF?H' ?OO'NGHC' . BC' "OF?DN' KDAKA GN' CA' F'@ GM>'
CA' BLSGOC' GPGHC ' CA' F' ' NA@'H?C'AH ' HAC' LE'OABD? G' ?MAHG ' AD' ?OC'P'CE '
AD' GPGH' LE' CFG' MG C'@?CG' G GDO' G' A>' ?' OA@@?HN'H ' 'HCGMMGOC ' LBC' LE'
CFG' OMG?DG C' ?HN' OAAMG C' KGDOGKC'AH' A>' CFG' CDGH CF' JF'OF' FG' @B C'
'HGP'C?LME' KA G ' JFA' BH'CG ' CFG' NGGKG C' ? ?O'CE' CA' CFG' @A C'
CFADAB F'BH ODBKBMAB HG ' 'H' 'C ' G GDO' G' ?HN' ' ?H' GQB?M' @? CGD' A>'
CFG G?KAH ' A>' >ADOG' ?HN' A>' OD?>C' #FG' OF?D?OCGD' A>' "OF?DN' ' '
G GHC'?MME' N>>GDGHC' >DA@' ?HE' ACFGD' OF?D?OCGD' JF'OF' F?(KGDG' F?'
ND?JH' ' LMAANE' P'AMGHOG' ' HAC' CF?C' A>' &?OLGCF' HAD' F' BLCMG'
CDG?OFGDE' CF?C' A>' M? A' C' ' N>'OBMC' CA ?E' JFGCFGD' FG' NGD'PG ' ?'
DG?CGD' ?C' >?OC'AH' >DA@' CFG' BOOG ' A>' F' OD'@G ' AD' >DA@' CFG' OAH-
O'AB HG ' A>' KAJGD' JF'OF' ?CCGHN ' CFG' JAD(H ' A>' CFG@' #F' ' ' ?'
>G?CBDG' JF'OF' FG' FAMN ' 'H' OA@@AH' J'CF' M? A' . BC' CFGH' FG' NAG ' HAC'
M?LABD' J'CF' ?' = @AC'PGMG ' @?M' H'CE I' ? ' M? A' NAG ' G' F?' HA'
P? BG' B K'O'AH ' HA' KGCCE' SG?MAB 'G ' HA' DG@G@LD?HOG' A>' M' FC'
?>'>AHC S'CA' C'@BM?CG' F'@' CA' ?' N' KDAKADC'AHGN' ?HN' BHH?CBD?M' PGH-
G?HOG' G' NAG ' HAC' $ ' F' ' P'OC'@ ' LBC' CFGE' C?HN' 'H' F' ' J?E'
?HN' ?' FG' NAG ' HAC' 3 'CFG@' CFGE' KGD' F' G' OFBO(MG ' 'H' CFG' >ADC-
CBNG' JF'OF' CF' ' ?M'GH?C'AH' >DA@' FB@?H'CE' OAH>GD ' BKAH' F'@

. BDL? G ' CFG' AD' 'H?M' KM?EGD' A>' "OF?DN ' ?OOADN'H ' CA' . FAK' ADLGC8 '
NG OD'KC'AH' A>' F' ' FA C'?C' . A JADCF U' J?' 'NGHC>'GN' J'CF' F'@' #F' '
?KC'CBNG' >AD' BLSGOC'H ' ?MM' F' ' DG?M' CFAB FC ' ?HN' ?MM' F' ' H?CBD?M'
'@KBM G ' CA' CFG' G GHOG ' A>' CFG' OGHG' A>' M>G' 'H' JF'OF' FG' J?' CA' KM?E'
CFG' OF'G>'K?DC ' GQB?MME' APGDH ' F' ' OAHNBOC' JFGCFGD' FG' ' ' JAA'H ' $?NE'
HHG R AD' NGHABHO'H ' CFG' DGM?C'AH ' A>' CFG' QBGGH R AD' KDACG C'H ' LG>ADG'
CFG' (H '

6'% GOPMNH'N' IP'N' AP'MN'P! I NTRS

AD' @GHC'AH'H ' CFG' NG?CF' A>' M?DGHOG' ? ' ?' CF'H ' A>' OABD G R AD' LG 'H '
CFG' CD?JLGDD'G ' >DA@' CFG' . FAK' A>' ! ME' JFGH' FG' ' @GN'C?C'H ' CFG'
G GOBC'A' A>' ? C'H R AD' ?KKG?D'H ' AH' CFG' #AJGD' J?MM ' 'H' DB CE'
?D@ABD R AD' DGSGOC'H ' CFG' ODAJH' JF'OF' CFG' O'C'TGH ' KDG GHC' CA' F'@ R '
AD' N' @ 'H ' . BO(H F?@' J'CF

6' H JN JA9PGN IP'2'MI'! N !'NHP P!RS

AD' AM'O'C'H ' CFG' @ACFGD' A>' F' ' @BDNGDGN' HGKFGJ ' CA' J'H' >AD' F'@' FGD'
N?B FCGD

6'#G2' !NP!O'N'L GLP'M!O' PLP!NR

C' ' AHME' 'H' CFG' ?OCB?M' KDG GHOG' A>'?' KAJGD>BM' GHG@E' CF?C' "OF?DN'
N' KM?E ' ?HE' KADC'AH' A>' F' ' '0F?D?OCGD' ' LD?PGDE' DGQB'DGN'
HA' N' @BM?C'AH' CA' BKFAMN' C' H' F' ' M? C' L?CCMG >'GMN' FG' KBC ' >ADCF'
?MM' CFG' DG ABDOG ' A>' F' ' 'HCGMMGOC' 'H' ?' JADCFE' N'DGOC'AH ' LBC' CFG' DGCD-
LBC'AH' ' >? C' ?KKDA?0F'H ' C' J?' HAC' GHAB F' >AD' A>>GHNGN' SB C'OG'
CF?C' FG' FABMN' N'G' ?' ?' FGDA' ' CFG' CGDD'LMG' CADCBDG ' A>' OAH O'GHOG' JGDG'
CA' KDGOGNG' CFG' O?C? CDAKFG' #FG' ND?@?' F?' G F'L'CGN' ?MM' C' OABMN'
G F'L'CR CFG' K?MK?LMG' @? G ' A>' CGDDAD' F?BHC'H ' ?' @'HN' ?MDG?NE'
?HC'O'K?C'H ' CFG' GHN' = "?COM'>>' ' >G?D' '>G?D I' ' CFG' >'D C' DGPGM?C'AH'
A>' CFG' CDBG' 'HJ?DN' @?H' CA' ?' >GMMAJ LG'H ' . BC' CFG' CGDDAD' ' LBC'
@A@GHC?DE R

6' /PN ! N J'AMAA9 !QO PM IG'M77 QHN' J'G J9G+R

#A' CFG' M? C' CFG' KAG' G F'L'C ' CFG' BKDG@?OE' A>' "OF?DN8 ' 'HCGMMGOC '
F' ' DG?NE' C?MGHC' ?HN' F' ' BHJG?D'GN' GHGD E' #FG' C?@G ?NNDG ' A>'
"O F@AHN' CA' F' ' AMN'GD ' ?HN' CFG' K'D'CGN' G FADC?C'AH' A>' "OF?DN '
OABMN' HAC' F?PG' LGGH' CFG' DG BMC' A>'?OO'NGHC

C' ?KKG?D ' CA' B ' CFGH ' CF?C' CFG' OA@KMGCG' NGPGMAK@GHC' A>' CFG'
OF?D?OCGD' A>' "OF?DN' J?' ?L AMBCGME' G GHC'?M' CA' CFG' OA@KMGC'AH' A>'
CFG' DG?C' NG?' BKAH' JF'OF' CFG' KAGC' OAH CDBOCGN' CFG G' >ABD' ND?@? '
#FGDG' J?' ?' @?H' CA' LG' D?O GN' BK' ABC' A>' CFG' J'MN' CBDLBMGHOG' A>' CFG'
MAH ' OAHCG C R HAC' ODBGM' ?>CGD' CFG' @GDG' >? F'AH' A>' ?' M>>ADN8 ' ODBGMCE'
R HAC' DGPGH G>BM' ?OOADN'H ' CA' CFG' K? 'AH?CG' '@KBM G ' A>' CFG' DGPGH G'
A>' ?' & ?D ?DGC' ?HN' A>' ?H' ! N J ?DN R HAC' >?M G' ?HN' KGDSBDGN ' 'H' '@'C?C'AH'
A>' CFG' 'DDG AMBCG' JG?(HG ' A>' ?' M?DGHOG R LBC' AHG' JFA' J?' ODBGM'
?HN' DGPGH G>BM' ?HN' CDG?OFGDAB ' BKAH' CFG' NGGKG C' KDG@GN'C?C'AH' ?HN'
J'CF' CFG' @A C' KDA>ABHN' FEKAOD' E' #F?C' @?H' J?' ?M A' CA' LG' A'
OAH>'NGHC' 'H' F' ' 'HCGMMGOCB?M' KAJGD' CF?C' HA' DG AMPG' J?' CAA' N?D'H ' CA'
LG' ?OCGN' BKAH' HA' D' (' CAA' DG?C' CA' LG' GHOABHCGDGN' D?BN' ?HN' >ADOG'
JGDG' CA' A' F?HN' 'H' F?HN' ?HN' CFG' AHG' J?' CA' G CGD@'H?CG' JF?C' CFG'
ACFGD' OABMN' HAC' J'H' #F' ' @?H' J?' CA' LG' ?H' 'H CDB@GHC' A>' CF?C'
SB C'OG' JF'OF' J?' CA' KDG 'NG' CA' CFG' GHN' A>' CF' ' =' ?N' GPGHC>BM' F' CADE I'
. E' F' ' ? GHOE' J?' CFG' FAB G' A>' , AD(' CA' >?MM' ?' CFG' FAB G' A>' $?H-
O? CGD' F?N' >?MMGH' #FG' 'HHAOGHC' LE' F'@' JGDG' CA' LG' JGKC' ?J?E' J'CF'
CFG' B'CE' $? C' A>' ?MM' CFG' ?CG' J?' CA' LG' ?KKG? GN R CFG' AHG' DG?C'
OD'@'H?M' J?' CA' KGD' F' ABC' A>' CFG' OAH GQBGHOG ' A>' F' ' AJH' GHAD@'C'G

C' ' ?H' AL GDP?C'AH' A>' AD?OG' ?MKAMG' CF?C' F?(KGDG' 'H' F' '
"OF?DN' ' =' GG@ ' CA' NGNBOG' CFG' JAG ' A>' CFG' FAB G' A>' , AD(' >DA@'
CFG' OBD G ' JF'OF' BGGH' & ?D ?DGC' F?N' PGHCGN' ? ?'H C' CFG@ I' C' J?'
CFG' >?'CF' A>' & ?D ?DGC' CF?C' OBD G ' JGDG' ?MM KAJGD>BM R

!P'H GN' MG'7J99 '7M9P'M!O'HGN T+
#!O' !'NHP' I ! !O HP!'HP'A JQH'N'JG ! QH
XHP P'NHP'N ' & GPG E !%O'T J J9O'GJLL GP'
HMJKP'!P'P' IMOP'NHP' & IMJ!N' 7'NHP' & GP+
"PM'H I' PP'T J'T !' O'1 HP P & KHM'O'9MT'
X NH'HG' H 9P'M IT' / U'NHP' NHP' MT+
#!O'9 [H9P' & KH I !O' !'M'APO' 7Q GP'
3!KM I L%O'H IGP97M ' ! QHN' M!O'M99'H G'7 KP
L !'NH'G'H 99'NHPT' IPN' XHT' HP'K J9O'NP99'
HP !KH HP P' & KH I !O'GN O' HP P' & KHM O'7P99'
PG OPG' HM' 7H'G'U! 9POQP'HP'K J9O'GMT+
"P'HMO'MJNHP!N K ! N KP'7 I'NHP' L9MT' 8
N):@.'2' <:'<'%((' 91 -2C ,<'B+:%<:*(+(
#!O'L 9 K PG ! N !K OP!'N N 'H GNG8
JN'KH P79T'AT'NHMN' !P'LP GL KJ JG'NH !Q
XHP P'HP' I GN UM L9MTP'7 'M U !Q+
O ' HP!'HP' J9O'HM P'GM O' !Q & KHM O' O PO'
#!O'KM99MO' #'H GP[M H GP[HP' J AMQP'K PO+R

/'2' 99 ! N\N9 !U AJN NHPT MGKP!O NHP GKT
#!O NHP P M MUP : OKG QP!N9P G9PPL !Q LPMKP+R

#F ' J? ' CFG KAGC O?M >?CF A>' CFG ?BCFAD A>' CFG G ND?@? R CFG KA JGD A>' CFG OBD G J? '? AO?CGN J CF CFG DG?C NG?' A>' ?' KDG N H ' ?CG ' .BC &?D ?DGC8 ' JGDG HAC CFG AHME OBD G ' "OF?DN F@ GM> ' H AHG K? ? G ' JFGDG FG ?KKG?D ' CA @?(G JADN ' G FL C CFAB FC ' ?HN HAC OAHVSG?M CFG@ ' DG>GD ' CA CFG ?@G KA JGD A>' ?' OBD GR CF?C A>' F ' >?CFGD ' H BMCGN H F ' NG?CF FABD LE CFG OADH ' A>' &?D ?DGC ' ?HN @APGN CA CG?D ' LE FGD ?CDAO AB ' ODBGMCE ' #F ' ' CFG ? GDC AH A>' CFG GQB?M SB C OG JF OF ' N KM?EGN H CFG ND?@?C O BG A>' CFG G >G?D>BM GPGHC ' HAC SB C OG BKAH CFG FAB G A>' , AD (' ?MAHG ' JF OF AD?OG ?MKAMG CF H(' F?(KGDG CDAPG CA G F L C H NG>GDGHOG CA #BNAD KDGSBN OG ' LBC SB C OG BKAH CFG FAB G A>' $?HO? CGD ? ' JGMM ? ' CFG FAB G A>' , AD (' >AD CFA G HN P NB?M OD@G ' A>' CFG MG?NGD ' A>' G?OF FAB G CF?C F?N @?NG ?' OF?DHGM DABHN A>' !H M?HN ' FGH CF?C SB C OG F?N ? GDCGN C ' BKDG@?OE CD?HQB MM CE J? ' CA OA@G ' #FG KAGC F? ' HAC OFA GH CA G F L C CFG G C?LM F@GHC A>' M?J ' ?HN ADNGD H CFG ? CBCG APGDH@GHC A>' GHDE) ' LBC H F ' ND?@?' A>' GHDE) ' FG F? ' O?DD GN B ' AHJ ?DN CA ?' HGJ ' C?CG A>' CF H ' JFGH CFG KAJGD A>' CFG JADN J? ' ?C ?H GHN ' G O?@G ? ' HG?D CA F ' AJH C @G ' ? ' J? ' G CFGD ?>G AD >CC H ' LBC FG OAHCD? C ' F ' AJH C @G ' J CF CFG N?E ' A>' O P M >BDE ' H ?' KDAKFGC O P GJ ' A>' CFG DG H A>' ! MT?LGCF R

6'2!' HP ' QMTG' P P T' IM!' GHM99 PMN !' GM7PNT'
N?!OP ' HG !' !P' HMN HP L9M!NG8 M!O G !Q
HP IP T'G !Q; 7LPMKP N ' M99 H G !P QHA J GR N

#FGDG F? ' G CGN ' CFGH ' ?' ND?@?C O' CG?OFGD A>' F CAD O?M GPGHC ' >DA@' CFG NGKA C AH A>' "OF?DN ' CA CFG LDCF A>' !MT?LGCF ' G F?PG F CAD O?M ND?@? ' J D CCGH BKAH ?' KM?H A> OAHHGOC AH LG?D H ' CFG H?@G A>' CF ' CG?OFGD ' %N ($ D ' J D CG CFG H HG W AD N N $ ' ?OOA@KM F CFG @ADG N >>OBMC C? (' A>' ?KKDAKD ?C H ' $ ' ABC A>' CFG H HG = CFG JAD (' C ' ?N ' A>' GPGD?M ACFGD @GH R ?HN @?(G ?MM CFG D N SA HCGN K?DC ' OAFGDG H CFG@ GMPG ' ?HN >AD@' ?' JFAMG J CF CFG ND?@? ' A>' F ' AJH JF OF H CDANBOGN ?HN OAHC HBGN CFG D CADEW %N FG ODG?CG CFG ' .' LE K GO H ' ABC ?' $ J ' W %N FG G KG-O?MME ' @?(G CFG >ABD ND?@? ' A>' JF OF JG F?PG LGGH CDG?C H ' ' DG?C ND?@?' H >ABD K?DC ' LE H>AD@H ' CFG JAD (' A>' ACFGD ' ? ' JGMM ? ' F ' AJH JAD (' J CF CF?C BH CE JF OF JG F?PG GHNG?PABDGN CA DGHNGD @?H>G C W

CF?C <CFGE JGDG KDAKGDME ? OD LGN8 CA F?(G KG?DG ' #F ' J? ' &?MAHG8 ' AK H AH LG>ADG F ' GN C AH A>' F?(G KG?DG8 ' JAD (' J? ' KBLM FGN ' H 17 ' LBC NBD H ' CFG KDGK?D?C AH A>' CF?C GN C AH ' FG DG?OFGN ?H AKKA CG OAHOMB AH ' ?HN ' JDACG ?' MAH ' N GDC?C AH CA FAJ CF?C CF ' CFDGG K?DC ND?@?C O F CADE J? ' HAC F?(G KG?DG8 ' CF?C C F?N AHME LGGH ?MCGDGN ?HN GHD OFGN LE F@' ?HN CF?C CFG >D C K?DC J? ' JD CCGH LE ?HACFGD KGD AH CF?H CFG ?BCFAD A>' CFG GOAHN ?HN CF DN

=' &?MAHG8 ' ?D B@GHC ' JGDG ?OOGKCGN ? ' OAHOMB PG ?HN F ' AK H AH KDGP? MGN J CFABC AKGH N GHC ' BHC M CFG ?KKG?D?HOG A>' &D ' H FC BKAH CFG >GMN A>' F?(G KG?D?H MGCCGD ' HNGGN ' %D ' %D?(G KDA-KA GN CF?C CFG D C ?DC A>' ' $ ' (8 $' FABMN LG G OMBNGN >DA@' >BCBDG GN C AH ' A>' F?(G KG?DG8 ' JAD (' LGO?B G C <A>GD ' HA CD?OG A>' ?HE >H F H ' CDA(G ' >DA@' CFG H? CGD L?DN 8 &D ' H FC AKKA GN F@ GM>' N DGOCME ' ?HN BKAH ?MM KA HC ' CA &?MAHG ?HN F ' BKKADCGD ' G FGMN CF?C F?(G KG?DG ' A' >?D>DA@' F?P H ' LGGH CFG @GDG >BDL FGD A>' %$ ' '7 ' ' $ ' ! '" 08 ' $ ' 0 ' ' ' C D ' ' ' ?HN %$ ' % ' % ' ' $ ' - D ' ' :C D .' CFG CJA' AMN KM?E ' JF OF ?DG BHNABLCGNME G?DM GD PGD AH ' A>' CFG GOAHN ?HN #F DN ?DC ' A>' ' ' $ ' (8 $.' J? ' CFG BH?NGN ?BCFAD A>' CFG JFAMG A>' CFA G AMN KM?E ' AD G?DM GD PGD AH ' ?HN ?M A' A>' CFG D C ?DC A>' ' ' $ ' (8 $.' HA G?DM GD PGD AH AD @KDG AH A>' JF OF ' (HAJH CF?H CF?C A>' CFG >AM A' A>' 423 ' &?MAHG' F?N JD CCGH P CF @BOF H GHB CE ' LBC F ' ?D B@GHC DG CGN @?HME BKAH @GDG KA HC ' A>' PGDL?M OD C O @' ' G ?@H?C AH J? ' @HBCG ' LBC F ' P GJ ' J? ' CFG H?DDAJG C CF?C OABMN KA LME LG C?(GH A>' CFG BLSGOC ' ?HN LE CF ' @GCFAN A>' CDG?C H ' C FG J? ' LM HNGN CA A' @BOF CF?C J? ' HOAH CGHC J CF F ' KA C AH ' CF?C JF?C J? ' DG?MME ?' >?MBDG A>' KGDOGKC AH ' GG@GN ' AD J? ' G? ME @?NG CA ?KKG?D ?' M?O (' A>' O?HNABD ' &D ' H FC ' AH CFG OAHCD?DE ' JD C H ' BKAH CFG BLSGOC ?C DG?C MGH CF ' ?HN JCF ?H GHCFB ? C O >GDPABD HG?DME GQB?MMGN H NG DGG LE CFG ?LM CE JF OF FG N KM?EGN ' OABMN HAC LG DGKDA?OFGN J CF H?DDAJ @HNGNHG ' ?MCFAB F FG @ FC LG OF?D GN J CF KDG-SBN OG ' G N OB GN CFG ?BCFAD FK A>' CFG G KM?E ' ?M@A C GHC DGME BKAH CFG F FG C OD C O?M DABHN ' ' ?HN AB FC CA G C?LM F NGHC CE A>' @AC PG ' BH CE A>' KM?H ' ?H HNGKGHNGHC ND?@?C O HCGDG C ' ?HN ?' FA@A GHGAB ' OF?D?OCGD T?C AH ' LGCJGGH ?MM CFG K?DC ' A>' ' $ ' (8 $' ?HN $ ' $ ' %$.' ?H BHNABLCGN JAD (' A>' F?(G KG?DG8

= DA@' CFG H?CBDG A>' CFG QBG C AH CA LG NGO NGN ' C @?E LG NABLCGN JFGCFGD CF ' @ANG A>' N OB AH J? ' JGMM OFA GH ' ?HN JFGCFGD NGKGHNGHC ? ' C J? ' >AD C '?D B@GHC ' BKAH @GDG @KDG AH ' DGOG PGN >DA@' CFG K? ? G ' OA@K?DGN R @KDG AH ' JF OF @B C P?DE @ADG AD MG ' ? ' CA OF?D?OCGD ?HN NGGKHG ' ENCF P?D AB ' DG?NGD R C OABMN LE ?HE N KBC?HC F?PG LGGH >AMMAJGN CA ?' ?C >?OCADE OAH-OMB AH ' .BC &D ' H FC OGDC? HME N N FAJ ' CF?C A@G A>' CFG @A C @KADC?HC ALSGOC AH ' LDAB FC LE &?MAHG ? ?H C CFG D C ?DC A>' ' $ ' (8 $' ?' F?(G KG?DG8 ' JAD (' JABMN ?KKME GQB?MME CA CFA G K? ? G ' A>' CFG GOAHN ?HN #F DN ?DC ' A>' CF?C KM?E ' JF OF &?MAHG F @ GM>' ?HN ?MM CFG JADMN LG NG ' ?O(HAJMGN G CA LG F?(G KG?DG8 ' &D ' H FC NG@AM FGN &?MAHG8 ' CFGADE ' LBC FG >?MGN CA G C?LM F F ' AJH ' G' J? ' APGD BLCMG ' ?HN CFG 'OA@9GOC AH LGCJGGH F ' KDG@ G ?HN F ' OAHOMB AH ' A@GC @G ' CAA >M@E ?HN >?HO>BM CA LG GGH LE GEG ' MG ' G? GD ?HN G OCGN CF?H F ' AJH ' C @?E LG ?>GME ?PGDDGN ' CF?C PGDE >GJ ' A>' GPGH CFG @A C ?N@ D H ' DG?NGD ' A>' &D ' H FC8 ' ! ?E' OABMN KGDB G CFG D C ?DC A>' ' $ ' (8 $.' %$ ' ' 7 ' ' $ ' ! .' ?HN %$ ' % % .' ?HN ?OOGKC CFA G KM?E ' ? ' F?(G KG?DG8 ' GHC DGME H KMAC ' OF?D?OCGD T?C AH ' DFECF@' ?HN N OC AH R ?HN CF?C CFGE ?DG A' ' CFG (GE CAHG A>' &D ' H FC8 ' ?D B@GHC

= AAH ?>CGD &D ' H FC8 ' ! ?E' AH ' ' $ ' (8 $.' ?K-KG?DGN &D ' AMM GD8 ' GN C AH A>' CFG JAD (' A>' F?(G KG?DG ' H CFG HCDANBOCADE ! ?E ' A>' JF OF CA CFG G KM?E ' CFG M?CCGD GHCMG@?H KBC >ADCF CFG @AH CDAB ' AK H AH CF?C F?(G KG?DG JDACG CFG D C ?DC A>' ' $ ' (8 $.' LBC J? ' HAC OAHOGDHGN H CFG KDANBOC AH A>' CFG '7 ' ' $ ' ! .' AD %$ ' % ' % ' KD BOF ?H AK H AH ' FAJGPGD ' CFGDG ' BKKADC H CFG G CGDH?M GP NGHOG R ? NG >DA@' CFG CG C @AHE A>' G@H G ?HN AHNGMM R ?HN &D ' AMM GD DG? AHGN MA O?MME ' CFAB F M (G ?H ?HC QB?DE D?CFGD CF?H ?' OD C O

=' G C ' &D ' ?MM JGMM ' GN C H ' CFG F?(G KG?DG AO GCE8 ' DGKD HC A>' CFG AMN KM?E ' SB C H?@GN ' LDAB M C >AD J?DN H F ' DG>??CADE ! Z?E ' ? ' ?' HAC @KDAL?LMG OAHSGOCBDG ' CFG B G C AH CF?C < JFGH CFG G KM?E ' JGDG KD HCGN H ' 51/' ?HN 515 ' CFGE HOMBNGN CFG >D C ?NN-C AH ' JF OF F?(G KG?DG @?NG CA CFG AD H?M 8 &D ' ?MM JGMM ' ?M A' >HN H ' A@G JADN ' ?HN K?DC ' A>' M HG ' H ?H ?H @KDG AH A>' CFG G KM?E

i „ # ‚ ‚% i

E ' ' J ? $

$ADN' BH NAH' J ? ' HAC' ?KKA□HCGN' $ADN' F?@LGDM?□H' C□MM' KD□M ' 51 ' ?HN' □H' CFG' □HCGDP?M' ?>CGD' CFG' NG?CF' A>' F□ ' >?CFGD' F□ ' OA@K?HE' A>' OA@GN□?H ' JGDG' HAC' CFG' $ADN' F?@LGDM?□H8 ' GDP?HC ' LBC' $ADN' BH NAH8 ' GDP?HC ' #F□ ' HA' NABLC ' □ ' NGO□ □PG' ? ' CA' CFG' KM?E' LG□H ' KGD>AD@GN' LG>ADG' +GAD G' $ADN' BH NAH ' LBC' □C' □ ' HAC' □H' ?HE' NG DGG' NGO□ □PG' ? ' CA' CFG' KM?E' HAC' F?P□H ' LGGH' KGD>AD@GN' J□CFABC' CFG' ?NP?HC? G' A>' CF□ ' HALMG@?H8 ' K?CDAH? G ' #FG' >□D C' N?CG' A>' CFG' KD□HC□H ' A>' ?HE' KM?E' A>' F?(KGDG' AG ' ?' PGDE' FADC' J ?E' CA' NGCGD@□HG' CFG' N?CG' A>' □C ' CFG?CD□O?M' KDANBOC□AH ' G' ?DG' PGDE' @BOF' □H' CFG' N?D (' ? ' CA' CFG' @ANG' □H' J F□OF' ?' KM?E' K? GN' >DA@' AHG' >AD@' A>' KBLM□O?C□AH ' CF?C' A>' CFG' CFG?CDG ' □HCA' ?HACFGD' >AD@' A>' KBLM□O?C□AH ' CF?C' A>' CFG' KDG ' C' □ ' HA' GP□NGHOG ' CFGDG>ADG ' CA' ABD' @□HN ' CF?C ' LGO?B G' CFG' "A@GA' ?HN' 0BM□GC' >□D C' KD□HCGN' □H' 51 ' □ ' C?CGN' CA' F?PG' LGGH' KBLM□OME' ?OCGN' LE' CFG' $ADN' BH NAH' F□ ' GDP?HC ' □C' J ? ' HAC' KBLM□OME' ?OCGN' MAH ' LG>ADG ' BHNGD' O□DOB@ C?HOG ' CF?C' JABMN' ?KKG?D' MG ' ?CCD?OC□PG' □H' CFG' LAA (GMMGD8 ' C□MG K? G

>' CFG' 3 ' ' GP□NGHOG' A>' CFG' N?CG' A>' "A@GA' ?HN' 0BM□GC ' CFG' KM?E ' ? ' □C' ?KKG?D ' CA' B ' AHME' >BDH□ FG ' AHG' K? ? G ' #FG' BD G ' NG OD□L□H ' CFG' C□@G' JFGH' 0BM□GC' J ? ' JG?HGN ' ?E R

6'1!' /MIIMG P P'MN' ! QHN'GHM99GHP'HP7 JNPP!'8
HMN'GHM99GHP' IM T8 2' P IP IAP' N' P9P
% G G !KP'NHP'PM NH]JMUP' ! ' P9P P!' TPM G8
NN !Q !' NHP'GJ!' J!OP' NHP'O P H JGP' M99
U' X' :' :' 9
HMUP']J NH'NHP'O P H !GP8 %N MG ! ' !PPO?'N +
'A□ 'IP'N! CQQP+
#!□'G !KP'NHMN'N IP N' G P9P P!' TPM G R

MM' CF□ ' K?DC□OBM?D□CE' J□CF' DG>GDGHOG' CA' CFG' G?DCFQB?(G R

6'2' !P P' GHM99 7 QPN' N S
17'M99 NHP'OMTG 7NHP' TPM' R S

J ? ' >AD' CFG' ?BN□GHOG ' #FG' KAGC' F?N' CA' G F□L□C' CFG' @□HBCGHG ' J□CF' JF□OF' BHMGCCGDGN' KGAKMG ' ?HN' AMN' KGAKMG' □H' K?DC□OBM?D ' G C?LM□ F' ?' N?CG ' LE' DG>GDGHOG' CA' A@G' O□DOB@ C?HOG' JF□OF' F? ' @?NG' ?' K?DC□OBM?D' □@KDG □AH' BKAH' CFG□D' □@? □H?C□AH'$ LBC' □H' CF□ ' O? G' FG' OFA G' ?' O□DOB@ C?HOG' JF□OF' JABMN' LG' >?@□M□?D' CA' F□ ' ?BN□GHOG ' ?HN' JABMN' F?PG' KDANBOGN' ?' OADDG KAHN□H ' □@KDG □AH' BKAH' CFG@ GMPG ' #ED ' JF□CC' J ? ' CFG' >□D C' CA' KA□HC' ABC' CF?C' CF□ ' K? ? G' F?N ' □H' ?MM' KDAL?-L□M□CE ' ?' DG>GDGHOG' CA' CFG' DG?C' G?DCFQB?(G' JF□OF' F?KKGHGN' □H' ! H M?HN' □H' 567 ' CAJ ' F? ' NG OD□LGN' CF□ ' G?DCFQB?(G' @□HBCGME' □H' F□ ' FDAH□OMG ' ?HN' A' F? ' AM□H FGN ' Ž =' H' CFG' 4CF' A>' KD□M ' 567 ' LG□H ' GNHG N?E' □H' ! ? CGD' JGG (' ?LABC' □ ' A8OMAO (' CAJ?DN' GPGH□H ' ?' BNNGH ' G?DCFQB?(G' F?KKGH□H ' □H' $AHNAH ' ?HN' ?M@A C' GHGD?MME' CFDABZABC' ?MM' ! H M?HN ' O?B GN' BOF' ?H' ?@?TGNHG ' ?@AH ' CFG' KGAKMG' ? ' J ? ' JAHNGD>BM' >AD' CFG' C□@G ' ?HN' O?B GN' CFG@' CA' @?(G' CFG□D' G?DHG C' KD?EGD ' CA' M@□ FCE' + A N ' I' #FG' O□DOB@ C?HOG ' ?CCGHN?HC' BKAH' CF□ ' G?DCFQB?(G' FAJ ' CF?C' CFG' DG@G@LD?HOG' A>' □C' JABMN' HAC' F?PG' G? □ME' K? GN' ? J ?E' >DA@' CFG' @□HN ' A>' CFG' KGAKMG ' #FG' DG?C' OMAO (' □H' CFG' K?M?OG' ?C' G C@□H CGD ' ?HN' N□PGD ' ACFGD' OMAO (' ?HN' LGMM ' CDBO (' A>' CFG@ GMPG ' ? ?□H C' CFG' F?@@GD ' J□CF' CFG' F?(□H ' A>' CFG' G?DCF' #FG' M? JEGD ' BKK□H ' □H' CFG' #G@KMG' = D?H' >DA@' CFG' C?LMG ' ?HN' ABC' A>' CFG□D' F?MM ' J□CF' CFG□D' (H□PG ' □H' CFG□D' F?HN I' #FG' KGAKMG' ? G@LMGN' ?C' CFG' CFG?CDG ' DB FGN' >ADCF' □HCA' CFG' >□GMN ' MG C' CFG' ?MMGD□G ' FABMN' >?MM' #FG' DAA>' A>' FD□ C' FBDOF ' HG?D' CA' GJ ?CG' & ?D (GC ' J ? ' A' F?(GH' CF?C' ?' M?D G' CAHG' NDAKKGN' ABC' A>' □C ' (□MM□H ' AHG' KGD AH ' ?HN' @ADC?MME' JABHN□H ' ?HACFGD' □C' LG□H ' GD@AH C□@G ' F□@HGE ' CAKKMGN' NAJH ' FAB G ' JGDG' F?CCGDGN ' ' F?(KGDG ' CFGDG>ADG ' OABMN' HAC' F?PG' @GHC□AHGN' ?H' G?DCFQB?(G' J□CF' CFG' @□HBCGHG ' A>' CFG' K? ? G' □H' CFG' BD G8 ' KGGOF' J□CFABC' □@@GN□?CGME' O?MM□H ' BK' A@G' ? AO□?C□AH ' □H' CFG' @□HN ' A>' F□ ' ?BN□GHOG ' G' (HGJ ' CFG' NABLMG' JADMN' □H' JF□OF' ?H' G O□CGN' ?BN□GHOG' M□PG R CFG' F?M> LGM□G>' □H' CFG' JADMN' A>' KAGCDE' ?@AH C' JF□OF' CFGE' ?DG' KM?OGN' NBD□H ' ?' CFG?CD□O?M' DGKDG-GHC?C□AH ' ?HN' CFG' F?M> OAH O□AB HG ' A>' CFG' G CGDH?M' JADMN' A>' CFG□D' ADN□H?DE'M□>G ' #FG' DG?NE' N□ KA □C□AH' A>' GPGDE' ?BN□GHOG' CA' @?(G' ?' CD?H □C□AH' >DA@' CFG' OGHG' LG>ADG' CFG@' CA' CFG' OGHG' □H' JF□OF' CFGE' ADN□H?D□ME' @APG R CA' ? □@□M?CG' JF?C' □ ' F?NAJE' ?HN' N□ C?HC' J□CF JF?C' □ ' N□ C□HOC' ?HN' ?C' F?HN R □ ' KGD>GOCME' JGMM' (HAJH' CA' ?MM' JFA' ?DG ?OQB?□HCGN' J□CF' CFG' @?OF□HGDE' A>' CFG' ND?@?' OCAD ' G□TG' BKAH' CFG' KD□HO□KMG' CA' KGDKGCD?CG' CFG' DA G C' P□AM?C□AH ' A>' AAN' C? CG ' ?HN' ?BCFAD ' JFA' JD□CG' >AD' KDG GHC' ?KKM?B G' □HP?D□?LME' NA' CFG' ?@G' JFGH' CFGE' A>>GD' B ' □H' CFG□D' N□?MA BG ' ?' K? □H ' ?MB □AH ' JF□OF' □ ' CGOFH□O?MME' O?MMGN' ?' OM?K CD?K ' H' CFG' O? G' LG>ADG' B ' GPGH' □>' F?(KGDG' F?N' HAC' CF□ ' KD□HO□KMG' □H' P□GJ ' CFG' ? AO□?C□AH' A>' CFG' ! H M□ F' G?DCFQB?(G' @B C' F?PG' LGGH' >K AH ME' □H' F□ ' @□HN' JFGH' FG' @?NG' CFG' BD G' N?CG' >DA@' ' ?H' G?DCFQB?(G ' □CFABC' DG>GDGHOG' CA' CFG' O□DOB@ C?HOG' A>' 0BM□GC8 ' ? GR

6'3 P!' ' OO' 7M99 OMTG' !' NHP' TPM +
IP' /MIIMG P P'MN' ! QHN' GHM99 GHP' AP' 7 JNPP! RS

FG' JABMN' H?CBD?MME ' N?C□H ' >DA@' CFG' G?DCFQB?(G ' F?PG' @?NG' CFG' N?CG' DG>GD' CA' CFG' KGD□AN' A>' F□ ' JD□C□H ' CFG' K? ? G' □H CG?N' A>' CFG' KGD□AN' A>' 0BM□GC8 ' LG□H ' JG?HGN R = #FGH' FG' OABMN' C?HN' ?MAHG I' . BC ' ?OOADN□H ' CA' CFG' BD G8 ' OFDAHAMA E ' 0BM□GC' F?N' HAC' ?DD□PGN' ?C' CF?C' GKAOF' □H' CFG' M□PG ' A>' OF□MNDGH' C□MM' FG' J ? ' CFDGG' EG?D ' AMN ' #FG' PGDE' OAHCD?N□OC□AH' FAJ ' CF?C' F?(KGDG' F?N' ?HACFGD' ALSGOC' □H' P□GJ ' CF?H' CF?C' A>' @?(□H ' CFG' BD G8 ' OFDAHAMA E' C?MME' J□CF' CFG' ? G' A>' FGD' HBD M□H ' ?N' FG' JD□CCGH R

6% G G !KP'NHP'PM NH]JMUP' ! JE8 $ ' TPM GR S

JG' FAB MN' HAC' F?PG' LGGH' A' DG?NE' CA' LGM□GP□H ' ?MCFAB F' □C' JABMN' LG' G OGGN□H ME' N□>>□OBMC' CA' OA@@BH□O?CG' CFG' DABHN ' A>' ABD' LGM□G>' >BMME' CA' ABD' DG?NGD ' CF?C' CFG' ?MCGD?C□AH ' @?NG' LE' F?(KGDG' BKAH' F□ ' >□D C' OAKE' A>' "A@GA' ?HN' 0BM□GC ' ? ' KD□HCGN' □H' 51 ' VJF□OF' ?MCGD?C□AH ' ?DG' FAJH' □H' F□ ' GOAHN' OAKE' ? ' KD□HCGN' □H' D511 ' G F□L□C' N□>>GDGHOG ' ? ' CA' CFG' QB?M□CE' A>' F□ ' @□HN R N□>>GDGHOG ' □H' SBN @GHC R N□>>GDGHOG ' □H' CFG' 0? C' A>' CFAB FC R N□>>GDGHOG ' □H' KAGC□O?M' KAJGD R JF□OF' O?HHAC' LG' ?OOABHCGN' >AD' LE' CFG' DAJCF' A>' F□ ' @□HN' NBD□H ' CJA' EG?D ' AHME ' >' CFG' >□D C' "A@GA' ?HN' 0BM□GC' JGDG' KDANBOGN' □H' 51 ' ?HN' CFG' GOAHN' □H' 511 ' JG' F?PG' ?H' □HCGDP?M' A>' G□ FC' EG?D ' □H' JF□OF' A@G' A>' F□ ' @A C' >□H□ FGN' JAD (' F?N' LGGH' □PGH' CA' CFG' JADMN ' %BD□H ' CF□ ' KGD□AN' F□ ' D□OFHG ' ? ' JGMM' ? ' F□ ' JGGCHG ' F?N' LGGH' NGPGMAKGN' ?HN' □C' □ ' CF□ ' NGPGMAK@GHC' JF□OF' □ ' A' DG@?D (?LMG' □H' CFG' BKGD?NNGN' K? ? G ' □H' "A@GA' ?HN' 0BM□GC ' G' ?M@A C' >?HOE' CF?C' CFG' =' BGGH' & ?L' I' KGGOF' J□MM' A>' □C GM>' >BDH□ F' ?H' G ?@KMG' A>' JF?C' JG' @G?H' R

6"P' KHM N' G M!' P I LNT' HMCP9 ! JN+
MOP' AT' NHP'E !P' GJJ P9' ' 9Ó Q JA+
IP JN' 7 I !Ó NHP' 7M PG%K MKH' IMUP G R

#FG G' M□HG ' ?DG' HAC' □H' CFG' >□D C' OAKE ' LBC' FAJ' LG?BC□>BMME' CFGE' >□C' □H' ?>CGD' CFG' NG OD□KC□AH' A>' CFG' KA(G R CFG' OAPGD' CFG' CD?OG R CFG' OAMM?D R CFG' JF□K R ?HN' CFG' J ? AHGD ' JF□MG ' □H' CFG□D' KGOBM□?DME' D□OF' ?HN' K□OCBDG QBG' G>>GOC ' CFGE' C?HN' ABC' LG>ADG' ?MM' CFG' DG C' A>' CFG' K? ? G ' #FGH' CFG' =' ' F?PG' GGH' CFG' N?E' ' 8C□ ' AHG ' 8C□ ' AHG ' 8C□ ' AHG I' A>' AMN' ?KBMGC ' GG@ ' CA' KG?(' @ADG' A>' CFG' @□NNMG ? GN' CF?H' A>' CFG' EABCF>BM' KAGC ' A>' JFA@' ?MM' CFG' K? ? G ' LE' JF□OF' □C' □ ' BDDABHNGN' ?DG' OF?D?OCGD□ C□O ' ?□H ' CFG' M□HG ' □H' CFG' >D□?D8 ' AM□MAQBE ' LG □HH□H R

6 HP' PM NH' NHMM%G !MNJ P%G I NHP' ' GHP' N IAR

MAA (' M□ (G' CFG' JAD (' A>' AHG' JFA' F?N' LGGH' DG?N□H ' ?HN' CF□H (□H ' @ADG' NGGKME' A>' H?CBDG8 ' @E CGD□G ' CF?H' □H' F□ ' >□D C' NGM□HG?C□AH' A>' CFG' LGHGPAMGHC' KF□MA AKFE' A>' CF□ ' AAN' AMN' @?H ' . BC ' ? ' JG' ?NP?HOG' □H' CFG' KM?E ' CFG' NGPGMAK@GHC' A>' CFG' JD□CGD8 ' KAJGD ' □ ' @ADG' ?HN' @ADG

%&& ' , % , , ,

M , FGH %?HCG DGKDA?0FG ' CFG i@KGDAD' ML GDC' >AD HG MGOC' A>' C?ME R

6' HT'G P'MI?O'NH J'HM P'GJ77P %O'NHJG
H JQH' Q PPO IPGG' 7'T iOP ' PM9 I G'OPMM i%O+
HP' QM OPi' 7'NHP'PIL P'N ' JI' MGNP+R S

FG ?NN R

6' IP'GPP'NHP' ML J9PNG' MI?' iNMQJPG
HP'O 9 LLPGKH'MI?' iM9O ' I MI
X H 'KM %GN'7 ' i JQHN8 NH GP'GJiU' i'Q P7'MI?'NHPGP
X NH'O P'GJGL K i' MKU%O R'N

GDG DOHG'?' @?H?LABC' >D>CE EG?D ' AMN' JGMM KD?OCO GN' H' CFG @MOC?DE
?DC';? KMG? ?HC OA@K?H□AH'?HN' M(G ?M@A C ?MM FO ' 0ABHCDE@GH' A>'
)GDAH?';? DG?C C?M(GD I' .?HNGMMA'□H 55/ 'KBLM□ FGN';? HAPGM' AH
CFG ?@G BLSGOC'CFG HOHCF A>' FO GOANH' 0AMMGOC□AH' C' LG □H '
=' FGH'CFG 0?M? GD ' JGDG'MADN 'A>')GDAH? IZ?HN' AG ' AH'CA' ?E'CF?C
CFG G GPGHC ' F?KKGHGN'=' BNNGD' .?DCFMA@GJ' 0?M□ GD'I' V.?DCAMA@GA'
NGMM?' 0?M? ' #FG'P?□AB ' @?CGD□?M ' CA' LG >ABHN'□H CFG G ABDOG '
JGDG G@LANG□N'□H ?' DGH0F' HAPGM'LE' □GDDG .A□ CG?B ' ?' CD?H M?C□AH'A>'
JFO□F EP?'KBLM□ FGN'LE' ?□HCGD'□H □□ '=' ?M?OG'A>' MG? BDG I'□H 54 '
?HN'BKAH'CF□ ' DGH0F' CADE J? ' >ABHNGN'CFG i H M□ F'KAG@'LE' DCFBD'
.DAA(G'KBLM□ FGN'□H 542 'BNHGD'CFG CMOG A>'='#FG'CD? O?MM (MADEG
A>' "A@GB ' ?HN' 0BM□GC ' JD□CCGH'>D C'□H C?M□?H' LE' .?HNGMM'?HN'HA JG
?LMG I' #FG' i@KGDAD' ML GDC' J?' @BDNGDGN'□H 376'$?HN' CFG
)GDAHG G ' JFA'LGM□GPG'CFG CADE A>' "A@GA'?HN' 0BM□GC' CA'LG'FO CAD-
O?MME'CDBG'>□ 'CFG N?CG'A>'CF□ CD? GNE'? ' 373' C' CF?C KGD□AN'CFG
O?M? 'AD' O?M□ GD 'DBMGN'APGD')GDAH?

>'CFG'DGOADN 'A>' FO CADE'CGMM B 'M□CCMG'A>'CFG >?□D ?KBM□C'?HN'FGD
MAPGN'&AHC? BG ' JFA@' F?(KGDG' F? ' @?NG'□@@ADC?M'CFG HAPGM□ C '
F?PG GTGN'BKAH'CFG BLSGOC'? '@= FC LG G KGOCGN'>DA@'□C ' □HCGDG C
?HN'□C'AL OBD□CE' &? BOO□A'?' G?KAM□C?H'JFA'M□PGN'?LAB□ / 7 '
J? '□C □ ' BKKA GN'CFG J□CGD'JFA'>□ C ?PG' ?' A@GJF?C □@□M?D
CADE'CFG OMACF□H ' A>' ?'OAHHGOCGN'>□OC□AH' G' KM?OG ' CFG OGHC ?C
□GHH?'?HN'A>'0ABD G'CFGDG □ ' HA'@GHC□AH'A>'CFG &AHC? BG ' ?HN'
?KBM□C ' #FG' CADE'CAA'A>' &? BOO□L' P?D□G ' □H □C ' 0?C? CDAKFG'
CFG G ABDOG '□FGDG□ ='?KM?E' LE' $AKG' NG')G ?' □H J□FO□F' CFG □HO□-
NGHC'?DG PGDE' □@□M?D'?HN'?H' C?M□?H' CD? GNE' ?M A' LE' $B□ □' +DAC'A'
JFO□F &D'< ?M(GD'□H F□ ' F□ CAD□O?M'@G@A□D' A>' C?M□?H' CD? GNE' CFH(
CF?C CFG iH M□ F' L?DN' DG?N' J□CF' KDA>□C &D' ?M(GD' □PG ' B ' K? -
? G '□H' BKKAD□' A>' F□ ' ? GDC□AH'ZBO?F' ? ' ?' NG ODK□AH'A>' H□ FC□H-
?MG' J□FGH' CFG MAPGD ' ?DG K?DC□H ' J□FO□F' ?KKG?D' A>' H□ FGN'CFG
AK□H□AH

#A' ?CCG@K□ CA' FAJ ' ? ' @?HE' F?PG' ?CCG@K□G'□ J□F?C >DA@' ?□HCGD8
CAA('>DA@'CFG'KAG@'A>'=' "A@GB ' ?HN'0BM□GC I'?HN' J□F?C >DA@' ?□HCGD

N' -J QMN T' MIN ' 2+' M T%G'N MIGGMN i+

' 5 KHNP 9PAPI' i' pKU+' p 9 i' 'L+' ' BK+

* 'CA' J□FA' J ? 'CFG K A G C R =' □MC' CFAB' LGM□GPG'WR AHG A>' GH MAJ G8'
0A@@AH'0A@GN□?H ' J□FA' F? ' ?MDG?NE' GDPGN'F□@' @?HE' EG?D ' AH' PGDE
J□F?C F? 'LGGH' ?NNGN' LE' ABD' >AC HACG ' G' JABMN' G KGO□?MME' N□GOC'
?CCGH□AH' CA' CFG' AMDMAQBE' A>' 0BM□GC' □H' CFG >□CF OGHG' A>' OC' ' CA'
FGD' AMDMAQBE'?M A'□H' CFG' GOANH' OGHG A>' OC' ' ?HN' CA' FGD' DG?C'
AMDMAQBE' LG>ADG' C?(H ' CFG' ND?B FC' □H' CFG' >ABDCF ?OC' G' F?PG'
□PGH'CF□ ' M? C' K? ? G ? '□C' CAAN'□H'CFG AD□ □H?M' OAKE ' ?HN' JG' OAH-
?@G' JADN ' J GDG' JF□ KGDGN' CA' @G' LE'@E'L? G' GHPE' J'FGH' 'AL GDPPGN'
CFG BH□PGD ?M NGN□ FC' CFG' NGGK' G@AC□AH' A>'GPGDE' KGOC?CAD' ' GHNG?-
PABDGN' CA' OA@>ADC' @E GM>' CFGDGJ□CF' ?HN' ? ?□H' CA' DGOAPGD' @E' MA C
FAHABD' □H' CF□ ' @□ GD?LMG' @?HHGD' ' >MGN' >DA@' CFG' OA@K?HE4' ?HN'
CFG FAB G CGJ?DN' JFA' F?N' ?OCGN' ? ' ?H' ? □ C?HC' ?PG' @G' CFG
@?HB ODD□KC' A>' CFG' KM?E' H' @E' MAHGME' OF?@LGD' ' ?C ?HN' DG?N' CFG
JFAMG H□ FC' ?HN' DG?N' ? ?□H R ?HN' G?OF' C□@G ?N@□DGN' CFG @ADG4 >AD'
@BOF' CF?C F?N' ?KKG?DGN' CA' @G' GK□ AN□O?M' AD' BKGD>MBAB ' ?OQB□DGN'
AH' @ADG G ?OC G ?@□H?□A?H';? □ H□>□O?HOE' ?HN' HGGN>BM' >BMHG ' #FG'
ANN FAB G CGJ?DN' ?PG' @G' ?M A' ?HAC□GD' KAG@'J□FO□F' CFG ?BCFAD'
F? 'HAC EGC' QB□CG' OA@K□GCGN')GHB ' ?HN' NAH□ 'CF?C' @□ FC' DG?N'□C
□H' @E H□ FCME' MG□ BDG' &E' >D□GHN' GPGH' FGDG' GPGH' □H' CF□ ' JGGC'
H?DD?C□PG R GPGH' □H' CF□ ' A>C KGGOF' ?HN'PAMB□KCBAB '□@? GDE R □H' CF□ '
□HCA □O?C□H 'DG?M@' 'JFGDG' 'C□MM' HAJ ' AHME'MAA(GN' BKAH' M□(GHG G ' A>'
@E GM> R ' ?@' OA@K□GCGME' OA@K□GCGME' LG?CGH' ' CF□' @?H' CF□ '
@AD□CF?H'@ADC?M' CA' F□@' V ' >GGM' ? ' □>' @E'M□>G' NGKGHN ' AH' □C ' '@B □
LGOA@G'CFG'@A □'□HC□@?CG'>D□GHN'AD'CFG'@A □'L□CCGD'GHG@E' i□CFGD'
'J□MM'EGC'>HN'@E'J?E'CA'F□@' ' AD' 'J□MM' BOOB@L'CA'CF□' KAMMA'?HN'
FG @?E'CFGH' KG?(' APGD' @E' ABC' CDGCOFGN'OADK G'CFG M? □' JADN ' A>'
CFG $ADN' BH NAH' G'F?N'G KGOCGN'FG ?E ' CF?C AHG' A>' F□ ' AJ□H
KM?E ' JABMN'F?PG'LGGH'KGD>AD@GN ' LB□'FG '>ABHN'CF?C□C J ? '='CF?C'AMN'
KAG@' JF□OF' JG' F?PG ?MM'MAH ' (HAJH' JAD(GN'BK' □HCA' ?' CD? GNE'I'
>CGD' &?DMAJG' F? ' DBH'CFDAB F' CFG GHGD?M' OF?D?OCGD□ C□O ' A>' CFG
KM?E' J□CF' ?H' GMAQBGHC' ?N@□D?C□AH'@□H MGN' J□CF' NGGK' DG' DGC' CF?C' FG
F□@ GM>'F?N'LGGH'?LMG'CA'?KKDA?OF' A'N□ C?HCME'CFG G OGMMGHOG'A>'CF?C
= ABC' ABHN□H ' @ABCF' JF□OF' ?' AN M□(G @ G' F? ' FGD GM>'□H K□DGN
□H' 513' #□GO('LB□MC'F□ ' AK□H□AH'HA'NABL□'BKAH'□HCGDH?M'GP□NGHOG'
?HN'BKAH'CF□ 'GP□NGHOG' J G' @B C' LG'OAHCGHC'CA'MGC'CFG'QBG C'AH'DG C

E ‘ ‘ J ?

= ?M?OG‘ A>’ MG? BDGI‘ R ‘ FAJ‘ FG‘ J? ‘ = JDGCOFGNME‘ @□ MGN‘ □H‘ F□ ‘ O?C? CDAKFG I‘ ? ‘ &D ‘ %BHMAK‘ F? ‘ □C ‘ LGO?B G‘ FG‘ F?N‘ HAC‘ DG?N‘ $B□ □‘ N?’ ADCA R ?HN‘ FAJ‘ FG‘ □HPGHCGN‘ AHME‘ AHG‘ □HO□NGHC‘ CFDAB FABC‘ CFG‘ KM?E ‘ CF?C‘ A>’ CFG‘ NG?CF‘ A>’ ?D□ ‘ ?HN‘ ODG?CGN‘ AHME‘ AHG‘ 0F?D?OCGD ‘ CF?C‘ A>’ &GDOBC□A ‘ ?OOADN□H ‘ CA‘ CFG‘ ? ?O□AB ‘ &D ‘ $GHA R ?KKG?D ‘ CA‘ B ‘ A@GJF?C‘ □NMG‘ JAD(

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#FG‘ M□ FC‘ >ABHN?C□AH‘ A>’ F□ CAD□O?M‘ CDBCF‘ JF□OF‘ O?H‘ LG‘ G C?LM□ FGN‘ □H‘ CFG‘ MG GHN‘ A>’ "A@GA‘ ?HN‘ 0BM□GC R CF?C‘ A>’CFG‘ =‘ O□P□M ‘LDA□M ‘8§ A>’ CFG‘ CJA‘ D□P?M‘ FAB G ‘ A>’)GDAH?R JABMN‘ KM?OG‘ CFG‘ KGD□AN‘ A>’ CFG‘ ?OC□AH‘ ?LABC‘ CFG‘ C□@G‘ A>’ %?HCG ‘ . BC‘ CF□ ‘ AHG‘ O□DOB@ C?HOG‘ AC□ FC‘ HAC ‘ ? ‘ □C‘ ?KKG?D ‘ CA‘ B ‘ PGDE‘ CD□OCME‘ CA‘ M□@□C‘ CF□ ‘ KGD□AN ‘ #FG‘ MG GHN‘ □ ‘ A‘ AL OBDG ‘ CF?C‘ JG‘ @?E‘ LG‘ SB C□>□GN‘ □H‘ O?DDE□H ‘ □C ‘ N?CG‘ >ADJ?DN‘ AD‘ L?O(J?DN ‘ CA‘ CFG‘ G CGHC‘ GPGH‘ A>’?‘ OGHCBDE‘ □>’?HECF□H ‘ @?E‘ LG‘ ?□HGN‘ LE‘ BOF‘ ?‘ >DGGNA@‘ H‘ CF□ ‘ O? G ‘ JG‘ @?E‘ PGHCBDG‘ CA‘ ? AO□?CG‘ CFG‘ CADE‘ J□CF‘ CFG‘ KGD□AN‘ JF□OF‘ >AMMAJGN‘ CFG‘ C□@G ‘ A>’ GCD?DOF‘ ?HN‘ .KOO?OO□AR PGD □H ‘ CAJ?DN ‘ CFG‘ OMA G‘ A>’ CFG‘ >ABDCGGHCF‘ OGHCBDE R ?‘ KGD□AN‘ >BM‘ A>’ D□OF‘ ? AO□?C□AH ‘ #FGH‘ CFG‘ M□CGD?DE‘ CDG? BDG ‘ A>’ CFG‘ ?HO□GHC‘ JADMN‘ F?N‘ LGGH‘ DG OBGN‘ ABC‘ A>’ CFG‘ NB C‘ ?HN‘ N?D(HG ‘ A>’? G ‘ R CFG‘ M?H B? G‘ A>’ C?ME‘ F?N‘ LGGH‘ >AD@GN ‘ □H‘ DG?C‘ K?DC ‘ LE‘ CFG‘ @?D-PGMMAB ‘ =‘) □ □AH ‘ I‘ A>’ FGD‘ DG?CG C‘ KAGC ‘ K?□HC□H ‘ F?N‘ LGGH‘ DGP□PGN‘ LE‘ +□ACCA‘ ?HN‘ □@?LBG ‘ ?DOF□CGOCBDG‘ F?N‘ KBC‘ AH‘ ?‘ OF?D?OCGD‘ A>’ LG?BCE‘ ?HN‘ @?SG CE ‘ ?HN‘ CFG‘ >□D C‘ HGOG □C□G ‘ A>’ FGMCGD‘ ?HN‘ NG>GHOG‘ F?N‘ LGGH‘ ? AO□?CGN‘ J□CF‘ CFG‘ F□ FGD‘ NG@?HN ‘ A>’ OA@>ADC‘ ?HN‘ C? CG ‘ OBMKCBDG‘ F?N‘ N□ KM?EGN‘ □C GM>’ □H‘ @?HE‘ LG?BC□>BM‘ KDANBOC□AH ‘ LACF‘ □H‘ @?DLMG‘ ?HN‘ LDAHTG‘$‘ ?HN‘ @B □O‘ F?N‘ LGGH‘ OBMC□P?CGN‘ ? ‘?‘ O□GHOG‘ MM‘ CFG G‘ JGDG‘ CFG‘ DAJCF‘ A>’ CFG‘ >DGGNA@‘ JF□OF‘ KDGP?□MGN‘ □H‘ CFG‘ C?M□?H‘ DGKBLM□O ‘ ?HN‘ A>’CFG‘ JG?MCF‘ JF□OF‘ F?N‘ LGGH‘ ?OQB□DGN‘ LE‘ OA@@GDO□?M‘ GHCGDKD□ G‘ BHNGD‘ CFG‘ □@KBM G ‘ A>’ >DGGNA@‘ #A‘ N?CG‘ CFG‘ KGD□AN‘ A>’ CFG‘ ?OC□AH‘ A>’ "A@GA‘ ?HN‘ 0BM□GC‘ LG>ADG‘ CF□ ‘ DGP□P?M‘ A>’ MG?DH□H ‘ ?HN‘ CFG‘ ?DC ‘ JABMN‘ LG‘ CA‘ @?(G‘ □C ‘ ?OOG AD□G ‘ ABC‘ A>’ F?D@AHE‘ J□CF‘ CFG‘ G OGGN□H ‘ LG?BCE‘ A>’ F?(KGDG8 ‘ ND?@?‘ ! PGH‘ □>’?‘ M□ FC‘ KADC□AH‘ A>’ F□ CAD□O?M‘ ?OOBD?OE‘ LG‘ ?OD□>□OGN‘ F□ ‘ KAGCDE‘ @B C‘ LG‘ BDDABHNGN‘ J□CF‘ ?H‘ ?KKDAKD□?CG‘ ?C@A KFGDG‘ A>’ D?OG‘ ?HN‘ D□OFHG

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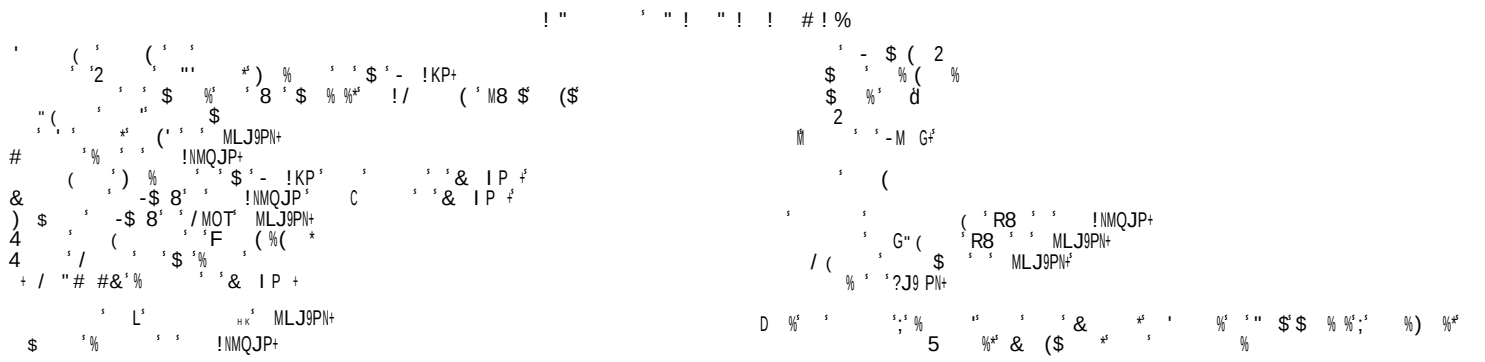

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7 '2'GN UP']J KU9T'AP !Q' I PO+
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7 '#'O Q' 7'NHP'H JGP' 7' !NMQJP' I PG' IP+
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! O 2 I MUP NHPP NH ! U NHT G M ! M K +
X HP ! NHP OP JN P9 Q ! 7 N ! P PTP
M ! NM ! G GJKH 7M9GPH O NHP ! NJ ! NPM G N 7 PG [
! O NHPGP S H 7NP ! O !%O K J9O ! P P O P S
M ! GLM P ! N HP PN KG AP AJ ! N 7 9 M G [
1 ! P 7M P NHM ! I T 9 P [NHP M99 GPP ! Q GJ !
P%P GM HP I MNKH G ! KP 7 GN NHP 9O APQJ ! +
L ; JN [T J GM HP 7M ! ! P P9GP AP ! Q +AT
" P GP97 L G%O NH HP GP97 ! P NHP PTP
JN ! NHMN K TGNM9 GKM9PG D 9PN NHP P AP P QH%O
4 J 9MOT%G 9 P MQM ! GN G I P NHP I M O

M " NHP PM 9T PON ! G HP AW8O Q PG6 GJLLP R N NHP GP M ! N+
4 ($% SJGPO MG M G ! QJ8M ! J ! +
SG +
HP GLPPKHPG 7 NHP J GP 7 I HP ! KP M P Q P ! MG L GP ! M99 NHP PM 9T
PON ! G MLP99 HMO NHP Q PMN I P N 7 7 GN L N ! Q NHP J MG P GP8 M ! O ! N
6 P ! P J99TR MG G P99 MLLPM G N NH ! U 7 NHP P G ! N ! M99 HMUGLP P M
LMG3MQP ! HKH NHP HTNH ! G I P HMLL 9T KHM MKNP GN K +
3 SHM PM I P I TSM K I I ! PWL PGG !+

HMN 2 99 GH T J GH ! ! Q MN NH G 7PMGN+
! O GHP GHM99 GKM ! N GH P99 NHMN ! GH G APGN+
! 2%99 Q M9 ! Q ! GJKH G QHN N AP GH !+
JN N PE KP ! GL9P ! O J 7 I ! P ! + = 4 &

3 3 " 2+ S ! ! MLJ9PN%G !&-
1 " J GP+
? , J GP HP P%G I T OMJQHNP \ KM99 HP 7 NH N
I P+
& - AT I T I M OP ! HPMO SMN N P9 P TPM 9O S
2 AMOP HP K I P+ S X HMN 9M I A[HMN 9MOTA O[S
: O 7 A O[S HP P%G NH G Q 9 \SD HMN ?J9 PN 2

= 1
J& " L [H KM99G \
& - 4 J I NHP +
J& MOM I 2 M I HP P+
X HMN G T J 99 \
? , ; H G G NHP I MNNP S J GP Q P 9PM P M H 9P+
X P I JGN NM9U ! GPK PN+ S J GP K I P AMKU MQM ! 8
2 HM P P I P I AP %O I P NH J GHM9N HPM J K J ! GP9+
H J U ! %GN I T OMJQHNP %G 7 M L PNNT MQP+
& - %OM NH 2 KM ! NP99 HP MQP J ! N M ! H J +
? , HP%G ! N 7 J NPP !+
& - 2%99 9MT 7 J NPP ! 7 I T NPPNH+
# ! O TPN N I T NPP ! FAP N GL UP ! 2 HM P AJN 7 J S
HP G ! N 7 J NPP !+ S " 9 ! Q G N ! / M I I MG N OP \
? , # 7 N ! QHN M ! O OO OMTG+
& - ; 3 P ! OO 7 M99 OMTG ! NHP TPM +
I P / M I I MG P P MN ! QHN GHM99 GHP AP 7 J NPP !+
JGM ! M ! O GHP S : O PGN M99 H GN M ! G J9G [S
X P P 7 M ! MQP+ SDXP99 JGM ! G NH : O 8
HP MG N Q O 7 I P JN MG 2 GM O+
1 ! / M I I MG P P MN ! QHN GHM99 GHP AP 7 J NPP ! 8
HMN GHM99 GHP I M T 8 2 P I P I AP N P99+
% G G ! KP NHP PM NH] JMUP ! P9P P ! TPM G8 6
# ! O GHP MG PM ! %O S2 ! P P GHM99 7 QPN N S
17 M99 NHP OMTG 7 NHP TPM JL ! NHMN OMT
O 2 HMO NHP ! 9M O I O N I T OJQ+
NN ! Q ! NHP GJ ! J ! OP NHP O P H JGP M998
T 9 O M ! O T J P P NHP ! MN M ! NJM S
MT 2 O APM M A M ! FSDAJN MG 2 GM O+
X HP ! N O O NMGNP NHP I O ! NHP ! LL9P
17 I T OJQ M ! O 7P9N N A NNP L PNNT 7 9
GPP N NPNKHT M ! O 7M99 JN ONH NHP OJQ+
HMUP] J NH NHP O P H JGP %N MG ! ! PPO 2 N +
A O I P N JOQP+
! O G ! KP NHMN N I P N G P9P P ! TPM G
O NHP ! GHP K J9O GNM ! O M9 ! P8 ! MT AT NHP O+
HP K J9O HM P J ! M ! O MOO9PO M99 MA JN+
O P P ! NHP OMT AP7 P GHP A UP HP A
! O NHP ! I T HJGAM ! O S : O AP NH H G G J9 [
%#' MG M I P T I M ! (SN U JL NHP KH 9O
4 PM $] J NH HP O GN NH J 7M99 JL ! NHT 7MKP \
H J 9N 7M99 AMKU M O HP ! NH J HMGN I P N8
X 9N NH J ! N ? J9P \ M ! O AT I T H 9T OM I +
HP L PNNT 7PNKH 9P7N K T ! Q M ! O GM O F 5 U
GPP ! H M EPGN GHM99 K I P MA JN
2 M M ! N M ! 2 GH J9O 9 P M NH JGM ! O TPM G
2 ! P P GH J9O 7 QPN N8 X 9N NH J ! N ? J9P \ ] J NH H P
! O L PNNT 7 9 N GN ! NPO F M ! O GM O S#T+

% SDN GN LLPO+ HJG : MGK Q ! P8 S
6 HP ! GN ! NPO GHP MG 7 HP G ! Q P P O ! P+R
% G ! JGPO ! M ! MKN P G Q ! 7 KMN ! 7 N % - HJG ! NH GP 7 ! P 9 ! PG
! NJG # ! O ! KJG H KH N G O 77 KJ9N N AP9 P P M ! T NHP NHM ! HMUGLP P
NP S
6 HP PMQ9P GJ7P G 9 NN9P A OG N G ! Q
! O G ! N KM P7J9 HMN NHPT I P M ! NHP PAT
! ! Q NHMN NH NHP GHMO 7 H G ! Q
" P KM ! MN L9PMGJ P % NHP I P9 OT+R
ETHMN M L KNJ P 7 M OPGL N ! H G ! NP M9G 7 GP97 GMN G7T ! Q 7 APM M ! KP [

? , 3! JQH 7 NH G8 2 L MT NHPP H 9O NHT
LPMKP+
& - 4PG I MOM I 8 TPN 2 KM! ! N KH GP AJN 9MJQH
NH !U N GH J9O 9PM P K T !Q M!O GMT S # T
#!O TPN 2 M M!N N HMO JL ! NG A
#ADJ IL MG A Q MG M T J!Q K KU P9%G GN !P 8
#LM 9 JG ÐU! KU 8 M!O N K PO A NNP 9T+
4PM]J NH I T HJGAM!O 7M99%GN JL ! NHT 7MKP O
H J 9N 7M99 AMKU M O HP! NH J K I%GN N MQP8
X 9N NH J ! N ?J9P \ N GN !NPO M!O GM O S#T+
J& # !O GN !N NH J N 2 L MT NHPP ! J GP GMT 2+
& - -PMKP 2 HM P O !P : O I M U NHPP N H G
Q MKP[
H J MGN NHP L PNN PGN AMAP NHMN P%P 2 ! J G%O
#!2 I QHN 9 P N GPP NHPP I M PO !KP
2 HM P I T GH+
? , M T NHMN I M T G NHP P T NHP I P
2 KM I P N NM9U 7 S P99 I P OMJQHNP ?J9 PN
" GNM!OG T J O GL G N ! N AP I M PO \
J& 2N G M! H ! J NHMN 2 O PM I ! N 7+
& - # ! H ! J [Ð P P ! N 2 NH !P !9T !J GP
2%O GMT NH J HMOGN GJKU%O GO I 7 I NHT NPMN+
? , X P99 NH !U 7 I M MQP ! 8 T J!QP NHM!
T J+
" P P ! P !M 9MO PG 7 PGNPP I +
P I MOP M9 PMOT I NHP G AT I T K J!N
2 MG M I NHP I JKH JL ! NHPGP TPM G
HMN T J M P ! M I M O HJG8 NHP! ! A P7
HP M9 M!N - M G GPPUG T J 7 H G 9 P+
& - #! I M! T J!Q 9MOT[9MOT GJKH M I M!
#G M99 NHP 9O S X HT HP%G M I M! 7 MW+
? , P !M%G GJ I I P HMNH ! N GJKH M 79 P +
& - MT HP%G M 79 P 8 ! 7M NH M P T 79 P +
; , FX HMN GMT T J \ KM! T J 9 P NHP QP!N9P_
I M! \
H G ! QHN T J GHM99 APH 9O H I MN J 7PMGN8
&PMO %P NHP 9J I P 7 T J!Q - M G%7MKP .
#!O 7 !O OP9 QHN N NHP P NH APMJNT%G LP! 8
3WM I !P P P T GP P M9 Ð9 !PM I P!N+
#!O GPP H ! P M! NHP 9P!OG K !NP!N8
#!O HMN AGKJ %O ! NH G 7M 9J I P 9 PG
O !O NNP! ! NHP I M Q ! 7 H G PTPG+
H G L PK JG A U 79 P NH G J!A J!O 9 P +
APMJN 7T H I ! 9T 9MKUG M K P
HP 7 GH 9 PG ! NHP GPM8 M!O %N G I JKH L OP+
O 7M NH JN NHP 7M NH ! N H OP
HMN A U ! I M! T%G PTPG O NH GHM P NHP Q9 T
HMN ! Q 9O K9MGLG 9 KUG ! NHP Q 9OP! GN T8
GHM99 T J GHM P M99 NHMN HP O NH L GGPGG+
T HM !Q H I I MU !Q T J GP97 ! 9PGG+
& - 9PGG \ ! MT A QQP 8 I P! Q AT I P!+
? , LPMU A P79T KM! T J 9 UP 7 - M G%9 P \
J& 2%99 9 U N 9 UP 7 9 U !Q 9 U !Q I P
JN ! I P OPPL 99 2 P! OM N I ! P PTP $
HM! T J K !GP!N Q PG GN P! QNH N I MUP N 79T+

P M!N+

7 1 MOM I NHP QJPGNG M P K I P GJLLP GP PO JL
T J KM99PO I T T J!Q 9MOT MGUPO 7 NHP ! J GP KJ GPO !
NHP LM!N T M!O P P TNH !Q ! PWN P I NT+ 2 I JGN HP! KP N
M N8 2 APGPPKH T J 7 99 GN M QHN+
? , X P 7 99 NHPP+ S?J9 PN NHP K J!NT GNMTG+
& - : Q 9 GPPU HMLLT ! QHNG N HMLLT OMTG+
9 4 &

% S N K JLN ! 7 NHP O LP 9 JG+
E + HP 7 9 M!O V + HM P $ A NH ! ?J9 PN%G M!O NHP J GP%G
GLPPKHPG+
Ð HP !PWN GP P!NPP! 9 !PG M P M!N !Q ! V +
H V3+ ; H KH PMO !Q HMG APP! MO LNPO AT NPP P!G M!O M9 !P ! !
L P7P P!KP N % + ! NHP 7 9 M!O @ +
Ð HPGP N 9 !PG ! E + M P I NNPO ! NHP GJAGP]JP! 9O PO N !G+
F4 ! @ 8 ! 7 9 +

3 3 2 +S 7 $

(& B2 > 1 ! 7 4
MGUP G KH APM P G "! -

! X HMN GHM99 NH G GLPPKH AP GL UP 7 J PWKJGP \
1 GHM99 P ! NH JN ML 9 QE \
% HP OMNP G JN 7 GJKH L 9 W NT
X P%99 HM P ! JL O H O !U%O NH M GKM 7 F
PM !Q M NM %G LM !NPO A 7 9MNH+
KM !Q NHP 9MO PG 9 UP M K UPPLP 8
! NH JN A U L 9 QJP 7M !N9T GL UP
#7NP NHP L I LNP 7 J P!N M! KP
JN 9PN NHP I I PMGJ P JG AT HMN NHPT 99
X P%99 I PMGJ P NHP I M I PMGJ P D M!O AP Q !P+
! : P I P M N KH S2 M I ! N 7 NH G M I A9 !Q8
P !Q AJN HPM T 2 99 APM NHP 9 QHN+
J? MT QP! N9P & I P P I JGN HM P T J OM! KP+
! N 2 AP9 P P I P T J HM P OM! K !Q GH PG+
X NH ! I A9P G 9PG 2 HM P M G J 7 9PMO
GNMUPG I P N NHP Q J!O 2 KM! ! N I P+
%E 4 J M P M 9 P 8 A JL O%G !QG+
#!O G M NH NHP I MA P M K I I ! A J!O+
! 2 M I N G P P I L P KPO NH H G GHM7N
G M NH H G 9 QHN 7PMNHP G8 M!O G A J!O F
2 KM! ! N A J!O M L NKH MA P OJ99 P
!OP 9 P%G HPM T AJ OP! O 2 G !U+
E #!O N G !U ! N GH J9O T J AJ OP! 9 P
Q PMN LL PGG ! 7 M NP! OP NH !Q+
! 2G 9 P M NP! OP NH !Q \ N G N JQH+
JOP N A GN% JG 8 M!O N L KUG 9 UP NH !+
E 27 9 P AP]JQH NH T J AP JQH NH? P8
- KU 9 P 7 L KU !Q M!O T J APMN 9 P O !+S
: P I P M KMGP N LJN I T GMQP ! = & 3 ! -'
G 7 M G [S HMN KM P 2
X HMN KJ JG PTP O NH]J NP %OP7 I N PG \
" P P M P NHP APPN9P A G GHM99 A9JGH 7 I P+
% I P U! KU M!O P ! NP 8 M!O ! G !P ! +
JN P P T I M! APNMUP H I N H G 9PQG+
! # N KH 7 I P 9PN M!N !G 9 QHN 7 HPM N+
KU9P NHP GP! GP9PGG JGHPG NH NHP HPP9G ,
O 2 M I L P A%O NH M Q M!OG P LH MGP S
2%99 AP M KM!O9P H 9OP M!O 9 U ! S
HP QM I P MG P!P %P G 7M M!O 2 M I O !P+
E JN OJ! %G NHP I JG7FEF NHP K !GNMA9P%G ! O8
27 NH J M N OJ! P%99 O M NHPP 7 I NHP I P
17 NH G G P P P!KP 9 P F HP P ! NH J GN KU%GN
L N NHP PM G+S I P P AJ ! OMT9 QHN H +
! MT NHMN%G ! N G +
E 2 !PM! G ! OP9MT
X P MGNP J 9 QHNG ! M ! 9 QHNG 9 QHNG AT OMT+F
MUP J Q O I PM! !Q 7 J EJOQ I P! N G NG
O P N I PG ! NHMN P P P !KP ! J 7 P NG+
! # !O P I PM! P99 ! Q !Q N NH G I MGU8
JN %N G ! N N Q +
E X HT I MT !P MGU \
! 2 O PM I N M O PM I N ! QHN+
E # !O G O O 2+
! X P99 HMN MG T J G \
E HMN O PM I P G 7NP! 9 P+
! 2 ! APO MG9PPL H 9P NHPT O O PM I NH !QG N JP+
E 1 NHP! 2 GPP]JPP! MA HMNH APP! NH T J+
HP G NHP 7M PG% I O 7P8 M!O GHP K I PG
2! GHMLP ! A QQP NHM! M! MQMNP GN !P
1! NHP 7 P7 !QP 7 M! M9OP'8 I M! +
5 M ! NH M NPM I 7 9 NN9P MN I PG

% : S AGP P <
F HJG E +
, F H G G NHP PMO !Q 7 NHP 7 9 ? H!G ! PMOG / ') 9 QHNG AT OMT+R
MLP99%G PMO !Q G QP! P M99T MO LNPO @NH JQH ! N9 NP M99T 7 I NHP PM 9T K L PG8 S
6 X P MGNP J 9 QHNG ! M ! 9 UP$9M I LG AT OMT+R D
V +* 2
4 ! ! ! ,5
Z 0

[E ' ' J ? ;

#NH M ND' IpI%G i GPG MG NHPT'9 P MG9PPL'
"p' MQQ i GL UPG' IMOP' 79 iQ' GL iip G%'9PQG+
HP'$K p' 7NHP' iQG' 7Q MGGH LLP G'8
"p'N MKPG' 7NHP'G IM99PGN'GL OP %G' pA'8
"p'K 99M G' 7NHP' I iGH ip%G' MNP T'APM I G 8
"p' HL' 7K KUP%G'i ip8 NHP'9MGH' 779I'
"p' MQQ ip'M'G I M99'Q pT K MNPO'QiMN
" N'HM97G'A Q'MG M' JiO'9 NN9P' I'
- LU%O'7 I'NHP'9MCT'7 iQP' 7M' I M O' D
"p'KHM N' G Mi'pILNT'HMCP9 iJN
MOP'AT'NHP'E ip'G]J p9' ' 9O'Q JA+
Ip' JN' % I iO'NHP'7M pG%K MKH IMUP G+
#iO' i'NH G'GNMP'GHP'QM99 LG' i QHN'AT' i QHN$
H JQH'9 p G%A M iG'MiO'NHPi'NHPT'O PMI' 79 p
1i'K J N p G%UippG'NHMN'O PMI' i'K J N%G pG'GN M QHN'
1%P'9M TP G%7 iQP G' H'GN M QHN'O PMI' i'7ppG'8
1%P'9MO pG%9LG' H'GN M QHN'i'U GGpG'O PMI'8
XH KH' 7N'NHP'MiQ T' MA' NH'A9 GNP G'L9MQJPG+
pKMJGP'NHP 'A PMNHG' NH'G ppNI PMNG'NM iNPO'M p+
IPN I P'GHP'QM99 LG' %P'M'K J N p %G' i GP+
#iO'NHPi'O PMI'G'HP' 7G I p99 iQ' JN'M'GJ N'%
HP'G'NHP'7M pG%I O 7P'MiO'O NH'K Ip
2i'GHMLP'i 'A QQP'NHMI'Mi'MQMNP GN ip
1i'NH'7 P7 iQP' 7M'AJ Q I MGNP '
5M ip' NH'M'NPMI' 79 NN9P'MN IT
#NH M N'IpI%G i GPG HPi'NHPT'9 P'MG9PPL+
HP'K P' 7NHP' iQG' 7Q MGGH LLP G+
HP'N MKPG'M P'NHP' I i GH'ip' MNP T'APM IG+
HP'K 99M G'K KUPN'A ipG'NHP'9MGH' 779IG+
"p' MQQ ip'G M G1M99'Q MT K MNPO'79T
"HM97G'A Q'MG G'M 9 NN9P' I+
- KUPO'7 I'NHP'9MCT'7 iQP' 7M IM O+
#iO'i'NH G G N'GHP'QM99 LG'JL'MiO'O i
1%P'K J N p G%UippG'NHMN'O PMI'i'U GGpG'O PMI'8
1%P'9MO pG%9LG' H'O PMI'i'U GGpG'GN M N
XH KH' 7N'NHP'MiQ T' MA' NH'A9 GNP G'L9MQJPG+
pKMJGP'NHP 'A PMNHG' NH'G ppN7IpMiG'NM ipPO'M p+
IPN I PG GHP'QM99 LG' %P'M'K J N p %G' ipKU+
#iO'NHPi'O PMI'G'HP' 7KJNN iQ'7 p Qi'NH MNG+
1i'K J N p G%UippG'NHMN'O PMI' i'K J N%G pG'GN M QHN'
1%P'9M TP G%7 iQP G' H'GN M QHN'O PMI' i'7ppG'8
1%P'9MO pG%9LG' H'O PMI' i'U GGpG'GN M N
XH KH' 7N'NHP'MiQ T' MA' NH'A9 GNP G'L9MQJPG+
pKMJGP'NHP 'A PMNHG' NH'G ppNI PMNG'NM ipPO'M p+
IPN I PG GHP'QM99 LG' %P'M'K J N p %G' i GP+
#iO'NHPi'O PMI'G'HP' 7G I p99 iQ' JN'M'GJ N'%
HP'G'NHP'7M pG%I O 7P'MiO'O NH'K Ip
2i'GHMLP'i 'A QQP'NHMI'Mi'MQMNP GN ip
1i'NH'7 P7 iQP' 7M'AJ Q I MGNP '
5M ip' NH'M'NPMI' 79 NN9P'MN IT
#NH M N'IpI%G i GPG HPi'NHPT'9 P'MG9PPL+
HP'K P' 7NHP' iQG' 7Q MGGH LLP G+
HP'N MKPG'M P'NHP' I i GH'ip' MNP T'APM IG+
HP'K 99M G'K KUPN'A ipG'NHP'9MGH' 779IG+
"p' MQQ ip'G M G1M99'Q MT K MNPO'79T
"HM97G'A Q'MG G'M 9 NN9P' I+
- KUPO'7 I'NHP'9MCT'7 iQP' 7M IM O+
#iO'i'NH G G N'GHP'QM99 LG'JL'MiO'O i
1%P'K J N p G%UippG'NHMN'O PMI'i'U GGpG'GN M N
XH KH' 7N'NHP'MiQ T' MA' NH'A9 GNP G'L9MQJPG+
pKMJGP'NHP 'A PMNHG' NH'G ppN7IpMi

I P' LP ! NPK GN 'MG'] J KU9T' MG' N' 99
I P' 7 P M ! O N P ! NT' TPM G' 8 M ! O' NHP ! ' P' I MGU%O+
%' ,$ % G' I P ' %N G' I P ' H G' G !' G' P9OP ' G 8
" G' G !' G' NH NT+
2' , ' $ X 99' T J' NP99' I P' NHMN' \
" G' G !' MG' AJN' M' M O' N ' TPM G' MQ +
! $ X HMN' 9MOT%G' NHMN ' H KH' O NH' P ! KH' NHP' HM ! O'
17' T !OP 'U ! QHN' \
(3 ' 2' U ! ' ! N ' G +
! ' 1 ' GHP' O NH' NPMKH' NHP' N KHPG' N ' AJ !' A QHN[
" P ' APMJNTD' HM ! QG' JL !' NHP' KHPPU' 7' ! QHN'
#GD' M' KH' EP P9' !' M !' 3NH L%G' PM
PMJNT' N ' KH' 7 ' JGP ' 7 ÷ PM NH' N ' OPM [
' GH G' M' G ! T' O P' N L ! Q' NH' K G+
#G' T !OP '9MOT' %P ' HP ' 7P99 G' GH G+
HP' I PMGJ P' O !P ' 2%99' MNKH' HP ' L9MKP' 7' GNM ! O+
#! O' N JKH ! Q' HP G ' I MUP' A9PGGPOF' I T' JOP' HM ! O+
5 O' I T' HPM N' 9 P' N 99' ! ' \ 7 G PM ' N ' G QHN[
0 ' 2' ! P%P ' GM ' N JP' APMJNT' N 99' NH G' ! QHN+
% " ' H G ' AT' H G' KP ' GH J9O' AP' M' ! NMQJP'
OPNKH' I P' I T' ML P ' A T' S X HMN[OM PG' NHP' G9M P+
I P' H NHP ' K P %O' NH' M ! ' M ! N K' 7MKP+
#A' >MGGD' ?HN' OADH' ?C' ABD' AMG@ H CE' W
' AT' NHP' GN KU' M ! O' H ! J ' 7' I T' U !+
' GN UP' H I ' OPMO' 2' H 9O' N' ! N' M' G !+
2' , ' X HT ' H ' ! ' U ! G I M !' ' HP P7 P' GN I ' T J'
G ' \ +
% " ' * HOMG ' CF ' ' ?' & AHC? BG ' ABD' >AG
#' P MM?H ' CF?C' ' F CFGD' A@G' H' K CG
' GK !' MN' J ' G 9P I ! NT' NH G' ! QHN+
2' , ' 4 J ! Q' & I P ' G%' \
% " ' % G' HP ' NHMN' 99M !' & I P +
2' , ' !NP ! N' NHPP ' QP ! N9P' K C ' 9PN' H I ' M9 ! P+
" P' APM G' H I ' 9 UP' M' L N9T' QP ! N9P I M !' 8
#! O ' N ' GMT' N JNH ' P ! M' A MQG' 7' H I +
' AP' M' NJ JG' M ! O' P99 Q P !%O' T JNH'
2' J9O' ! N' 7 ' NHP' PM9NH' 7' M99' NH G' N !+
" P' !' I T' H JGP' O ' H I ' O GLM MQP I P ! N
HP P7 P' AP' LMN P ! N ' NMUP' ! ' ! NP' 7' H I +
2N' G' I T' 998 NHP' H KH' 7' NH J' PGLPKN+
H ' M' 7M ' L PGP ! KP ' M ! O' LJN' 77' NHPGP' 7 ! G
#L' 99 APGPP I ! Q' GP I A9M ! KP' 7 ' M' 7PMGN+
% " ' 2N' 7 NG ' HP !' GJKH' M' 99M !' G' M' QJPGN8
2%99' ! AN' P ! OJ P' H I +
2' , ' O P' GHM99' AP' P ! OJ %O+
X HMN ' Q O I M !' A T[S2' GMT ' HP' GHM998S : ' N 8S
I ' 2' NHP' I MGNP ' HP P8' ' T J' ' Q ' N +
4 J%99' ! N' P ! OJ P' H I [S : O' GHM99' I P ! O' I T' G J9 S
4 J%99' I MUP' M' I JN ! T' M I ! Q' I T' QJPGNG' [
4 J' 99' GPN' K KU M H L' [D T J%99' AP' NHP' I M ! [
% " ' X HT ' J ! K9P ' %N G' M' GHM I P+
2' , ' : ' N ' Q ' N +
4 J' M P' M' GMJKT' A T S2G 8C' G ' HNGGN' \
H G' N KU' I MT' KHM ! KP' N ' GKMNHF' T J8S2' U ! ' HMN+
4 J' I JGN' K ! N M TF' I P[S I M T ' %N G' N I P S
X P99' GM O ' I T' HPM NG' [SD4 J' M P' M' L !K W' ' 3!' S
P'] J PN' S P' 9 QHN ' I P' 9 QHN+ SO$ ' GHM I P[S
2%99' I MUP' T J'] J PN8 X HMN' [S HPP 9T ' I T' HPM NG+
Y " ' - MN P ! KP' LP 7 KP' NH' 97J9' KH 9P ' I PPN ! Q'
MUPG' I T' 79PGH' N P I A9P' !' NHP ' O 77P P ! N' Q PPN ! Q+

$' 9 ' $ 2' $ %' # 99' NHP' M ! K P ! N' PO N !G' H KH' KM !' AP' K !G OP PO'
MJNH N PG SNHP' 7 J '] JM N G' M ! O' NHP' 7 GN' 7 9 S PMO' ' % %' %$ ' $ %' HP'
PMO ! Q' 7$ '$ 2' G' 7 I ' NHP' GPK ! O' 7 9 ÷ X HT ' NHP ! ' N' I MT' AP' MGUPO ' O '
P' OPLM N' 7 I ' J ' JGJM9' L !K L9P ' M ! O' PEPKN' M ! ' J ! O JANPO' M ! K P ! N' PMO ! Q' \
PKMJGP' NHP' PMO ! Q' H KH' P' Q P' HMG' APK I P' 7M I 9 M SHMG' LMGGPO' !N ' K I I !'
JGP' HP P P ' J ' 9M ! QJMQP' G' GL UP ! S G'] J NPO' !' A UG' MG' 7 P] JP ! N9T' MG' M ! T'
7' NHP' NHP ' LMGGMQPG' 7' HMUGLP P' H' KH' K !GNM ! N9T' L PGP ! N' NHP I GP9 PG' MG'
PWM I L9PG' 7' H G' PW] J G NP' L P ' 7' OPGK LN !÷ " P P ' N' MLLPM G' N ' JG ' G' M' H QHP '
9M ' N ' AP' AGP PO' NHM ! ' NHMN' 7' MO9 P P ! KP' N ' NHP' M ! K P ! N' K L PG÷ 2N' G' NHP' GM I P'
NH' N P' KP9PA MNPO' LMGGMQP S;

;' 6' 1 ' OPO KMNP' H G' APMJNT' N ' $ ' % G

#9' NHP' M ! K P ! N' K L PG' PMO' $ ' % ' X P' AP9 P P' NH G' N ' AP' M' I GL !N8 AJN ' P P !'
7' NHMN' K J9O' ! N' AP' M99PQPO ' P' GH J9O' 7PP' J GP9 PG' EJGN 7 PO' !' PNM ! ! Q' % '
JKH' !GNM ! KPG ' 7' K J GP ' L PGP ! N' AJN' P T' M P' PWKPLN !G' N ' M' QP ! P M9' J9P+

2' 99' NHO M ' 8 AJN' NH G' ! N JG !' GHM99+
' GPP I ! Q' G PPN ' K ! P N' N ' A NNP ' QM99+ 9: 4
! ' 27' 2' L 7M ! P' NH' I T' J ! NH PGN' HM ! O
^ H' / (
H G' H 9T' GH ! P ' NHP' QP ! N9P' 7 LPF' G' NH G S
T' 9 LG ' N ' A9JGH ! Q' L 9Q I G ' PDOT' GNM ! O'
$ ÷ ' G I NH' NHMN' JQH' N JKH' NH' M' NP ! OP ' U GG+
J& ' : O' L 9Q I ' T1J O ' ! Q' T J ' HM ! O' N ' I JKH÷'
X H KH' I M ! ! P 9T' OP N !' GH G' !' NH G' 8
0 ' GM ! NG' HM P' HM ! OG' NHMN' L 9Q I G% HM ! OG' O ' N JKH+
! O' LM9 I ' N ' LM9 I ' G' H 9T' LM9 I P G% U GG+
! ' " M P' ! N' GM ! NG' 9 LG ' M ! O' H 9T' LM9 I P G' N ' \
J ' #T ' L 9Q I ' 9 LG' NHMN' NHPT' I JGN' JGP' !' L MTP +
! ' 1 ' NHP ! ' OPM ' GM ! N ' 9PN' 9 LG' O ' HMN' HM ! OG' O ' 8
HPT' L MT ' Q M ! N' NH J ' 9PGN' 7M NH' NJ !' N ' OPGLM +
J& B' M ! NG' O ' ! N' I P ' NH JQH' Q M ! N' 7 ' L MTP G%
GMUP+
! ' HP !' I P' ! N ' H 9P' I T' L MTP G% P77PKN' 2' +NMUP÷'
HJG' 7 I ' I T' 9 LG ' AT' NH ! PF' I T' G !' G' LJ Q%O+
= -- 3'
J& ' HP !' HM P' I T' 9 LG' NHP' G !' NHMN' NHPT' HM P' N U+
! ' !' 7 I ' I T' 9 LG' \ 1' N PGLMGG' G PPN9T' J Q%O [
: P' I P' I T' G !' MQM !+
J ' 4 J' U GG' AT' NHP' A U+
& - ' MOM I ' T J ' I NHP ' K M PG' M' O' NH' T J÷'
! ' X HMN' G' HP ' I NHP ' \
& - ' @ M T ' AMKHP9 +
" P ' I NHP ' G' NHP' 9MOT' 7' NHP' H JGP+
! O' M' Q O' 9MOT ' M ! O' M' GP ' M ! O' NJ JG' 8
2' ! J G%O' HP ' OMJQHNP ' NHMN' T J' NM9U%O' NHM98
2' NP99' T J SDHP' NHMN' KM ! ' 9MT' H 9O' 7' HP +
HM99' HM P' NHP' KH ! UG+
! ' 2G' GHP' M' MLJ9PN' \
' OPM ' MKK J ! N[I T' 9 7P' G' I T' 7 P%G' OPAN+
% ' # MT ' APQ ! P' 8 NHP' GL N' G' MN' NHP' APGN+
! ' #T ' G ' 2' 7PM 8 NHP' I P' G' I T' J ! PGN+
2' , ' MT ' QP ! N9P I P ! ' L PLM P' ! N' N ' AP' Q ! P' 8
X P' HM P' M' N 79 ! Q' 7 9 GH' AM !] JPN' N M OG+DF
2G' N' P%P ! ' G ' \ X HT ' NHP ! ' 2' NHM ! U' T J' M998
' NHM ! U' T J ' H ! PGN' QP ! N9P I P ! 8 Q O' ! QHN S
P' N KHPG' HP P' [S I P' !' NHP ! ' 8 9PN%G' N ' APO+
H ' G MH ' = !' %' ' ;' AT' I T' 7MT' N' MWPG' 9MNP8
2%99' N ' I T' PGN÷' = 4 & ' ' (& ' / (' "' J GP+
J& ' I P' H NHP ' ! J GP ' 9DHMN' G' T !' QP ! N9P I M !' '
& - ' HP' G !' M ! O' HP ' 7' 9O' AP +
J& ' X HMN%G' HP ' NHMN' ! ' G' Q ! Q' JN' 7' O ' \
& - ' M T ' NHMN ' 2' NH ! U ' AP' T J ! Q' - PN JKH +
J& ' X HMN%G' HP ' NHMN' 7 99 G' NHP P ' NHMN' J9O' ! N' OM ! KP' \
& - ' 2' U ! ' ! N+
J& ' : ' MGU' H G' ! M I P' 8S 7' HP' HP' I M PO+
T' Q M P' G' 9 UP' N ' AP' I T' POO ! Q' APO+
& - ' " G' ! M I P' G' & I P ' M ! O' M' ! NMQJP8
HP' !9T' G !' 7' T J ' Q PMN' P ! P I T+
J& ' T' !9T' 9 P' GL J ! Q' 7 I ' I T' !9T' HMNP [
' PM 9T' GPP ! ' J ! U ! ! ' M ! O' U ! !' N ' 9MNP' [
- O Q JG' A NH' 7' 9 P' N' G' N ' I P+
HMN' 2' I JGN' 9 P' M' 9 MNHPO' P ! P I T+
& - ' X HMN%G' NH G' \ X HMN%G' NH G' \ 8
J& ' #' HT I P' 2' 9PM ! %O' P P !' !
17' ! P' 2' OM ! K%O' NHM9÷' = ' -' 2 $ 6 ?J9 PN+R

' V +*')
F' ' @ ' M ! O' 7 9 ÷ E +*' $ - -2
=' 4 ' (()! !$ - ' HP' Q !' 7' NH G' LH MGP ' NN$H KH' MLLPM G' M9 MTG' N ' AP' JGPO'
!' NHP' GP ! GP' 7' HMGNT' M ! O' 9P ! N' PWKPGG ' K' P T' O JAN7J9÷' HP' PKP PO' L ! !'
G' NHMN' !' G I P' 7PGN P' KKMG !G' NHP' (()* ' GL Q N ' MG' NMUP !' JN' 7' NHP' AM P9'
M ! O' 9M O' !' NHP' $ -* M ! O' NHMN' NHP' J ! !NP JLNPO' 79 ' 7' NHP' M9P' ! MNJ M99T' 9PO' N '
! NP I LP M ! KP÷' ;
' %($ SN ' !EJ P÷ D
F' 2' ' - H 9 L' O ! PT' M ! O' I M ! T' NHP ' 9O' NP G' JGP' NH G' MG' M' P A+
' (JSK WK I A+
F' 4 ' !' M99' ?HP' 9O' K L PG÷' X M AJ N !' KHM ! QPO' % ' N '
=' E +*' 2 %
' 8 % S PMOT ' MN' HM ! O÷' $

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S

I P 9P N%G M MT 8 NHP GN M!QP G M99 M P Q !P+ = 4 &

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(

9O OPG P O NH E! H G OPMNH APO 9 PD
#!O T J!Q M77PKN !QMLPG N AP H G HP 8
HMN 7M 7 H KH 9 P Q M!%O 7 M!O J9O O P
$ X NH NP!OP ?J9 PN I MNKH%O G! ! N 7M +
& I P G AP9 %O M!O 9 PG MQM !+
#9 UP AP NKHPO AT NHP KHM I 7 9 UG 8
JN NM H G 7 P GJLL G%O HP I JGN K I L9M !+
#!O GHP GNPM9 P%G G PPN AM N 7 I 7PM 7J9 H UG
P !Q HP9O M 7 P HP I MT ! N HM P MKKPGG
A PMNHP GJKH G MG 9 P G JGP N G PM 8
Y #!OD GHP MG I JKH !9 P HP I PM!G I JKH 9PGG
I PPN HP !P AP9 PO M!T HP P
JN LMGG !9P!OG NHP I L P N I P I PM!G N I PPN
P I L% !Q PWN P I N PG NH PWN P I P G PPN+ = 4

3 3 2 F !, "6! 3 MLJ9PN%G "

A #

! $ M! 2 Q 7 M O HP! I T HPM N G HP P \
J ! AMKU OJ99 PM NH M!O 7 !O NHT KP!N P JN+
= (- 2 $ "" ,-"!2 2

& "" (

% & I P [I T K JG !& I P [
E ; "P G GP#
#!O ! I T 9 7P HMNH GN 9P!H I H I P N APO+
% "P M! NH G MT M!O 9PML N NH G KHM O M99
M99 Q O P KJN +
MT 2%99 K !EJ P N +
& I P $[HJ I J G[I MO I M![LMGG ![9 P [
#LLPM NH ! NHP 9 UP!PGGD 7 G QH+
LPMU AJN !P HT I P M!O 2 M I GMN G7 PO+
T AJN S#H I P[L ! J!KPD AJN 9 P M!O O P8
LPMU N I T Q GG L P!JG !P 7M O+
1!P ! KU!M I P 7 HP LJ A9 !O G !M!O HP +
4 J!Q #A MHM I D JL O HP NHMN GH N G N I +
XHP!U !Q LHPNJM 9 %O NHP APQQM I M O+F S
"P HPM PNH ! N HP GN PNH ! N HP I PNH ! N8 ;
HP MLPF G OPMO M!O 2 I JGN K !EJ P H I +S
2 K !EJ P+NHPP AT & GM9 !P%G A QHN PTPG+
T HP H QH 7 PHPMO M!O HP GKM 9PN 9 L+
T HP 7 !P 7 N GN M QHN 9PQ M!O]J P !Q NH QH+

;

#!O NHP OP I PG!PG NHMN NHP P MOEMKP! N 9 P+
HMN !NHT 9 UP!PGG NH J MLLPM N JG+
% #!O 7 HP HPM NHPP NH J 9N M!QP H I +
H G KM!! N M!QP H I 8 %N J9O M!QP H I
M GP M GL N !H G I GN PGG% K K9P
17 G I P GN M!QP !MNJ P 9PNN !Q N NHP P GNM!O
99 GHP HMO 9M O N M!O K !EJ %O N O !8
HMN P P G I P GL NP I T ! KMN !
2G 7M M!O H !PGN M!O !H G+ I GN PGG% !M I P
2 K !EJ P !9T AJN N M GP JL H I ++
% I P HP HMNH H O H I GP97 M I !Q NHPGP N PPG ,
AP K !G NPO NH NHP HJ I JGD ! QHN
9 !O G H G 9 P M!O APGN AP7 NG NHP OM U+
E $ 27 9 P AP A9 !O 9 P KM!! N H N NHP I M U
99 HP G N J!OP M I PO9M N PP
#!O GH H G I GN PGG P P NHMN U !O 7 7 J N+
#G I M OG KM99 I PO9M G HP!NHPT 9MJQH M9 !P+F
& I P Q O ! QHN S2%99 N I T N JKU9P APO
H G 7 P9O APO G N K 9O 7 +I P+N G9PPL
I P GHM99 P Q \
% : NHP!8 7 %N G H M !
GPPU H I HP P NHMN I PM!G ! N N AP 7LJ!O+ = 4 & $

3 3 22+ S MLJ9PN%G "

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! "P EPGNG MN GKM G NHMN !P P 7P9N M J!O+ S$
;/(, , -(!1$ 2 "!2
JN G 7N[HMN 9 QHN NH JQH T !OP !O A PMUG \
2N G NHP PMGN M!O ?J9 PN G NHP GJ![S
GP 7M GJ! M O U 99 NHP P! JG I !
XH G M9 PMOT G KU M!O LM9P NH Q P7 Y
HMN NH J HP I M O M N 7M I P 7M NHM!G9 P
P ! N HP I M O F G !KP GHP G P! JG 8
"P PGNM9 P T G AJN G KU M!O Q PP! +
#!O ! !P AJN 7 9G O PM N8 KMGN N 77 S
2N G I T 9MOT 1 N G I T 9 P
1 NHMN GHP U!P GHP P P[S
HP GLPMUG TPN GHP GMTG ! NH !Q8 X HMN 7 NHMN \
"P PTP O GK J GPG 2 99 M!G P N+S
2 M I N A 9O %N G ! N N I P GHP GLPMUG
7 NHP 7M PGN GNM G !9 M99 NHP HPM P!+
"M !Q G I P AJG !PGG O P!N PMN HP PTPG
N !U9P !NHP GLHP PG N 99 NHPT PNJ !+
XHMN 7 HP PTPG P P NHP P NHPT !HP HPMO \
HP A QHN!PGG 7 HP KHPPU J9O GHM I P NH GP GNM G
#G OMT9 QHN O NH M 9M I L 8 HP PTP !HPM P!
X J9O NH JQH NHP M T PQ !GN PM I G A QHN+
HMN A OG J9O G !Q M!O NH !U N P P ! N ! QHN+
PP H GHP 9PM!G HP KHPPU JL !HP HM!O[
1 NHMN 2 P P M Q9 P JL !NHMN HM!O+
HMN 2 I QHN N JKH NHMN KHPPU[
J& #H I P[

$ V +0" P%- (;NHP GJAGP]JP!N]JM N G M!O $ % *- ;NHP
GPK !O 7 9 (-'2 NPP P!G OPG PO N PNM !- PT= *N L OP 7 I NHP
- *L G !+
#9 99 NHP 9O K L PG HM P " $ LN !KHM!QPO N N 6 #OM I R H KH
I OP !PO N G HM P MO LNPO GJLL G !Q NHP M99JG !6 HP NHMN GH N G N I R MG
N NHP #OM I P99 7NHP 9O AM99MO N H I HMUGLP P HMG M9G M99JOPO !JKH
#O MA JN NH !Q 6 "P NHMN H NG I P 9P N H I AP K9MLLPO !NHP GH J9OP M!O
KM99PO #OM I +R JN NHP O 6 N I R H KH G NHP PMO !Q 7 NHP 7 GN]JM N
@NHP GJAGP]JP! N PO N !G Q !Q JG +# G O GN !KN9T OP PO 7 I NHP 6 M99MO K7
!Q LHPNJM M!O NHP PQQM I M O8R S

6 HP A9 !OPO A T NHMN GH NG G *
O I HPM P!O N M O O H P+
"P O P M OM N M!O GH N MN H I +
2!L9MKP HP P HP O O 9 P+R

X NH M99 GJA I GG !N NHP L ! !7 -P KT H MO LNG NHP PMO !Q 7 LN !
P NH !U NHMN NHP KHM!QP 7 #A MHM I !N #OM I MG J!KM99PO 7 " $
K ! PTG M! NHP OPM NHM!NHMN 7 JL O G NHP KHPGN SNHP 6 #A MHM I R JL O G NHP KHPGN SNHP 6 #A MHM I I M!R S 7 J 9O
GNMNJNPG
$ - SDDM PWL PGG !7U !O9T 7M I 9 M NT MLL9 PO N M T J!D I M
9 %SOP T ML JG+
D HP P M P N 9 !PG HP P I NNPO !NHP NPWN 7 NPP !G G PO N ! H KH
+

M9 !P HMG PGN PO N NHP NPWN 9 P 9 !PG M P Q GG AJN NHD Q GG!PGG G AGKJ P
M!O 7 N P P J!OP GN O K J9O GKM KP9T AP KM PO K JLN !Q HP 7 PPO I G 7
P KJN M GP JN 7H G O M I MN K KHM MKNP H G PWJAP M!N GL NG APN MT H I !N
9P N PG H KH M P K !GNM!N9T LL GPO N NHP !NP99PKNJM9 P7 LP I P!N H KH GPG
MA P GJKH AMGP I MNNP JN - LP PEPKNPO NHPGP 9 EPG S - LP H ! NHP
6 &MLP 7 NHP / KU R HMG !N OJKPO !P K JL9PN MN 9PMGN NHMN J9O HM P
O GQ MKPO NHP MQP 7 39 CMAPNH XP O ! N L !N NHP N 9 !PG 7 HMUGLP P 7
NHPT KM! !9T !NP PGN NHP P AM9 K N K JN P O GN !KN9T PK O NHP I GG !
#G 7M MG P HM P APP!MA9P N N MKP SM!O P HM P Q !P NH JQH NHP 9O PO N !G
NH M! PGLPK M9 P7P P!KP N NH G I MNNP DNHPGP N 9 !PG K !GN NJNP NHP 'Z
LMGGMQP !NHP Q !M9 PO N !G H KH HMG APP! I NNPO AT H OP I PO N G X NH
NH G PWKPLN !NHP P G ! N M LMGGMQP !HMUGLP P H KH G N PL !NPO !P P T
PO N !PWKPL NHMN 7 O9P #!O TPN NHP NP ! !/M O!P %G 6 TK9
LMPO M R @/ PG 7 / NP M T M!O K P!N 7 K P! HMG P!NJ PO N I MUP NHP 7 99 !O
MGGP N ! &$ $ %') $ $ %
O GQJGNPO %J!NH NHP AGKP! NT 7 H G M99JG !G HPT MAG 9JNP9T NPP I NH NHP
Q GGPGN I L P N PG S I P Q GG AT 7M NHM!KM!AP 7 J!O !M!T K !NP I L M T
O M I MN GN+R HP !G !JMN !NHMN NHP %K !NM ! I L L PN PG NHMN
YM P ! N N AP 7 J!O ! % G O 77 KJ9N N KHM MKNP CP NH JN JG !Q
PWL PGG !G NHMN HMO APNNP AP M OPO
D P ! N M NM T N 5 M!M S NHP
>JPP!M!O HJ!N DG HMGNP M!O 7M R

D 7 P! ?!G !%G APMJN 7J9 HT I !+

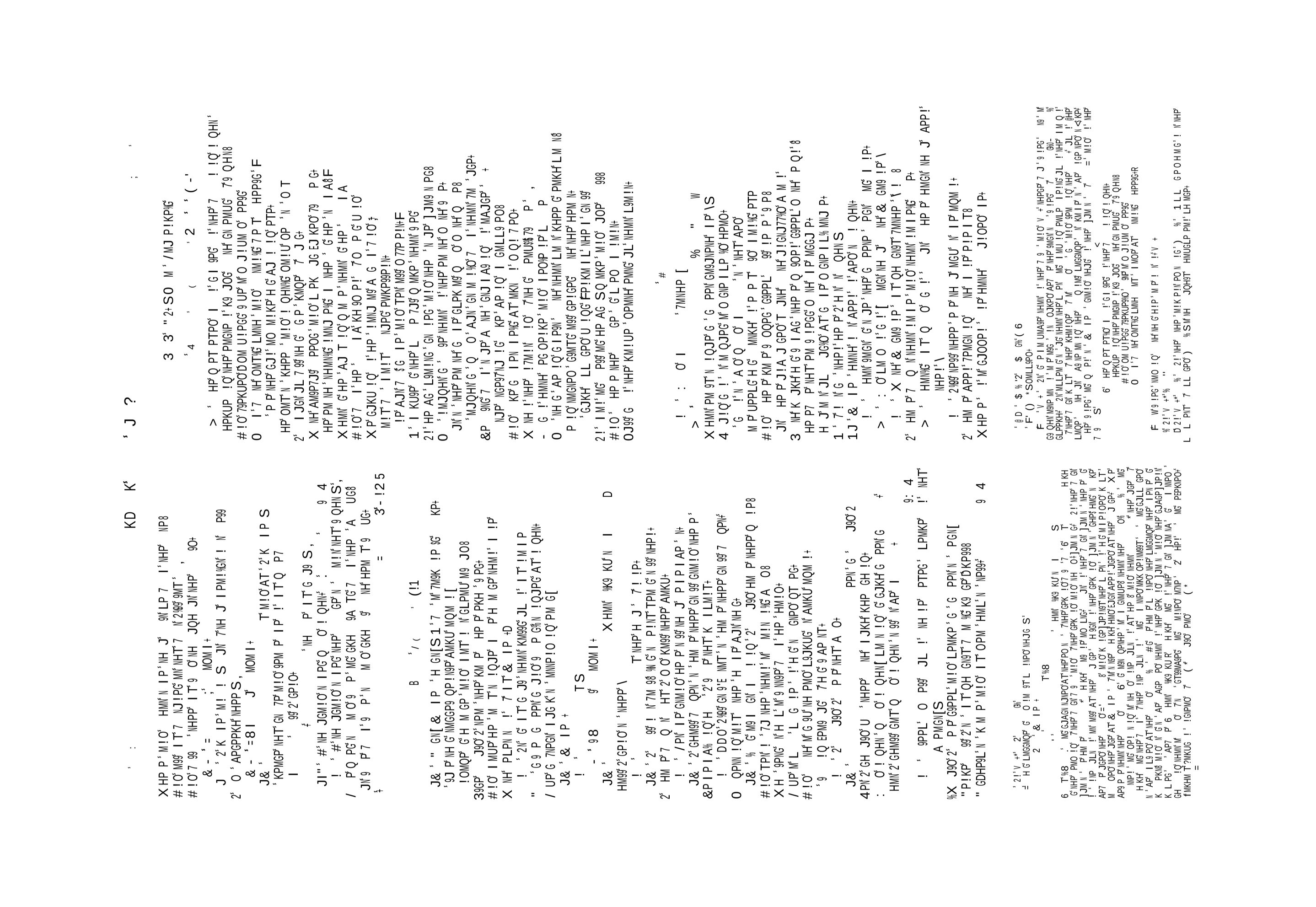
! $ HP GLPMUG S
1 GLPMU MQM ! A QHN M ! QP9[7 NH J M N
#G Q9 JG N NH G ! QHN AP !Q %P I T HPMO+
#G G M !QPO I PGGP!QP 7 HPM P!
!N NHP H NP JLNJ !PO !O% !Q PTPG
17 I NM9G NHMN 7M99 AMKU N +QMCP !' H I
HP!' HP APGN OPG NHP 9MCT LMK !Q9 K9 JOG %
#!O GM 9G JL !' NHP A G I 7 NHO M +
J " 1 & I P & I D HP P7 P M N NH J & I P \
5P!T NHT 7MNHP M!O P7JGP NHT ! M I P8
2 +:*' ; , *+ 9% 9'+ (; *2 , 1 *7%
#!O 2%99 ! 9 !QP AP M MLJ9PN+
! HM99 2 HPM +! P GHM99 2 GLPMU MN 7H G \
Ž Q& A
J& % G AJN NHT LM I P NHMN G I T P!P I T8S
H J M N NHTGP97 NH JQHD ! M M !NMQJP+
X HMN%G !NMQJP \ N G ! HM!O ! 7 N+
M I ! 7MKP ! M! T NHP LM N
P9 !Q !Q N M I M! ; 1 AP G I P NHP M !M I P[F
X HMN%G !' M !M I P \ NHMN H KH P KM99 M GP+
T M!T NHP !M I$P D $ J9O G I P99 MG G PPN8
& I P JABMN 4DG HP HAC & I P KM99%O+
&PNM !' NHMN OPM LP 7PKN !' H KH HP PG
X NH JN NHMN N N9D S& I P O 9ONHT ! M I P8
#!O 7 NHTF !M I P H KH G ! LM N 7 NHPP+
MUP M99 I TGP97
! $ 2 +NMUP NHPP MN NHT O
M99 I P AJN 9 P +M!O 2%99 AP !P AML N C%O 8
"P!KP7 NH 2 !P P T 99 AP & I P +
J& +X HMN I M!' M N NH J NHMN NHJG APGK PP!%O !' ! QHN
GNJ I A9PGN ! I T K J!GP9 \
, ! * , , T M !M I P
2 U! ! N H N P99 NHPP H 2 M I 8
$ T !M I P OPM GM !N G HMNP7J9 N + I TGP97
PKMJGP YN G MH P!P I T N NHPP8

Y O NHMN H KH NH T HMGN HPM O I P GLPMU N ! QHN++
OM !' J9O 2 ON P99 E 7 I 7M ! 7M !' OP!T
X HMN 2 HM P GL UP J N 7M P P99 K I L9 I P!N[%;
5 GN NH J 9 P I P \ 2 U! NH J 9N GMT S # T8
O 2 99 NMUP NHT O TPN 7 NH J G PM %GN
H J I MT%GN L TP 7M9GP8 MN 9 P G% LP EJ PG
HPT GMT ? P 9MJQHG 1 QP!N9P & I P
27 NH J O GN 9 P L ! J!KP 7 7M NH7J99T
1 7 NH J NH !U%GN 2 M I N] J KU9T !+
2%99 7 ! M!O AP LP P GP M!O GMT NHPP !MT+
NH J 9N 8 AJN P9GP ! N 7 NHP 9O+
2!N JNH 7M ! NMQJP 2 M I N 7 !O8 D
#!O NHP P7 P NH J I MT%GN NH !U I T HM J 9 QHN
JN N JGN I P QP!N9P I M!+ 2%99 L P I P N JP
HM!' NH GP NHMN HM P I P KJ!! !Q N AP GN M!QP+
2 GH J9O HM P APP!' I P GN M!QP 2 I JGN K !7PGG+
JN NHMN NH J P HPM O%GN P P 2 MG M P+
T N JP 9 P%G LMGG ! NHP P7 P LM O !' I P8
#!O ! N I LJNP NH G T P9O !Q N 9 QHN 9 P+
X H KH NHP OM U ! QHN HMNH G O GK P PO+
! / MOT AT T !OP A9PGGPO I !' 2 G PM
HMN N LG NH G 9 P M99 NHPGP 7 J N N PP N LG S
J& 1 G PM ! N AT NHP I ! NHP !K !GNM!N I !
HMN I !NH9T KHM!QPG !' HP K K9PO A+
/PGN NHMN NHT 9 P L P 9 UP GP M MA9P+
! X HMN GHM99 2 G PM AT
J& 5 ! N G PM MN M998
1 7 NH J 9N G PM AT NHT Q MK JG GP97+
X H KH G NHP Q O 7 I T O 9MN T Z
#!O 2%99 AP9 P P NHPP+
! $ 27 I T HPM N%G OPM 9 PS
J& $) % O* , *+ (; %-28F - +:*'<:'2 .*1 , +:%%Q
2 HM P ! E T 7 NH G K !N MKN ! QHN8
2N G N MGH N J!MO G%O N GJOOP!8
9 UP NHP 9 QHN! !Q H KH O NH KPMGP N AP
3 P !P KM!' GMT S2N 9 QHNP!G PPN Q O ! QHN2
H G AJO 7 9 P AT GJ I I P %G LP! !Q A PMNH
MT L P M APMJNP JG 79 P HP!' !PWN P I PPN+
: O ! QHN Q O ! QHN ' MG G PPN PL GP M!O PGN
I P N NHT HPM N MG NHMN NH !' I T A PMGN
! 1 9N NH J 9PM P I P G J!GMN G7 PO \
J& X HMN GMN G7MKN !' KM!GN NH J HM P N ! QHN\
! HP PWKHM!QP 7 NHT 9 P%G 7M NH7J9 7 I !P
J& $ 2 QM P NHPP I !P AP7 EL NH J O OGN P]JPGN +
#!O TPN 2 J9O N P P N Q P MQM !+
! X J9OGN NH J NHO M N \7 HMN LJ L GP 9 P \
J& JN N AP 7 M!U M!O Q P N NHPP MQM ! +
#!O TPN 2 GH AJN 7 NHP NH !Q 2 HM P
T A J!NT G MG A J!O9PGG MG NHP GPM+
T 9 P MG OPPL8 NHP I P 2 Q P N NHPP+
HP I P 2 HM P 7 A NH $!7 ! NP+
^ J GP -2
2 HPM G I P ! GP NH !8 5PM 9 P MO PJ
#! !Q O !J GP[S PPN !NMQJP AP N JP+
NMT AJN M 9 NN9P 2 99 K I P MQM !+ 9: 4
! 1 A9PGGPO A9PGGPO ! QHN[2 M I M7PM O+
P !Q !' ! QHN M99 NH G G AJN M O PM I +
79MNNP !Q G PPN N AP GJAGNM!N M9+

B = 1 (!1

J& H PP OG OPM & I P M!O Q O ! QHN !OPPO+
27 NHMN NHT AP!N 7 9 P AP H ! J MA9P+
HT LJ L GP I M MQP GP!O I P O N I +
T !P NHMN 2%99 L KJ P N K I P N NHPP

% V +*%
F %') SO GL9PMGP+
2!'V +*'
2!'E 0+*% $
$$ 3 $ ' SG NH J O AJN 9 P I P+
4"'V + ' ' ' ' V5+*%$ '
F + '"(-' S7M P P99 PGLPKN 7 7 E!G+
4 ? + ' ' ' E +* ((2
$2!'7 9 M!O V5+* M
1 / + 22+ =



HMN%G AT I P J!OPO 8 A NH J P I PO PG
X NH !' NHT HP9L' M!O H 9T LHTG K 9 PG 8D
2 APM ' ! ' HMN PO ' A9PGGPO I M!' 8 7 ' ?+
'c2T !NP KPGG !' 9 UP GP GNPMOG I T 7 P+
> ' P L9M ! ' Q O G !' M!O H I P9T !' NHT O 7N 8
& OO9 !Q K !7PGG !' 7 !OG AJN OO9 !Q GH 7N+
! ' HP!' L9M !9T U! ' I T HPM N%G OPM ' 9 P G GPN
$ 1 !' NHP 7M ' OMJQHNP ' 7 KH ML J9PN
#G I !P !' HP G ' G ' HP G G GPN !' I !P 8
#!O M99 K I A !%O ' GM P HMN NH J I JGN K I A !P
T H 9T I M MQP ' X HP!' M!O HP P ' M!O H +
X P I PN ' P PO ' M!O I MOP PWKHM!QP 7 +
2%9 NP99 NHPP MG P LMGG 8 AJN NH G 2 L MT+
HMN NH J K !GP!N N ' I M T JG N OMT+
> ' " 9T M !N O M!K G[HMN M KHM!QP G HP P [
2G & GM9 !P ' NHMN NH J O OGN 9 P G ' OPM
' G !' 7 GMUP!' \ T J!Q I P!%G 9 P NHP!' 9 PG
N N J9T !' NHP ' HPM NG ' AJN !' NHP ' PTPG+
J ' E '. HMN M OPM9 7 A !P
" MNH MGH%O NHT GM99 ' KHPPUG 7 ' & GM9 !P [
" ' L JKH GM9N MNP ' NH !' M MT !' MGNP+
' GPMG !' 9 P ' NHMN 7 N O NH ! N NMGNP [
HP GJH ! N TPN NHT G QHG 7 I ' HPM P!' K9PM G+
HT 9O Q M!G !Q TPN !' I T M!K P!N PM G 8
/ ' HP P JL !' NHT KHPPU NHP GNM !' O NH G N
17 M!' 9O NPM ' NHMN G ! N MGH%O 77 1 %+
27 P%P ' NH J MGN NHTGP97 ' M!O NHPGP PG NH !P+
H J M!O NHPGP PG P P M99 7 ' & GM9 !P8
#!O M N NH J KHM!Q%O \ L ! J!KP NH G GP!NP!KP NHP! S
X I P!' I MT 7M99 ' HP!' NHP P%G ! ' GN P!QNH !' I P!+
& I ÷ H J KH OO%GN I P 7N 7 ' 9 !Q & GM9 !P+
> ' O ' O N !Q ' ! N 7 ' 9 !Q ' LJL G I !P+
! ' # !O AMO%GN I P AJ T 9 P+
> ' N !' M Q M P
' 9MT !P ! ' M! NHP ' JN N ' HM P+
! ' 2 L MT NHPP ' KH OP ! N ' GHP ' H I 2 9 P ! ÷
5 NH Q MKP 7 ' Q MKP ' M!O 9 P 7 ' 9 P M99 8
HP NHP ' O O ! N G +
> ' ' 1 ' GHP U!P ' P99+
HT 9 P O O PMO AT NP ' M!O K J9O ! N GLP99+
JN K I P ' T J!Q M P P ' K I P ' Q ' NH I P
2!' !P PGLPKN 2%9 NHT MGG GNM!N AP8
O ' NH G M99 M!KP I MT G ' HMLLT L P+
' NJ !' T J ' H JGPH 9OG% M!K J ' N ' LJ P 9 P+
! ' 1 ' 9PN JG HP!KP 8 2 GNM!O !' GJOOP!' HMGNP+
> ' X GP9T ' M!O G9 8 HPT GNJ I A9P ' NHMN J!' 7MGN+
9 4 &

3 3 2 + S " ' 7

' & , ' "' = ,

E ' X HP P NHP OP 9 GH J9O NH G & I P ' AP \S
M I P HP ! N H I P N ! QHN \
% ' N N ' H G 7MNHP %G 8 2 GL UP NH H G I M!+
E ' X HT ' NHMN GM I P LM9P HM O HPM NPO P!KH ' NHMN
& GM9 !P
I P!NG H I ' G ' NHMN HP 99 GJ P J!' I MO+
% ' TAM9N ' NHP U !G I M!' 7 9O MLJ9PN
" MNH GP!N M 9PNNP ' N ' H G 7MNHP %G H JGP+
E ' #' KHM99P!QP ' !' I T 9 7P+
% ' & I P ' 99 M!G P ' N+
E '' #!T I M!' NHMN KM!' NP ' I MT M!G P ' M 9PNNP ÷
% ' MT ' HP 99 M!G P ' NHP 9PNNP %G I MGNP ' H ' HP
OM PG ' AP !Q OM PO+
E ' #9MG ' L ' & I P ' HP G M9 PMOT OPMO[GNMAAPO
NH M H NP P!KH%G A9MKU PTP 8 GH N NH JQH NHP PM ' NH

R Z Z U

' HP KP!N P 7 NHP NM QPN ' HP P NHP L !' 7MGNP!PO NHP K9 JN+
D TAP N G # P !M I P Q P!' N ' NHP+KMN !' NHP GN T 7 6 &PT!M O @7PP O W+R
F ()!% S I JG K L KUPO ' ' ! NPO ' O ! ' G ' MG N ' PMO MKK O !Q N ' J9P '
!' K !N MO GN !KN !' N ' I JG K 9PM !N "2 NHP PM ' ' GJ!Q 7 I ' I P I T+
Y HP Q PT PTP S NHP A9JP PTP S MG NHP I GN APMJN 7J9 2!' NHP P!JG M!O
#O ! G ' P!JG GMTG ' 6 !P PTPG M P Q PT+R

M 9 P G !Q 8 NHP P T L !' (7 H G HPM N K9P7N NH NHP A9 !O
A A T%G AJNN GHM7N8 # !O G HP M I M!' N$ P!K J!NP '
TAM9N \ $ Y
% ' X HT ' N HMN G TAM9N
E $ P NHM!' L !KP 7 KMNG .' 2 KM!' NP99 T J+$ 1 ' HP G
NHP K J MQP JG KMLNM !' 7 K I L9 I P!NG+ " P 7 QHNG MG T J
G !Q L KU G !Q ' UPPLG N I P ' O GNM!KP ' M!O L L N !8
PGNG I P H G I ! I ' PGN ' !P N ' M!O NHP NH O !' T J '
A G I ' ' NHP P T AJNKHP ' 7 M G 9U AJNN ! ' M OJP99 GN ' M
OJP99 GN M QP!N9P I M!' 7 NHP P T 7 GN H JGP S 7 NHPD GN
M!O GPK !O KMJGP ' #H ' NHP I I NM9 LMGGMO [NHP LJ!KN '
P P GP [NHP HMT [
% ' HP HMN \
E ' HP L W 7 GJKH M!N K ' 9 GL !Q ' M77PKN !Q 7M!NMGN '
K PG 8 NHPGP !P ' NJ!P G 7 MKKP!NG[S T ?PGJ ' M P T Q O$
A9MOP[S M P T NM99 I M!' [S M P T Q O H P [SDXHT ' G
! N NH G M 9M I P!NMA9P NH !Q ' Q M!OG P ' NHMN P GH J9O AP
NHJG M7 " KNPO NH NHPGP GN M!QP 79 PG ' NHPGP 7MGH ! I !QP G '
NHPGP . "! B -$ H ' GNM!O G ' I JKH !' NHP !P ' 7 I ' NHMN
NHPT KM!! N G N MN PMGP !' NHP 9O AP!KH \ 1 ' NHP ' ! -$
NHP ' ! -' W

' #

% ' " P P K I PG & I P ' HP P K I PG & I P +
E ' X NH JN H G P ' 9 UP M O PO HP !Q S1 ' 79PGH '
79PGH ' H ' M N NH J 7 GH 7 PO[SD ' G HP 7 ' NHP !J I AP G
NHMN - PN M KH 79 PO !' ' / MJ M ' N ' H G 9MOT ' MG AJN M
U NKHP! P!KH8 S I M T ' GHP HMO M APNNP ' 9 P N ' AP HT I P
HP ' 5 O ' M O OT8 9P LMN M ' M Q LGT8 " P9P!' M!O " P '
H 9O !QG M!O HM 9 NG 8 H GAP ' M Q PT PTP ' G D AJN ! N N '
NHP LJ L GP+ S Q! ' & I P ' NHP P%G M O P!KH
GM9JNMN !' N ' T J ' O P!KH G9 L÷ 4 J QM P JG NHP K J!NP _
7P N 7M 9T 9MGN ! QHN+
! ' : O I ' N ' T J A NH÷ X HMN K J!NP 7P N O O
2 Q P T J \
E ' HP G9 L ' G ' NHP G9 L M!' T J ! N K !KP P \
! ' - M O !' Q O P KJN ' I T AJG !PGG MG Q PMN8
M!O ' !' GJKH M KMGP MG I !P ' M I M!' I MT GN M !' K J NPGT+
E ' HMN%G MG I JKH MG N ' GMT S GJKH M KMGP MG T J G
K !GN M !G M' I M!' N ' A ' !' NHP HM I G+
! ' PM! !Q SN ' K J N%GT+
E ' H J HMGN I GN U !O9T H N N+
! ' #' I GN K J NP JG PWL G N !+
E ' MT ' 2 M I ' NHP P T L !U 7 K J NPGT+
! ' - !U 7 ' 79 P +
E ' & QHN+
! ' X HT ' NHP!' G I T LJ I L' P99 79 P PO+F
E 4 ' J P N+F O 99 ' I P NH G EPGN ! ' N 99 NH J HMGN
!' JN NHT LJ I L8 NHMN ' HP!' NHP G !Q9P G 9P 7 N G
!' NHP EPGN I MT P I M !' M7NP ' NHP PM !Q ' G 9P9T
G !QJ9M +
! ' 1 ' G !Q9P G 9PO EPGN ' G 9P9T G !QJ9M ' 7 ' NHP G !Q9P_
!PGG $
E ' I P APN PP!' JG ' Q O P! 9 8 I T NG 7M !N+
! ' NKH M!O GLJ G ' G NKH M!O GLJ G 8 ' 2%99 K T M
I MNKH+
E ' MT ' 7 J ' NG J!' NHP 9O Q GP KHMGP Y 2 HM P
O !P 8 7 ' NH J HMGN I P 7 NHP 9O Q GP !' !P 7 NHT
NG ' NHM!' 2 M I ' GJ P ' 2 HM P !' I T H 9P 7 P ' X MG 2
NH T J NHP P 7 ' NHP Q GP \
! ' H J MGN !P P ' NH I P 7 ' M!TNH !Q ' HP!' NH J
MGN ! N NHP P 7 ' NHP Q GP+
E ' 2 99 A NP NHPP AT NHD PM ' 7 ' NHMN EPGN+
! ' MT ' Q O Q GP ' A NP ! N+
E ' HT N G% M P T A NNP ' G PPN !Q8 % N G M I GN
GHM L GMJKP+
! ' #!O G N ! N P99 GP PO !' N ' M G PPN Q GP \

F HP MG NHP GH P÷ X P]D J NHP O÷ HP AA !G !' NHP L J!L'
P P GHMLPO MH 79 P G+
< 2!' V +*' & '"%
% HP !M I P 7 M!' MLL9P+

E $HP P%G M N 7KHP P P9 NHMN GN PNKHPG7 I M!
!KH !M 'EN M!' P99A MO[
...E CGN PNKH N JN7 NHMN O S%A MO H KH MOOPO
N NHP Q GP L PG NHPP 7M M!O OP M A MO Q GP+
E XHE G ! N NH G APNNP ! NHM!' Q M! !Q 7
9 P\D ! %D M N NH J G K MA9P ! M N NH J & I P 8 !
M N NH J HMD NH J M N AT M N MG P99 MG AT ! MNJ P87 NH G
O P99 !Q 9 P G 9 UP M Q PMN !MNJ M9 NHMN J!G 9 99 !Q JL
M!O O !N H OP H G AMJA9P !' M H 9P+
; N L NHP P GN L NHP P+
E H J OPG PGN I P N GN L !' I T NM9P MQM !GN NHP
HM +
% H J J9OGN P9GP HM P I MOP NHT NM9P 9M QP+
E 1 NH M N OPKP PO 2 J9O HM P I MOP N GH N
7 2 MG K I P N NHP H 9P OPLNH 7 I T NM9P M!O I PM!N
!OPPO N KKJLT NHP M QJ I P!N ! 9 !QP +
! " P P%G Q O9T QPM N

BD G "- 1

E #GM 9 M GM 9 M GM 9
% N 8 M GH N M!O M G I KU+
& - - PNP [
# ! ![+
& - T 7M! -PNP +
E : O -PNP N H OP HP 7MKP8 7 HP 7M!%G NHP
+7M P 7MKP+
- : O TP Q O I QP!N9P I P!+
E : O TP Q O OP! 7M QP!N9P I M!+
& - 2G N Q O OP! \6
E % G ! 9PGG 2 NP99 T J8 7 NHP AM OT HM!O 7 NHP
O M9 G ! JL !NHP L KU 7 ! !+
& - 1JN JL !T J HMN M I M!M P T P9JGN P NHM!' HP G M!O N P!NT GJKH ?MKUG8
M!O 7 2 KM!! N+ 2%99 7 !O NH GP NHMN GHM99+ KJ T U!M P[
2 M I ! !P 7H G 79 N Q 99G8 2 M I ! !P 7H G GUM !G I MNPG

D O 9PMNHP S7 I ($ '# M PAJKU+
#99 NH G O M9 QJP 7 I 6 I I P!O I P N NHT I GN PGG R G ! N !E +

SD#!O NH J I JGN DNM!O AT N M!O GJ77P P P T U!M P N
JGP I P MN H G L9PMGJ P \
2 GM I M!' JGP T J MN H G L9PMGJ P 7 2 HMO I T
PML !' GH J9O]J KU7T HM P APP!' JN 2 M M!N T J 2
OM P O M MG G !' MG M! NHP I M!' 7 2 GPP PQMG !' !' M
Q O]JM P9 M!O NHP 9M ! !' I T G OP+
& - M7 P : O 2 M I G PWPO NHMN P P T LM N
MA JN I P]J P G KJ T U!M P S - MT T J G M O
M!O MG 2 N 9O T J I T T J!Q 9MOT AMOP I P !]J P T J JN8
HMN GHP AMOP I P GMT 2 99 UPPL N I TGP97 AJN 7 GN 9PN
I P NP99 TP 7 TP GH J9O 9PMO HP !N M 7 9%G LM MO GP MG
NHPT GMT N P P M P T Q GG U !O 7 APHM J MG NHPT
GMT 7 NHP QP!N9P I M!' G T J!Q8 M!O NHP P7 P 7 T J
GH J9O OPM9 O JA9P NH HP N J9T N P P M!' 99 NH !Q N
AP 77P PO N M!T QP!N9P I M!' M!O P T PMU OPM9 !Q
! J GP K I I P!O I P N NHT 9MOT M!O I GN PGG+ 2
L NPGN J!N NHPP S
& - : O HPM N2 M!O %7M NH 2 99 NP99 HP MG I JKH
/ O / O GHP 99 AP M E T7J9 I M!+
! X HMN 9N NH J NP99 HP ! J GP \ NH J O GN ! N
I M U I P+
& -)' 99 NP99 HP G SNHMN T J O L NPGN8 H KH
MG 2 NMUP N G M QP!N9P I M!9 UP 77P +
! O HP OP GP G I P I PM!G N K I P N GH 7N
H G M7NP ! !8
#!O NHP P GHP GHM99 MN 7 M / MJ O!PP% KP99
P GH %O M!O I M PO+ "P P G 7 NHT LM !G+
- N J9T G 8 ! N M LP!!T+
! : N 8 2 GMT T J GHM99+
& - H G M7NP ! !' G \ P99 GHP GHM99 AP NHP P+
! #!O GNMT Q O !J GP APH !O NHP MAAPT M99
X NH !' NH G H J I T I M!' GHM99 AP NH NHPP8
#!O A !Q NHPP K OG I MOP 9 UP M NMKU9PO GNM
X H KH N NHP H QH N L QM99M!N 7 I T E T
JGN AP I T ! T !' NHP GPK PN ! QHN+
OM P P99[S P N JGNT M!O 2%99]J NP NHT LM !G+
OM P P99[S I I P!O I P N NHT I GN PGG+
& - : O !' HPM P!' A9PGG NHPP 2S "M U T J G +
! X HMN GMT%GN NH J I T OPM !J GP \
& - 2G T J I M!' GPK PN \ 5 O T J !P%P HPM GMT
I MT UPPL KLJ!GP9 LJNN !Q !P M MT \
! 2 M M!N NHPP8 I T I M!%G MG N JP MG GNPP9+
& - XP99 G 8 I T I GN PGG G NHP G PPNPGN 9MOT S
/ O / O S HP!' %N MG M 9 NN9P L MN !Q NH !Q S1 NHP P%G
M ! A9P I M!' !' N !' !P -M G NHMN J9O 7M !' 9MT U! 7P
MA M O8 AJN GHP Q O G J9 HMO MG 9 P P GPP M N MO M P T
N MO MG GPP H I + 2 M!QP HP G I PN I PG M!O NP99 HPA NHMN
-M G G NHP L LP P I M!8 AJN+ 2%99 M M!N T J HP!' ?
hMT G GHP 9 UG MG LM9P MG M!T K9 JN !' NHP M GM9 9O+
5 NH ! N GP I M T M!O & I P APQ !' A NH NH M 9PNNP \
! #T !J GP8 XHMN 7NHMN \ A NH ONH M!' &+
& - #H I KUP [NHMN%G NHP O Q%G !M I P+ &' G 7
NHP O Q+. 8 2 U! N APQ !G NH G I P NHP 9PNNP
M!O GHP HMNH NHP$L PNN PGN GP!NP!N JG 7 N 7 T J M!O
GP I M T NHMN N J9O O T J Q O N HPM N+D
! I I P!O I P N NHT 9MOT+ + 4
& - #T M NH JGM!O N I PG+ S -PNP [
#! ![
& - P7 P M!O MLMKP+ + 4 &

3 3 +S MLJ9PN%G "

J& HP K9 KU GN JKU ! !P HP!' 2 O O GP!O NHP ! J GP8
2!' HM97 M!' H J GHP L I G%O N PNJ !+
-P KHM!KP GHP KM!! N I PPN H L SNHMN%G ! N G +S$
GHP G 9M I P 2 9 P%G HP M9OG GH J9O AP NH JQHNG
XH KH NP!' N I PG 7MGNP Q9 OP NHM!' NHP GJ!%G APM I G
5 !Q AMKU GHMO G P 9 % !Q H 99G

2!' D ?J9 PN%G G 9 9]JT P!OG HP P+

H. ERIDGE, R.A. PAINTER.

E. SANGSTER, ENGRAVER.

JULIET AND THE NURSE.

(ROMEO & JULIET.)

LONDON, VIRTUE & Co.

E ' IP'K IP'NH J'M N'MG'H N'M'?MKU i'NHT'I O'MG MIT' i'2MM9T'8 MIO'MG'G i'I PO'N 'AP'I OT'MIO'MG G i' I OT'N 'AP'I PO+ 99'Q P'IP' KKMG i+ E ' J9OT J'i N'NMUP'G IP' KKMG i' NH JN'Q iQ'\ 5(' pKJN 'NH J'K iG NPGN' NH'& IP S E ' iG NL' HMN'O GN' NH J'IMUP'JG'I iGN P9G[MI' NH J'IMUP'I iGN P9G' 7JG'9 U'N 'HPM' i NH iQ' AJN'O G K OG'HP P%G' IT'7 OO9PGN KU8 HP P%G NHMN' GHM99' IMUP'T J" OMIKP+ %f JIOG'K iG NL % ' XP'NM9U'HP D' i'NHP'LJA9 K'HMJIN' 7'IPI' 3 NHP' NHO M 'JIN'G IP'L MNP'L9MKP 1 ' PMG i'K 9O9T' 7'T J'Q P MIKPG+ 1 'P9GP'OPLM N8 HP P'M99'PTPG'QMCP' i'JG+ E ' PI%G'PTPG P P'IMOP'N '9 U'MIO'9PN'NHP I'QMCP8 2' 99 i N'AJOQP'7 'i 'IMi%G'L9PMGJ P'2+ 'O 5('XP99'LPMKP'AP' NH'T J'G [HP P'K IPG IT'IMI+ E ' JN'2997'AP'HMIQ%O'G '7HP' PM'T J'9 P T8 M T'Q 'AP7 P'N '7P9O'HP99'AP'T J'7 99 P 8 4 J' GHL' i'NHMN'GPiGP'IMT'KM99'H I SIMi+ 5(' & IP 'NHP'9 PD2'APM'NHP'KMi'M77 O 'APNNP'NP I'NHMi'NH G SD H J M N'M' 99M i+ i ' TAM9N'NHP' PMG i'NHMN'2'HM P'N '9 P'NHPP' 5 NH' I JKH' PWKJGP'NHP'MLLP NM i iQ' MQP' 'GJKH'N'Q PPN iQ S 99M i'MI'2'i ip8 HP P7 P'7M P P99 2'GPP'NH J'UI %GN' I P' i N+ 5(' T'NH G GHM9N' i N'PWKJGP'NHP' iEJ PG' HMN'NH J'HMG'O iP' I P8 NHP P7 P'NJ i'MIO'O M + i '2'O'L NPGN' 'IP P'i EJ %O'NHPP8 JN'9 P'NHPP'APNNP'NHMI'NH J'KMiGN'OP GP+ 99'NH J'GHM9N'UI 'NHP' PMG i' 7IT9 P #iO'G 'Q O' MLJ9PN SD HKH'IMIP?'NPiOP' E ' 1'KM9I'O GH i J MA9P' 9P'GJAI GG i[TAM9ND'T J' MN KMNKHP ' 99'T J' M9U'\ = 2- ' ;' KM PG' N'M MT+' = E. 3 # 1. - H G'GHM99'OPNP I ip'NHMN+ ' F ' +*'@ 'MIO'7 9 '$' V +*'$ ' '' '% ((SNHP'2MM9 MI'NP I' 7M N'7 'NHP'NH JGN' NH'M' ML P+ F KMAAM O+ 14

5(' XHMN' J9OGN'NH J'HM P' NH'IP\ E ' :' O U iQ' 7KMNG'i NH iQ'AJN' ip' 7T J'i ip' 9 PG'NHM'2'IPMi'N ' IMUP'A 9O' NHM9'MIO' MG T J'GHM99' JGP'IP'HP PM7NP 'O T APMN'NHP' PGN' 7NHP'P QHN+' X 99'T J' L9JKU'T J'G O JN' 7HG L 9KHP'FAT'NHP' PM G'\IMUP' HMGNP'9PGN'I ip'AP'MA JN'T J'PM G'P P'N'AP' JN+ 5(' 'MI'7 'T J+' = E 3 i ' :PIN9P' PKJN 'LJN'NHT' ML P'JL+ E ' IP'G 'T J'LMGGMO +' = 5.3 i '5M ' pi 9 +' PM'O i'NHP ' PML iG+' :PIN9PIPi'7 'GHMIP'7 APM'NH G' JN MQP8 TAM9N' PKJN 'NHP'L iKP'PWL PGG9T'HMNH' O A OOPi'AMiOT iQ' i' P iN'GN PPNG+ " 9O' TAM9N SQ O' PKJN 'DS' $ = 4 & ' 1' -' N GMiG+ E '2'MI'HJ N+S ;#'L9QJP' %A NH'T J'H JGPG[S2'MI'GLPO 2G'HP'Q IP'MiO'HMNH'i NH iQ'\ % ' X HMN'M N'NH J'HJ N'\ E ' #T'MT'M'GK MNKH'N'GK MNK8 IM T'%G'PI JQH+S' X HP P'G IT'LMQP'\SQ ' 99M i'7PNKH'N'GJ QP i+ = 4 '-MQP+ i ' J MQP'IMI'' NHP'HJ N'KMii N'AP'IJKH+ E ' '%G'i N'G 'OPPL'MG'M' P99'i 'G ' OP'MG'N' KHJ KH'O 8 AJN'$N G'PI JQH'%N 99 GP P'MGU'7 'IP'N I ' 'MIO'T J'GHM99'7 iQ'IP'M'Q M P'IMI+ 2'MI'LPLLP PO' 2' M MiN'7 'NH G' 90+S 'L9MQJP' %A NH'T J'H JGPG[SDXHMN'M'O Q'M' MN'M' I JGP'M'KMN'N 'GK MNKH'M' IMI'N ' OPMNH[' M' A MQQM N' M' QJP'M' 99M i'NHMN'7 QHNG'AT'NHP' A U' 7'M NH IPN K[SXHT'NHP' OP 9'KMIP'T J'APN PPi' JG'\ 2' MG'HJ N'JIOP'T J'M I+ i '2'NH JQHN'M99'7 'NHP'APGN+ E ' "P9L'IP'iN'G IP'H JGP' pi 9 1'2'GHM99'7M iN+S#'L9MQJP' %A NH'T J'H JGPG+ HPT'HM P'IMOP' 1%G'IPMN' 7IP 2' HM P'N'MiO'G JiO9T'N ' SD4 J'H JGPG+ = 4 & '&i"*# ' "'i) $ i ' H G'QPiN9PIMi'NHP'L iKP%G'IPM'M99T+ T P T'7 PiO'HMNH'Q N'H G I NM9'HJ N' 2i'IT'APHM978 IT' PLJUMN i'GNM i%O' X NH' TAM9N%G G9MIOP ' TAM9N'NHMN'Mi'H J' "MNH'APPi' IT'K JG i+DS1'G PPN'?J9 PN HT'APMJNT'HMNH'IMOP'IP'P77PI iMNP+ #iO' i'IT'NPILP'G 7NPi%O' M9 J %G GNPP9

B ' ' i) $

% ' 1'& IP '& IP 'A M P' PKJN %G'OPMO8 HMN'QM99MIN'GL N'HMNH'MGL %O'NHP'K9 JOG+ XHKH'N 'JiN IP9T'HP P'O O'G K i'NHP'PM NH+ i ' H G'OMT.NP'A9MKU'7MNP' i'I P'OMTG'O NH'OPLPIO8 H G'AJN'APQ IG'NHP' P' NHP G'IJGN'PIO+

B '

% ' "P P'K IPG'NHP'7J JG TAM9N'AMKU'MQM i+ i ' #9 P[E i'N JILH[MIO' PKJN 'G9M i[# MT'N 'HPM pi' PGLPKN P'9PI NT+ #iO'7 P PTPO'7J T'AP'IT'K iOJKN'i [S ' TAM9N'NMU'NHP'1 '("' 3 $ HMN'9MP'NH J'QM %GN' #'.i'E & iG'-i&' -'AJN'M'9 NN9P' MT' (i1'i&' "- NMT iQ'7 'NH iP'N'UPPL' ' i , 5'8 3 NHP'NH J' '2' 'A NH'IJGN'Q ' NH'H I+ \5(' H J' PNKHPO'A T'NHMN'O OGN'K iG N'H I'HP P' HM9N' NH'H I'HPiKP+ ' H G'GHM99'OPNP I ip'NHMN+ = 5.3 # 1. -

5(' XHMN' J9OGN'NH J'HM P' NH'IP\ E ' :' O U iQ' 7KMNG'i NH iQ'AJN' ip' 7T J'i ip' 9 PG'NHM'2'IPMi'N ' IMUP'A 9O' NHM9'MIO' MG T J'GHM99' JGP'IP'HP PM7NP 'O T APMN'NHP' PGN' 7NHP'P QHN+' X 99'T J' L9JKU'T J'G O JN' 7HG L 9KHP'FAT'NHP' PM G'\IMUP' HMGNP'9PGN'I ip'AP'MA JN'T J'PM G'P P'N'AP' JN+ 5(' 'MI'7 'T J+' = E 3 i ' :PIN9P' PKJN 'LJN'NHT' ML P'JL+ E ' IP'G 'T J'LMGGMO +' = 5.3 i '5M ' pi 9 +' PM'O i'NHP ' PML iG+' :PIN9PIPi'7 'GHMIP'7 APM'NH G' JN MQP8 TAM9N' PKJN 'NHP'L iKP'PWL PGG9T'HMNH' O A OOPi'AMiOT iQ' i' P iN'GN PPNG+ " 9O' TAM9N SQ O' PKJN 'DS' $ = 4 & ' 1' -' N GMiG+ E '2'MI'HJ N+S ;#'L9MQJP' %A NH'T J'H JGPG[S2'MI'GLPO 2G'HP'Q IP'MiO'HMNH'i NH iQ'\ % ' X HMN'M N'NH J'HJ N'\ E ' #T'MT'M'GK MNKH'N'GK MNK8 IM T'%G'PI JQH+S' X HP P'G IT'LMQP'\SQ ' 99M i'7PNKH'N'GJ QP i+ = 4 '-MQP+ i ' J MQP'IMI'' NHP'HJ N'KMii N'AP'IJKH+ E ' '%G'i N'G 'OPPL'MG'M' P99'i 'G ' OP'MG'N' KHJ KH'O 8 AJN'$N G'PI JQH'%N 99 GP P'MGU'7 'IP'N I ' 'MIO'T J'GHM99'7 iQ'IP'M'Q M P'IMI+ 2'MI'LPLLP PO' 2' M MiN'7 'NH G' 90+S 'L9MQJP' %A NH'T J'H JGPG[SDXHMN'M'O Q'M' MN'M' I JGP'M'KMN'N 'GK MNKH'M' IMI'N ' OPMNH[' M' A MQQM N' M' QJP'M' 99M i'NHMN'7 QHNG'AT'NHP' A U' 7'M NH IPN K[SXHT'NHP' OP 9'KMIP'T J'APN PPi' JG'\ 2' MG'HJ N'JIOP'T J'M I+ i '2'NH JQHN'M99'7 'NHP'APGN+ E ' "P9L'IP'iN'G IP'H JGP' pi 9 1'2'GHM99'7M iN+S#'L9MQJP' %A NH'T J'H JGPG+

% & I P M MT AP Q !P[
HP K N CP!G M P JL .M!O TAM9N G9M ! S
NM!O ! N M I MC%O SNHP L !KP 99 O I NHPP OPMNH
27 NH J M N NMUP! SHP!KP[SAP Q !P[SM MT[
! 1 H[2 M I 7 NJ!P%G 7 9[
% X HT O GN NH J GNMT \
= 4 o
N CP!G BK+

2 X H KH MT M!HP NHMN U 99%O P KJN \
TAM9N NHMN I J OP P H KH MT M!HP \
% A HP P 9 PG NHMN TAM9N+
2 L G Q NH I P8
2 KHM QP NHPP !NHP L !KP%G !M I P APT+

- ! " "# < 1 ' 1 X PG
"! -

X HP P M P NHP 9P APQ ! !P G 7 NH G 7 MT
% 1 ! A9P L !KP 2 KM! O GK P M99
HP J!9JKUT I M!MQP 7 NH G 7MNM9 A M 9
HP P 9 PG NHP I M!G9M !AT T J!Q& I P
HMN G9P NHT U !G I M! A M P P KJN +
? , TAM9N I T K JG !['1 I T A NHP %G KH 9O[
1 L !KP S 1 K JG ! SHJGAM!O $SNHP A9 O G GL 99%O
17 I T OPM U !G I M!['S - !KP MG NH J M N JP+
0 A9 O 7 J G GHPO A9 O 7 !NMQJP+S
K JG ! K JG ![
P! 9 H APQM! NH G 7 MT\
% TAM9N HP P G9M ! H I & I P %G HM!O O G9MT8
& I P NHMN GL UP H I 7M AMOP H I APNH !U
" ! KP DNHP]JM P9 MG M!O J Q%O NHM9
4 J H QH O GL9PMGJ P S#99 NH G SJNNP PO
X NH QP!N9P A PMNH KM9 I 9 U U!PPG HJ I A9T A %O S
J9O ! NNMUP N JKP NH NHP J! J9T GL9PP!
17 TAM9N OPM7N LPMKP AJN NHMN HP N 9NG
X NH L P K !Q GNPP9 MN A 9O P KJN %G A PMGN#
XH M99 MG H N NJ !G OPMO9T L !N N L !N+
#!O NH M I M N M9 GK ! NH !P HM!O APMNG
9O OPMNH MG OP M!O NH NHP NHP HP GP!OG
2N AMKU N TAM9N H GP OPWNP NT
&PN NG N & I P HP K PG M9 JO+
" 9O 7 P!OG[7 P!OG L M N[M!O G 7NP NHM!H G N !QJP+
" G MQ 9P M I APMNG O !NHP 7MNM9 L !NG+
#!O %N WN NHP I JGHPG8 J!OP !PMNH H GP M I
#!P! JG NH JGN7 I TAM9N H N NHP 9 7P
17 GN JN P KJN M!O NHP! TAM9N 79PO
JN AT M!O AT K IPG AMKU N & I P
XH HMO AJN !P 9T P!NP NM !%O P P!QP+
#!O N %N NHPT Q 9 UP 9 QHN! !Q8 7 P P 2
J9O O M N LM N NHP I MG GN JN TAM9N G9M !8
#!O MG HP 7P99 O O& I P NJ !M!O 79T8
H G G NHP N JNH 9PN P! 9 O P+
? , "P G M U !G I M!N NHP !NMQJP
79PKN ! I MUPG H I 7M9GP HP GLPMUG ! N JP
IP N P!NT 7NHP I 7 JQHN !NH G A9MKU GN 7P+
#!O M99 NH GP N P!NT K J9O AJN U 99 !P 9 7P
APQ 7 EJGN KP H KH NH J L !KP I JGN Q P8
& I P G9P TAM9N & I P I JGN ! N 9 P+

& I P G9P H I HP G9P P KJN 8
XH ! NHP L KP 7H G OPM A9 O O NH P\
E! $ N& I P L !KP HP MG P KJN %G 7 P!O8
" G 7MJ9N K !K9JOPG AJN HMN NHP 9M GH J9O P!O+
HP 9 7P 7 TAM9N+
!O 7 NHMN 77P!KP+
2 I I PO MNP9T P O PW 9P H I HP!KP
2 HM P M!' !NP PGN !'T J HMNP%GD L KPPO !Q+
T A9 O 7 T J JOP A M 9G O NH 9 P M A9PPO !Q8
JN 2%99 M I P KP T J NH G GN !Q M 7 !P
HMN T J GHM99 M99 PLP!N NHP 9 GG 7 I !P
2 99 AP OPM7N L9PMO !Q M!O PWKJGPG8
NPM G ! L MTP G GHM99 LJ KHMGP JN MAJGPG+
HP P7 P JGP ! !P 9PN & I P HP!KP !HMGNP+
39GP HP!HP%G 7 J!O NHMN H J G H G 9MGN+
PM HP!KP H G A OT M!O MNNP!O J 998
P KT AJN I J OP G LM O ! !Q NH GP NHMN U 99+ = 4 &

3 3 22 F ! ! MLJ9PN%G !&-
/ (

J& : M99 L MLMKP T J7 P T 7 NPO GNPPOG+
M OG -H PAJG%9 OQ !Q GJKH M MQQ !P
#G -HMPN ! J9O H L T J N NHP PGN
#!O A !Q !K9 JOT ! QHN I I PO MNP9T+F
L PMO NHT K9 GP KJ NM ! 9 P LP 7 I !Q ! QHN[
HMN J!M MT%G FPTPG I MT !U8 M!O& I P
/PML N NHPGP M I G J!NM9U%O 7 M!O J!GPP![S
/ P G KM!GPP N O NHP M I JG NPG
T NHP !APMJN PG8 7 9 P AP A9 !O
2N APGN MQ PPG NH ! QHN+S I P K 9 ! QHN+
H J G AP GJ NPO I MN ! M99 !A9MKU+
#!O 9PM ! IP H N 9 GP M !! !Q I MNKH
-9MT%O27N M LM 7 GNM !9PGG I M OP!H OG
" O I T J! I M!!%O%A9 O AMN !Q ! I T KHPPUG+
X NH NHT A9MKU I M!N9P8 N 99 GN M!QP9 P Q !A 9O+
H !U N JP 9 P MKNPO G I L9P I OPGNT+
IP ! QHN[S IP & I P [K IP NH J OMT ! ! QHN[
0 NH J 9N9 P JL ! NHP !QG 7 ! QHN
XH NP NHM!'!P G! JL ! M M P!%G AMKU+S
IP QP!N9P ! QHN8 K IP 9 !Q A9MKU A %O ! QHN+
: P IP I T & I P 8 M!O+ XHP! HP GHM99 O P+
MUP H I M!O KJN H I JN !$D9 NN9P GNM G
#!O HP 99 I MUP NHP 7MKP 7HPM P!G 7 !P
HMN M99 NHO 9O 99 AP !9 P NH ! QHN+
#!O LMT ! GH L N NHP QM GH GJ!+
1 2 HM P A JQHN NHP I M!G ! 7M 9 P
JN ! N L GGPGG%O N8 M!O NH JQH 2 M I G 9O
N TPN P!E T%O G NPO JG G NH G OMT+
#G G NHP ! QHN AP7 P G IP 7PGN M9
M! ' I LMN P!N KH 9O NHMN HMNH !P APG
#!O I MT ! N PM NHP I+ 1 HP P K I PG I T !J GP

J GP 2 ! "-

#!O GHP A !QG !P G# M!O P P T N !QJP NHMN GLPMUG
JN & I P %G !M I &GLPMUG HPM P!9T P9]JP!KP+S

K JG ! K JG ![R !'NHP NH O 9 !P APT !O G I NNPO+ IP I OP I PO N G !'
NH G M!O !' NHP LMGGMQPG HM P MO LNPO NHP M A N M T K J GP) -' J'
JN 7 NHP 7 GN]JM N M!O NHP]JM N 7)==' NH JN PQM O N NHP IL NM!N
K KJ I GNM!KP NHMN NH G 9MNP PO N !' $ MG 6'!P 9T K PKNPO MJQ I P!NPO M!O
M I P!OPO R M!O NHMN NHP 7 9 !'!PM 9T P P T PGGP!N M9 LM N KJ9M 7 99 G N+
; 9 QHN+
V +*'$ %' E +*'$ 0%
? +*' % *
?J9 PN%G 9 9]JT P!OG HP P !'NHP 7 GN]JM N +
F H G PMO !Q G NHMN 7M99 NHP 9O K L PG HP LMGGMQP HMG APP!' M LP LPNJM9
G J KP 7 K !NP!N !'N NHP K I IP!NMN G HP O 77 KJ9N PG M P P99 PL PGP!NPO
AT XM AJ N !%G]JPGN !S6 XHMN M!M8D MTG M P NHPGP H GP PTPG ?J9 PN G
GH !Q N HM P GN LLPO 7R XM AJ N !'GMTG $ " % G NHP J!M MT 5 NPP P!G
L PG NHMN $ G NHP J!M MT 5 JKP NH !UG NHMN ' G N P J!M MT 2N
HMG APP!'GJQQPGNPO N JG NHMN !' GP P M9 PM 9T L P I G JL O G GNT9PO 8 2
!KU MG !' G K !7 OP!N NHMN NHP LMGGMQP JQHN N AP 6 HMN 20%' PTPG
I MT !U R &P! I T AP !Q M !P LP G !MQP K PMNPO JN 7 NHP O P!KH
&P! I I PP M!O M!G P !Q P GJLL GP N NHP 6&J I J R 7 LP!GP + fMKHM T

!' NHP 9O NH Q MLHT G 8 2 % @N G G GLP9N !' NHP H O -M N 7
"P! T 2+ M!O NHP # HM !Q APP!' I GL9MKPO L OJKPO NH G O 7 LJCC9P
8 2 % + 99 P MO LNG NH G PMO !Q+ JN + 5TKP AEPKNG 6 HMN
8 2% @NHP 9MGN GT99MA9P 7 J! M MTG JQHN N AP 5MT%G 2 7PP9 !PWN N KP NM !8
AJN HMN O Q !M99T L PKPOPO N 2 O ! N L PNP!O N OPNP I !P+

=% =a I MT !U+ $
I LM P MKAPNH
Y IP GPP9 !Q $
KM 7JL NHP NP!OP PTP 7L N 7J9 OMT+%R
HP P G I JKH 7 KP !'NH G AEPKN !+ 1 !P I P K !EPKNJNP' ($ 40' # M!O
LJN M K I I M !GNPMO 7 NHP QP! N P E S
6 L PMO NHT K9 GP KJ NM !' 9 P LP 7 I !Q ! QHN[
$ % 8 2# PTPG I MT !U M!O& I P
/PML N NHPGP M I G J!NM9U%O 7 M!O J!GPP![R

7M9K !P $H N M !G HP +

HT' N'NHMN' iMIpiN'N 'GHMLP'MIO'9 p+
G GHMLPi' i'NHP'K iOJKN' 7'NHPI'A NH
/ UP'L OP ' i'M'GU 99 9PGG G 9O p %G 79MGU F
2G'GPN'M 7 P'AT'NH ip' i'Qi MiKP
#iO'NH J'O GIpIAP %O' NH'NH ip' i'OP7piKP+
X HMN' JGP'NHpp'IMi'7NHT?J9 pN'G M9 p+
O ' H GP'OPM'GMUP'NH J' MGN'AJN'9MNP9T'OPMO8
HP P'M N'NH J'HMLLT8 TAM9N' J9O'U 99'NHPP+
JN'NH J'- 2G7' 5(# ' 'NH J'HMLLT'D
HP'9M 'NHMN'NH pMNPi%O'OPMNH'APKMIP'NHT'7 pIO
#iO'NJ i%O' N'N ' 4 # 'M N'NH J'HMLLT
'LMKU' 7A9PGG iQ' 3 -'JL i'NHT'AMKU8
"MLL ipGG'K J NG'NHPP' i'HP'APGN'M MT8
JN'9 UP'M I GAPHM %OD'MIO'GJ99pi' piKH
H J'LJNNPGN'JLF'NHT'7 NJIP'MIO'NHT'9 P'
MUP'HPPO'MMUP'HPPO'7 'GJKH'O P' I GP MA9p+
: 'QPN'NHPP'N 'NHT'9 p'MG MG OPK ppO+
#KPIO'HP'KHMIAP 'HPIKP'MIO'K I7 N'HP 8
JN'9 U'NH J'GNMT'I N'N 99'NHP' MNKH'AP'GPN+
O 'NHPi'NH J'KMIGN'i N'LMGG'N ' MiNJM8
XHP P'NH J'GHM9N'9 p'N 99' P'KMi'7 iO'N'I P'
'A9MCP'T J'1M MQP' PK ik9P'T J'7 piOG+
PQ'LM O i' 7'NHT'L ikP'MIO'KM99'NHPP'AMKU'
X NH'N piNT'HJIO PO'NH JGMIO'N IPG I P'E T'
HMi'NH J' piN%GN'7 NH' i'9M I piNMN i+
: 'AP7 p'iJ GP'8 K I IpiO' IP'N 'NHT'9MOT8
#iO'A O'HP'HMGNPi'M99'NHP'H JGP'N 'APO+
XH KH'HPM T'G 'IMUPG'NHPI'ML'JiN
& Ip'G'K I iQ+
& - '1'/ O'2'K J9O'HM P'GNMT%O'HP P'M99'NHP'i QHN+
'HPM'Q O'K JiGP9' 1' HMN'9PM i iQ' G[S
T'9 O'2%9'NP99'IT'9MOT'T J' 99'K Ip+
i '5'G 'MIO'A O'I'T G ppN'L pLM P'N 'KH OP+
& - ' "pp'G 'M' iQ'GHP'A O'AP'Q P'T J'G
" P'T J'IMUP'HMGNP'7 ' N'Q G P T'9MNP+

E ' ' J ?

i1' *** ;

9 4 '"J GP+
i ' " ' P99'IT'K I7 N'G P %O'AT'NH G[;
> $: 'HPiKP' : O'i QHN8 MiO'HP P' GNMIOG'M99'T J'
GNMNP8
3 NHP'AP'Q IP'AP7 P'NHP' MNKH'AP'GPN
1 'AT'NHP'A PMU' 7' MT'O GQJ G%O'7 I'HPiKP8
E J i' i' MiNJM'2%9'7iO' JN'T J'IMI
#iO'HP'GNM9'G QI 7T'7 I'N IP'N'N IP'
3 PT'Q O'HML'N 'T J'NHMN'KMNiKPG'HP P'
: P'IP'NHT'HMi08 %'G'9MND'7M P P99'Q O'i QHN+
2N' P P'M'Q P7G'A P7N'LM N' NH'NHPP'
OM P P99+ = 4 &

3 3'2 F ' ii ' ML J9PN%G' i&-
' ' 1' - ' . 1' "-
', H iQG'HM P'7M99Pi' JN'G 'G 'Ji9JKU 9T+
HMN' P'HM P'HMO'i 'N I IP'N ' I P' J'OMJQHNP
/ U'T J'GHP'9 %O'HP'U iGIMi' TAM9N'OPM 9T+
#iO'G'O O'28 SDXP99$ $P P P'A i'N 'O P+S
% G P'T'9MNP'GHP%9Pi N'K IP'O i'N i QHN
2' L I GP'T J'AJN'7 'T J'K ILMIT
2' J9O'HM P'APPi'M APO'Mi'H J'MQ +
' HPGP'N IPG 7 P'M77 O'i 'N IP'N ' ' '
MOMI'Q O'i QHN'K ipiO'IP'N 'T J'OMJQHNP +
?$ ' ,'2' 99'MiO'Ui 'HP'I iO'PM 9T'N I 8
i QHN'GHP%G IP %O'JL'NGHP'HPM IPGG+
' -M G'2' 99'IMUP'M'OPGLP MNP'NPiOP'
17'IT'KH 9O%G 9 P'2'NH i U'GHP' 99'AP' J9%O

D E +#$ K9'I OPI'PON GHM P'7 99 PO'Q PG $ -=2'
i' FE HJG V +' HP'7 9 ' %%$ -
FE %' -', 'NHP'7 9 +"@f ' PMOG /- %'NHT'7 NJip+R' 2G' '- -'JGPO
MG'N' ' % 'J
D #i NHP'Np I' 7'M9K i T‡ HP' 8 G'NHP'HM U9G'KMQP+

2i'M99 PGLPKNG'AT'IP8 iMT'I P'2'O JA'N'i N+
X 7P'Q'T J'N'HP'pP'T J'Q 'N 'APO'8
#K]JM iN'HP'HP P' 7 IT'G i'-M G%'9 P8
#iO'A O'HP 'IM U'T J'IP' i'XPOIPGOMT'ipWN S
JN'G 7N8 XHM'OMT G'NH G'\
' iOMT'IT'9 O+
', iOMT\' HM[HM[XP99' XPOIPGOMT' GZ N '
G i
1% HJ GOMT'9PN' N'AP8S % HJ GOMT'NP99'HP +
HP'GHM99'AP' IM PO'N 'NH G'i A9P'PM 9 S
X 99'T J'AP' PMOT'\O 'T J'9 UP'NH G'HMGNP'\
XP%99'UPPL'i'Q PMN'MO '8SM'7 pIO' 'N 8S
O 'HM U'T J' TAM9N'AP iQ'G9M i'G '9MNP+
2N' IMT'AP'NH JQHN' P'HP9O'H I'KM P9PGG9T+
p iQ' J'U iGIMi' 7' P p p9 I JKH
HP P7 P' P%99'HM P'G IP'HM97'M'O CPi'7 piOG+
#iO'NHP P'Mi'piO+ JN' HMN'GMT'T J'N ' HJ GOMT'\
' T'9 O'2' J9O'NHMN' HJ GOMT' p p'N I +'
: 'XP99'QPN'T J'Q ip S1% HJ GOMT'AP' N'NHpi S'
- 'T J'N '?J9 PN'P p'T J'Q 'N 'APO+
- pLM P'HP ' 7P'MQM iGN'NH G' POO iQ OMT+S
OM P P99'IT'9 O+S/ QHN'N ' IT'KHM IAP 'H [
#7 P'IP' N' GG ' P T'9MNP'NHMN' P
MT'KM99' N'PM 9T'AT'MiO'AT8S : O'i QHN+ = 4 &

3 3' F?i33 'i'?J9 PN%G (;
'O ' "'= 1

J& ' X 9N'NH J'AP'Q IP'\ N' G'i N'TPN'IPM'OMT
2N' MG'NHP'i QHN iQM9P'MiO'i N'NHP'9M U+
HMN'L P K%O'NHP'7PM 7J9'H 99 ' 7'NH IP'PM 8
QHN9T'GHP'G iQG' i'T i'L IPQ MiMNP N pp'F
P9 P P'IP'9 P' N' MG'NHP'i QHN iQM9P+

" ' '2(%

.- ' ! -0- ?

J& ' J GP' \

& - ' 4 J '9MOT' I NHP %G' K I !Q' N ' T J ' KHM I AP '

HP' OMT' G' A UP' 8 AP' M T ' 9 U' MA JN+' 9 4 ' J GP+'

J '+ HP! ' !O '9PN' OMT' ! ' M ! O' 9PN' 9 7P' JN+

' OM P P99 ' 7M P P99[!P' U GG ' M ! O' 2%99' OPGKP ! O+

;# ' " - "-

J& ' # N' NH J' Q !P' G ' ' 9 P' 2 9 O[MT SHJGAM ! O '

7 P ! O' ' D

2' I JGN' HPM ' 7 I ' NHPP' P P T' OMT' !' NHP' H J +

0 ' !' M' I !JNP' NHP P' M P' I M ! T' OMTG8

' ' AT' NH G' K J!N' 2' GHM99' AP' I JKH' !' TPM G+

3 P' 2' MQM !' APH 9O' I T' & I P +

! ' OM P P99' ' 2' 99' I N' ! ' LL NJ! NT'

HMN' I MT' K ! PT' I T' Q PPN !QG ' 9 P ' N ' NHPP+

J& ' 1 ' NH ! U% N' NH J ' P' GHM99' P P ' I PPN' MQM !' \

! ' 2' O JAN' N' ! N8 M ! O' M99' NHPGP' PG' GHM99' GP P'

0 ' G PPN' O GK J GPG' !' J ' N I P' N ' K I P+

J& ' ' : O' 2' 2' HM P' M !' 99 O ! !Q' G J9'

PNH ! UG ' 2' GPP' NHPP ' ! ' NH J' M N' G ' 9 D

#G' !P' OPMO' !' NHP' A NN I ' 7' M' N I A'

3 NHP ' I T' PTPG QHN' 7M 9G ' ' NH J' 9 U%GN' LM9P+

! ' # ! O' N JGN' I P ' 9 P ' !' I T' PTP' G ' O ' T J

5 T' G ' O !UG' J ' A9 O+' #O PJ' [MO PJ[

= 4 'o

J& ' ' 7 NJ ! P ' 7 NJ ! P' [M99' I P ! ' KM99' NHPP' 7 KU9P'

27' NH J' M N' 7 KU9P ' HMN' O GN' NH J' NH' H I '

HMN' G' P! !%O' 7 ' 7M NH' \ P' 7 KU9P ' 7 NJ ! P8

0 ' NHP ! ' 2' H LP ' NH J' 9N' ! N' UPPL' H I ' 9 !Q+

JN' GP ! O' U I ' AMKU+

? ' , ' ^' 8 9' O9 ' OMJQHNP ' [M P' T J' JL' \

J& ' X H ' G%N' NHMN' KM99G' \ G' N' I T' 9MOT' ! NHP ' \

2G' GHP' ! N' O !' G ' 9MNP ' ' JL' G ' PM 9T' \

X HMN' J ! MKKJGN I %O' KMJGP' L KJ PG' HP ' H NHP ' \

' " (' "' J GP+

? ' , ' X HT ' H ' ! ' ?J9 PN' \

J& ' MOM I ' 2' M I ' ! N' P99+

? ' , ' 3 P I P' PPL !Q' 7 ' T J ' K JG !%G' OPMNH' \

X HMN ' 9N' NH J' MGH' H I ' 7 I ' H G' Q M P' NH' NPM G' \

#!' 7' NH J' K J9OGN ' NH J' K J9OGN' ! N' I MUP' H I ' 9 P' '

HP P7 P ' HM P' O ! P ' G I P' Q P7' GH G' G I JKH' 7' 9 P' 8

JN' I JKH' 7' Q P7' GH G' GN 99' G I P' M ! N' 7' N+

J& ' 4 PN' 9PN' I P' PPL ' 7 ' GJKH' M' 7PP9 ! Q' 9 GG+

? ' , ' ' GHM99' T J' 7PP9' NHP' 9 GG ' AJN' ! N' NHP' 7 P ! O'

X H KH' T J' PPL ' 7 +

J& ' %% , <' (*' + : %' *((

6' @ - , , *+' @ : * * (%' 9 ' +' %7%2' ; %%B' + : %' 2 % , O

? ' , ' X P99 ' Q 9 ' NH J' PPL%GN' ! N' G ' I JKH' 7 ' H G'

OPMNH+

#G' NHMN' NHP' 99M ! ' 9 PG' H KH' G9MJQHNP %O' H I +

J& ' X HMN' 99M ! ' I MOM I ' \

? ' , ' HMN' GM I P' 99M ! ' & I P +

J& ' 99M ! ' M ! O' HP' AP' I M ! T' I 9PG' MGJ ! OP +

: O' LM O ! ' H I [2' O ' NH' M99' I T' HPM N8

#!O' TPN' H ' I M ! ' 9 UP' HP ' O NH' Q P P' I T' HPM N+

? ' , ' HMN' G ' APKMJGP' NHP' N M N ' 9 PG+

J& ' #T ' I MOM I ' 7 I ' NHP' PMKH' 7' NHPGP' I T' HM ! OG+'

%X J9O ' ! !P' AJN' 2' I QHN' P ! QP' I T' K JG !%G' OPMNH' [

? ' , ' X P' 99' HM P' P ! QPM ! KP' 7 ' N ' 7PM ' NH J' ! N '

HP ! ' PPL' ! ' I P+' 2%99' GP ! O' N ' !P' !' M ! NJM S

X HP P' NHMN' GM I P' AM ! GH%O' J ! MQMNP' O NH' 9 P S

HM99' Q P' H I ' GJKH' M ! ' J ! MKKJGN I %O' O M I F

HMN' HP' GHM99' G !' UPPL' TAM9N' K I LM ! T'

#!O' NHP ! ' 2' H LP' NH J' 9N' AP' GMN G7 PO+

' J& ' 2 ! OPPO ' 2' ! P P ' GHM7N' AP' GMN G7 PO'

X NH' & I P ' N 99' 2' APH 9O' H I SOPMO S

2G' I T' L ' HPM N ' G ' 7 ' M' U ! G I M ! ' PW%O'

MOM I ' 7' T J' K J9O' 7 !O' JN' AJN' M' I M ! '

' APM ' M' L G ! ' 2' J9O' NP I LP ' N 8

HMN' & I P ' GH J9O ' JL ! ' PKP LN' NHP P 7+

!' G9PPL' !'] J PN+' 1 ' H ' I T' HPM N' MAH G'

' HPM ' H I ' ! M I %O SM ! O' KM ! ! N' K I P' N ' H I S

' PMU' NHP' 9 P' 2' A P' I T' K JG !'

L !' H G' A OT' NHMN' HMNH' G9MJQHNP %O' H I ' [

? ' , ' O ! O' NH J' NHP' I PM ! G ' M ! O' 2%99' 7 !O' GJKH' M' I M ! +'

JN' ! ' 2%99' NP99' NHPP' E T7J9' N O !QG ' Q 9+

J& ' # ! O' E T' K I PG' P99' !' GJKH' M' ! PPOT' D N I P

X HMN' M P' NHPT ' 2' APGPPKH' T J ' 9MOTGH L' \

? ' , ' X P99 ' P99 ' NH J' HMGN' M' KM P7J9' 7MNHP ' KH 9O8

1 ! P ' H ' N ' LJN' NHPP' 7 I ' NHT' HPM ! PGG+

" MNH' G NPO' JN' M' GJOOP !' OMT' 7' E T+

HMN' NH J' PWLPK%GN' ! N ' ! ' 2' 9 U%O' ! N' 7 +

J& ' MOM I ' !' HMLLT' N I P ' HMN' OMT' G' NHMN' \

? ' , ' M T ' I T' KH 9O ' PM 9T' ! PWN' HJ GOMT' I !+'

HP' QM99M ! N ' T J ! Q ' M ! O' ! A9P' QP ! N9P I M ! +

HP' K J ! NT' - M G ' MN' N+' - PNP %G' KHJ KH+

HM99' HMLL 9T' I MUP' NHPP' M' E T7J9' A OP+

J& ' ' AT' N+' - PNP %G' KHJ KH ' M ! O' - PNP ' N +

" P' GHM99' ! N' I MUP' I P' NHP P' M' E T7J9' A OP+

2' ! OP ' MN' NH G' HMGNP8 NHMN' 2' I JGN' PO'

3 P' HP ' NHMN' GH J9O' AP' HJGAM ! O ' K ! PG' N ' +

2' L MT' T J' NP99' I T' 9 O' M ! O' 7MNHP ' I MOM I

2' 99' ! N' I M T' T PN8 M ! O ' HP ! ' 2' O ' 2' G PM +

2N' GHM99' AP' & I D ' H I ' T J' U! ' 2' HMNP+

&MNHP ' NHM ! ' - M G SD HPGP' M P' ! P G' ! OPPO' [

? ' , ' " P P' K I PG' T J ' 7MNHP 8 NP99' H I ' G ' T J GP97+'

! O' GPP' H ' HP' 99' NMUP' N' MN' T J ' HM ! OG+

' J& ' 2 ! OPPO ' 2' ! P P ' GHM7N' AP' GMN G7 PO'

X NH' & I P ' N 99' 2' APH 9O' H I SOPMO S

2G' I T' L ' HPM N ' G ' 7 ' M' U ! G I M ! ' PW%O'

MOM I ' 7' T J' K J9O' 7 !O' JN' AJN' M' I M ! '

' APM ' M' L G ! ' 2' J9O' NP I LP ' N 8

HMN' & I P ' GH J9O ' JL ! ' PKP LN' NHP P 7+

!' G9PPL' !'] J PN+' 1 ' H ' I T' HPM N' MAH G'

' HPM ' H I ' ! M I %O SM ! O' KM ! ! N' K I P' N ' H I S

' PMU' NHP' 9 P' 2' A P' I T' K JG !'

L !' H G' A OT' NHMN' HMNH' G9MJQHNP %O' H I ' [

? ' , ' O ! O' NH J' NHP' I PM ! G ' M ! O' 2%99' 7 !O' GJKH' M' I M ! +'

JN' ! ' 2%99' NP99' NHPP' E T7J9' N O !QG ' Q 9+

J& ' # ! O' E T' K I PG' P99' !' GJKH' M' ! PPOT' D N I P

X HMN' M P' NHPT ' 2' APGPPKH' T J ' 9MOTGH L' \

? ' , ' X P99 ' P99 ' NH J' HMGN' M' KM P7J9' 7MNHP ' KH 9O8

1 ! P ' H ' N ' LJN' NHPP' 7 I ' NHT' HPM ! PGG+

" MNH' G NPO' JN' M' GJOOP !' OMT' 7' E T+

HMN' NH J' PWLPK%GN' ! N ' ! ' 2' 9 U%O' ! N' 7 +

J& ' MOM I ' !' HMLLT' N I P ' HMN' OMT' G' NHMN' \

? ' , ' M T ' I T' KH 9O ' PM 9T' ! PWN' HJ GOMT' I !+'

HP' QM99M ! N ' T J ! Q ' M ! O' ! A9P' QP ! N9P I M ! +

HP' K J ! NT' - M G ' MN' N+' - PNP %G' KHJ KH+

HM99' HMLL 9T' I MUP' NHPP' M' E T7J9' A OP+

J& ' ' AT' N+' - PNP %G' KHJ KH ' M ! O' - PNP ' N +

" P' GHM99' ! N' I MUP' I P' NHP P' M' E T7J9' A OP+

2' ! OP ' MN' NH G' HMGNP8 NHMN' 2' I JGN' PO'

3 P' HP ' NHMN' GH J9O' AP' HJGAM ! O ' K ! PG' N ' +

2' L MT' T J' NP99' I T' 9 O' M ! O' 7MNHP ' I MOM I

2' 99' ! N' I M T' T PN8 M ! O ' HP ! ' 2' O ' 2' G PM +

2N' GHM99' AP' & I D ' H I ' T J' U! ' 2' HMNP+

&MNHP ' NHM ! ' - M G SD HPGP' M P' ! P G' ! OPPO' [

? ' , ' " P P' K I PG' T J ' 7MNHP 8 NP99' H I ' G ' T J GP97+'

! O' GPP' H ' HP' 99' NMUP' N' MN' T J ' HM ! OG+

' 1

? ' , ' X HT ' H ' ! ' ?J9 PN' \

J& ' MOM I ' 2' M I ' ! N' P99+

? ' , ' 3 P I P' PPL !Q' 7 ' T J ' K JG !%G' OPMNH' \

X HMN ' 9N' NH J' MGH' H I ' 7 I ' H G' Q M P' NH' NPM G' \

#!' 7' NH J' K J9OGN ' NH J' K J9OGN' ! N' I MUP' H I ' 9 P' '

HP P7 P ' HM P' O ! P ' G I P' Q P7' GH G' G I JKH' 7' 9 P' 8

JN' I JKH' 7' Q P7' GH G' GN 99' G I P' M ! N' 7' N+

J& ' 4 PN' 9PN' I P' PPL ' 7 ' GJKH' M' 7PP9 ! Q' 9 GG+

? ' , ' ' GHM99' T J' 7PP9' NHP' 9 GG ' AJN' ! N' NHP' 7 P ! O'

X H KH' T J' PPL ' 7 +

J& ' %% , <' (*' + : %' *((

6' @ - , , *+' @ : * * (%' 9 ' +' %7%2' ; %%B' + : %' 2 % , O

? ' , ' X P99 ' Q 9 ' NH J' PPL%GN' ! N' G ' I JKH' 7 ' H G'

OPMNH+

#G' NHMN' NHP' 99M ! ' 9 PG' H KH' G9MJQHNP %O' H I +

J& ' X HMN' 99M ! ' I MOM I ' \

? ' , ' HMN' GM I P' 99M ! ' & I P +

J& ' 99M ! ' M ! O' HP' AP' I M ! T' I 9PG' MGJ ! OP +

: O' LM O ! ' H I [2' O ' NH' M99' I T' HPM N8

#!O' TPN' H ' I M ! ' 9 UP' HP ' O NH' Q P P' I T' HPM N+

? ' , ' HMN' G ' APKMJGP' NHP' N M N ' 9 PG+

J& ' #T ' I MOM I ' 7 I ' NHP' PMKH' 7' NHPGP' I T' HM ! OG+'

%X J9O ' ! !P' AJN' 2' I QHN' P ! QP' I T' K JG !%G' OPMNH' [

? ' , ' X P' 99' HM P' P ! QPM ! KP' 7 ' N ' 7PM ' NH J' ! N '

HP ! ' PPL' ! ' I P+' 2%99' GP ! O' N ' !P' !' M ! NJM S

X HP P' NHMN' GM I P' AM ! GH%O' J ! MQMNP' O NH' 9 P S

HM99' Q P' H I ' GJKH' M ! ' J ! MKKJGN I %O' O M I F

HMN' HP' GHM99' G !' UPPL' TAM9N' K I LM ! T'

#!O' NHP ! ' 2' H LP' NH J' 9N' AP' GMN G7 PO+

' " (' "' J GP+

, ' X HP ! ' NHP' GJ ! ' GPNG ' NHP' PM NH' F O NH' O CC9P' OP ' '

JN' 7 ' NHP' GJ ! GPN' 7' I T' A NHP %G' G ! +

2N' M ! G' O 7 ! QHN+ S' ; ;

" ' ! ' \ M' K ! OJ N ' Q 9' \ HMN ' GN 99' ! ' NPM G' \

3 P I P' GH P ! Q' \ 2 ! ' ! P' 9 NN9P' A OT'

H J' K J ! NP 7P N%G[M' AM U ' M' GPM ' M' ! O8

0 ' GN 99' NHT' PTPG ' H KH' 2' I M)8+KM99' NHP' GPM

5 ' PAA' M ! O' 79 ' NH' NPM G8 NHP' AM U' NHT' A OT' G+

M 9 ! Q' ! ' NH G' GM9N' 79 O8 NHP' ! OG ' NHT' G QHG#

8 ! S MQ ! Q' NH' NHT' NPM G ' M ! O' NHPT' NH' NHP I S

X NH JN' M' GJOOP ! ' KM9 I ' 99' P GPN

HT' NP I LPGN N GGPO' ALOT+ S " ' ! ' 7P' \

" M P' T J' OP9 P PO' N ' HP ' J ' OPK PP' \

? ' , ' # T ' G 8 AJN' GHP' 99' ! !P ' GHP' Q PG' T J'

NHM ! UG+

2' J9O' NHP' 7 9' P P' I M PO' N ' HP ' Q M P' [

, ' 7N ' NMUP' I P' NH' T J ' NMUP' I P' NH' T J ' 7P+'

" [99' GHP' ! !P' \ O NH' GHP' ! N' Q P' JG' NHM ! UG' '

2G' GHP' ! N' L JO' \ O NH' GHP' ! N' K J ! N' HP ' A9PGG%O+'

! NHT' MG' GHP' G ' NHMN' P' HM P' JQHN'

' NHT' M' QP ! N9P I M ! ' N ' AP' HP ' A OPQ I ' \

J& ' N' L JO ' T J' HM P8 AJN' NHM ! U7J9 ' NHMN' T J' HM P'

- JO' KM ! ' 2' ! P P ' AP' 7' HMN' 2' HMNP8

JN' NHM ! U7J9' P P ! ' 7 ' HMNP ' NHMN' G' I PM ! N' 9 P+F

, ' " ' ! [H ' ! ' KH L 9 Q K[X HMN' G' NH G' \

- JO SM ! O ' 2' NHM ! U' T J SM ! O ' 2' NHM ! U' T J' ! N8 S'

HM ! U' I P' ! ' NHM ! U ! QG ' ! ' L JO' I P' ! ' L JOG+

JN' 7P NN9P' T J ' 7 ! P' E ! NG' %QM 79GN' HJ GOMT' ! PWN+

' Q ' NH' - M G' N ' M ! N' - PNP %G' KHJ KH+

1 ' 2' 99' O MQ' NHPP' !' M' HJ O9P' NH NHP +

Z

F E - +' Q PG' JG'

F ' ' S I PM ! N' %9 P+

%' @N ' HMG' NH G' 9 ! P ' H KH' G' ! N' ! ' NHP' 7 9 ' S

6' # ! O' TPN' ! N' L JO8 S GN PGG ' I ! ! ' T J R

% @# ' PMOG' 2' ' +' 2' ' +' 2' '

' +' ' ;' % ' ' 8' ! ' 7 9 G+

F @# ' @NHP' NHP ' 9 ! PG' AP ! Q' O 77P P ! N ' HMG S

HMN' GHM99' APGN ' ! ' H I ' G ' GJ P' M' O MJQHN %

' E +' '

E. M. WARD, R. A. PINXT

H. BOURNE, SCULPT

JULIET IN THE CELL OF FRIAR LAWRENCE.

(ROMEO AND JULIET.)

LONDON. VIRTUE & Co

J M!G P NHMN 2 GH J9O K !7PGG N T J+
5 ! N OP!T N H I NHMN T J 9 P I P+
J 2 99 K !7PGG N T J NHMN 2 9 P H I+
99 T J 2 M I GJ P NHMN T J 9 P I P+
J& 27 2 O G N 99 AP 7 I P L KP+
P !Q GL UP APH !O T J AMKU NHM! N T J 7MKP+
- G J9 NHT 7MKP G I JKH MAJG%O NH NPM G+
J& HP NPM G HM P Q N G I M99 KN T AT NH M N8
O N MG AMO P! JQH AP7 P NHP GL NP+
H J !Q%GN N I P NHM! NPM G NH NHMN
PL N+
J& HMN G ! G9M!OP G H KH G M N JNH8
D!O HMN 2 GLMUP 2 GLMUP N N I T 7MKP+
HT 7MKP G I !P M!O NH J HMGN G9M!OP %O N+
J& 2N I MT AP G 7 N G ! N I !P !+S
P T J MN 9P GJ P H 9T 7MNHP ! 8
1 GHM99 2 K I PN T J MN P P! !Q I MGG \
> T 9P GJ P GP PG I P LP!G P OMJQHNP ! S
T 9 O P I JGN P!N PMN NHP N I P M9 !P+
: O GH P9O 2 GH J9O O GNJ A OP N ![S
?J9 PN ! HJ GOMT PM 9T 7MNHP ! 8
MM CFGH ?N GB ?HN (GGK CF FAME (9 4 "
J& 1 GHJN NHP O [M!O HP!NH J HMGN O !P G +
I P PPL NH I P - MGN H LP LMGN KM P LMGN HP9L [
> 1 ?J9 PN 2 M9 PMOT U! NHT Q P78
2N GN M !G I P LMGN NHP K I LMGG 7 I T NG
2 HPM NH J I JGN M!O ! NH !Q I MT L QJP N+
1! HJ GOMT !PWN AP I M PO N NH G K J!NT+
J& P99 I P ! N 7 M NHMN NH J HPM %GN 7 NH G+
* HMG CFAB CGMM @G FAJ 2 @?E KDGPGHC N
27 !NHT GO I NH J KM!GN Q P ! HP9L+
5 NH J AJN KM99 I T PG 9JN ! GP+
#!O NH NH G U! 7P 2%99 HP9L N L PGP!N9T+
: OE !%O I T HPM N M!O & I P %G NH J J HM!OG8
#!O P P NH G HM!O AT NHPP N & I P GPM9%O+
HM99 AP NHP 9MAP9 N M! NHP OPPO+
1 I T N JP HPM N NH N PMKHP JG P 9N
J !N M! NHP NH G GHM99 G9MT NHP I A NH
HP P7 P JN 7NHT 9 !Q PWLP P!K%O N I P
: P I P G I P L PGP!N K J!GP98 APH 9O
% WN I T PWN P I PG M!O I P NH G A9 OT U! 7P
HM99 L9MT NHP J I L P + M A N MN !Q NHMN
XH KH NHP K I I GG ! 7 NHT TPM G M!O M N
J9O N ! GGJP 7N JP H ! J A !Q+
P ! N G 9 !Q N GLPMU 8 2 9 !Q N O P+
27 HMN NH J GLPMU%GN GLPMU ! N 7 P I POT+
> " 9O OMJQHNP 8 2 O GLT M U !O 7H LP+
XH KH K M PG MG OPGLP MNP M ! PWPKJN !
#G NHMN G OPGLP MNP H KH P J9O L P P!N+
27 MNHP NHM!N I M T K J!NT - M G
H J HMGN NHP GN P!QNH 7 99 N G9MT NHTGP97+
HP! G N 9 UP9T NH J 9N J!OP NMUP
#NH !Q 9 UP OPMNH N KH OP M MT NH G GHM I P+
HMN K L%GN NH OPMNH H I GP97N %GKMLP 7 I N8
#N O 7NH J OM %GN 2%99 Q P NHPP P I POT+
J& 1 A O I P 9PML MNHP NHM! I M T - M G
O I 77NHP AMNN9P I P!NG 7T !OP D N P 8
1 M9U !NH P GH MTG8 A O I P 9J U
XHP P GP LP!NG M P 8 KHM ! I P NH M !Q APM G 8
1 H OP I P ! QHN9T !M KHM !P9 H JGP
1%P K P %O]J NP NH OPMO I P!%G MNN9 !Q LAHG
X NH PPUT GHM!UG M!O TP99 KHML9PGG GUJ99G8
1 A O I P Q ! N M !P I MOP Q M P+
#!O H OP I P NH M OPMO I M! !H G GH JO

!P 9 !PG P!O !Q NH NH G M P ! !V +
D 2! 0+2 2! @ M!O7 9 2
F2! E +% $ 2! 7 9
D @D Q PG NH G LMGGMQP NHJG S

6 #OJ99 M!O HPM T G9J I AP H KH GHM99 GP CP ,
3MKH NM9 GL N8 7 ! LJ9GP GHM99 UPPL
" G !MNJ M9 L Q PGG AJN GJ KPMGP N APMN+R

H !QG NHMN N HPM NHP I N 9O HM P I MOP I P N P I A9P8
#!O 2 99 O N NH JN 7PM O JAN+
9 P M!J!GNM !%O 7P N I T G PPN 9 P+
> " 9O NHP!8 Q H I P AP I P T Q P K !GP!N
I M T -M G XDPO!PGOMT G N I 8
I ! QHN 9 U NHMN NH J 9 P M9 !P+
/ PN ! N NHT !J GP 9 P NH NHPP !NHT KHM I AP
MUP NH J NH G LH M9 AP !Q NHP! ! APO+
#!O NH G O GN 99PO 9]J O !U NH J 77
XHP! L PGP!N9T NH JQH M99 NHT P !G GHM99 J!
#K 9O M!O O GT HJ I J 8 7 ! LJ9GP
HM99 UPPL H G !MN P L Q PGG AJN GJ KPMGP+D
M I NH ! A PMNH GHM99 NPGN 7T NH J 9 %G N8
HP GPG ! NHT 9 LG M!O KHPPUG GHM99 7MOP
LM9T D MGHPG 8 NHT PTPG% O!O G 7M99 8
/ UP OPMNH HP! HP GHJNG JL NHP OMT 7 9 7P8
3MKH LM N OPL %O 7GJLL9P Q P ! I P!N+
HM99 GN 77 M!O GNM U M!O K 9O MLLPM 9 UP OPMNH +
#!O ! NH G A %O 9 UP!PGG 7GH J!U OPMNH
H J GHM9N K !N !JP N M!O 7 NT H J G+
#!O NHP! M MUP MG 7 I M L9PMGM!N G9PPL+
HP! NHP A OPQ I ! NHP I ! !Q K I PG
JGP NHPP 7 I NHT APO NHP P M N NH J OPMO
HP! @MG NHP I M! !P 7 J K J!N T G
2! NHT APGN APG J!K P %O ! NHP A P
P A !P N AJ MG ! NHT U !O PO%G Q M P F
H J GHM9N AP A !P N NHMN GM I P M!K P!N MJ9N+
XHP P M99 NHP U !O PO 7 NHP M^ J9PNG 9 P+
2! NHP I PM!N I P MQM !GN NH J GHM9N M MUP
HM99 & I P AT I T 9PNNP G U! J O 7N8
#!O H NHP GHM99 HP @* %8 M!O HP M!O
X 99 $MNKH NHT MU !Q M!O NHMN P T ! QHN
HM99 & I P APM NHPP HP! KP N M!NJM+
#!O NH G GHM99 7 PP NHPP 7 I NH G L PGP!N GHM I P8
27 ! !K !GNM!N N T ! I M! GH 7PM +
#AMNP NHT M9 J ! NHP MKN !Q N+
?J9+ : P I P Q P I P[1 NP99 ! N I P 7 7PM +
> " 9O8 QPN T J Q !P AP GN !Q M!O L GLP JG
2! NH G PG 9 P 2%99 GP!O M 7 M NH GLPPO
M!NJM NH I T 9PNNP G N NHT 9 O+
J& / P Q P I P GN P!QNH[M!O GN P!QNH GHM99 HP9L
M77 O+
OM P P99 OPM 7MNHP [9 4 &

3 3 22 F ! ! MLJ9PN%G !&- $

1 GDP?HC

, I M!T QJPGNG ! NP MG HP P M P N+S
= 4 P M!N+
MH Q H P I P N P!NT KJ!! !Q K UG+F
% 7 1 4 J GHM99 HM P ! !P 99 G 8 7 2%99 NaD 7 NHPT
KM!9 KU NHP 7 !QP G+
, " KM!GN NH J 7 T NHP I G 9
Y 7 1 M T G %N G M! 99 K U NHMN KM!! N 9 KU H G
!7 !QP G NHP P7 P HP NHMN KM!! N 9 KU H G 7 !QP G Q P+G
! N NH I P+
, : APQ !P+$S 9 4 P M!N+
XP GHM99 AP I JKH J!7J ! GH%O 7 NH G N I P+ S
XHMN G I T OMJQHNP Q !P N 7 M / MJ P!KP \
& - #T 7 G NH+ 6
, XP99 HP I MT KHM!KP N O G I P Q O !HP
#LPP GH GP97 99%O HM 9 N T N G+

XP Q P NHP NPWN 7 + M!O NHP 7 9 + H G GLPPKH 7 NHP 7 M ! NHP MJNH %G
Y%M I P!OPO R PO N !E3+* G P9MA MNPO 7 I NH NPP!9 !PG N NH NT NH PP 8 M!O TPN
NHP M J I PO N G HM P APP!A 9O P! JQH P P!HP P N Q P JG M NPW7 I MOP JL
7 HMUGLP P%G 7 GN NH JQHNG M!O H G 9MGN+
D 2! @5 - '2 2! @ 2
F H G 9 !P H KH G !9 P99 NHP M!K P!N K L PG HMG APP!9P7N JN !M99 NHP
I OP I + HP PO N G HM P HP P Q !7M APT !O NHP 77 KP 8 ! KM!P J!OP
GNM!O HT NHP I P LM N KJ9M 9O!Q JN 7NHP OPM !NHP !PWN 9 !PG GH J9O
HM P Q P!NHP I 177P!KP 3 $ I PM!G AP H I P+
1 / + 22+ 3 3

2!M99HP APGNM MTAPMHPNKHJ KH
O NH JQHG IPD!MNJ PA OGJG M99 9M IP!N+
4PN!MNJ P%GNPM GM PPMG !%G IP IP!N+
, #99NH !QGNHMNP OM !POPGN M9+
J !7 INHP 77 KPN A9MKU7J!P M9
1J !GN J IP!NGN IP9M!KH 9TAP99G8
1J POO !QKHPPN M GMOAJ M9 7PMGN8
1J G 9PI!HTI!GN GJ99P!O QPGKHM!QP8
1J A OM9 79 PGGP P7 MAJ POK GP+
#!OM99NH !QGKHM!QPNHPI N NHPK !N M T+
> Q T J ! SM!O IMOM I Q NHH I 8S
#!OQ G -M G P P T !PL PLM P
7 99 NH G7M K GPJ!N HP Q M P+
HPHPM P!GO 9 %JL !T J7 G IP 998
PNHPI ! I P AT K GG !QNHP H QH 99+
= 4 & " ((" ("O M +
E&- %OM NH P I MTLJNJL J L LPG M!OAPQ !P+
& - " !PGNQ OP99 GMH LJNJL LJNJL+
O P99T J U! NH GGMLN 7JG KMGP+ = 4 J GP+
E&- #T AT IT N NH NHPKMGP IMT APM IP!OPO+

JG K M!G 1 IJG K M!G - - -#
1M!T J 99HM P IP9 P ;9 5 G -
E&- 7 5 G - A
1 IJG K M!G APKMJGP IT HPM N NGP97L9MTG S
- -.& * 1 L9MT IP G IP IP T OJ IL DN K I7 N
IP
%E&- N MOJ IL P8 %NG ! N IPN L9MT !
4 J 99 ! NNHP!\
E&- +
2 99NHP!Q P N T J G J!O9T+
E&- X HMN 99T J Q P JG\
I !PT ! IT7M NH8 AJN NHP Q9PPU 2 99Q P
T JNHP I !GN P9+
E&- HP! 99 2 Q P T JNHP GP !Q K PMNJ P+
HP! 99 2 9MT NHP GP !Q K PMNJ P%G OMQQP ! !
T J LMNP+ 2 99 M T ! K NKHPNG 2%99 T J+ 2%99 . T J8F5 T J ! NP IP\
E&- #!T J JG M!O. JG T J ! NP JG+
%E&- - MT T J LJNJL T J OMQQP M!O LJN JN T J
N+ ;
HP! HM P MNT J NHH IT N8 2 99 O T APMN T J
NH M! ! N M!O LJNJL IT !OMQQP S#!G P
IP9 UP IP!8

X HP!Q L !Q Q P7G NHP HPM NO NH J!O
#!O O 9P7J9 OJ IL GNHP I !O LL PGG
$ HP! IJG K NH HP G 9 P G J!O8D

X HT G 9 P G J!O\ HT IJG K NH HP G 9 P G J!O\
X HMN GMT T J I ! MN9 !Q\F
E&- M T G APKMJGP G 9 P HMNH M G PPN G J!O+
- PNNT[F X HMN GMT T J " JQH &PAPKU\
%E&- 2 GMTSG 9 P G J!O APKMJGP IJG K M!G G J!O7 G 9 P +
- PNNTN [X HMN GMT T J ?MIPG J!OL GN\
)E B-%OM NH 2U! ! N HMN N GMT+
1 2 K TT J IP KT[T J M P NHP G !QP 2 99 GMT

4 F !MNJ P HMG APP! !N OJKPO !N NHP NPWN7 I NHP GPK !O
7 9 HP O77 KJ9NT 7 % G ! N IM! 7PGN IP !MNJ PSG IP ILJ9GPG 7
!MNJ PSG IP LM N 7 J !MNJ P+ HP OPM IMT HM P GJQQPGNPO NHP 6G IP
!MNJ MG NPM GR 7 9N !+
% -MG ! N Q !M99T M AJ 9PGNDHP NP I AJN N QP!P M99T IL9 PO G IP HMN
G 7J9 I J !7J9+
& 6 2 G'' O#2 M!O M P NHP GT99MA9PG !MIPG Q P! !
G 9I GMN ! G 9 7M !Q N NHP G J!OG 5 M!O O !NHP IJG KM9GKM9P+
= PP 299JGN MN !GN NH G MKN+
SM 9JNP GN !Q+
V +*- %
() SNHP NH PP GN !QPO 9 !+
2!NHP GP M!N KM99G NHP I 6'7 OO9P G+R 2N G !NP PGN !Q N IM U NHP KHM!QP !
NHP K PKNPO K LT HMUGLP P J9O ! N LJN 77P!G P OG N NHP GU 99PO !
IJG K P P!' !N NHP I JNH 7M K9 ! GH GP M!N+
MA4

7 T J 2N GS IJG K NH HP G 9 P G J!O APKMJGP
IJG K M!G HM P! Q 9O7 G J!O !Q S

HP! IJG K NH HP G 9 P G J!O+
X NH GLPPOT HP9L O NH 9P!O PO PGG+

= 4 $ - 3 3
E&- X HMN M LPGN 9P!NU!M P G NH G GM I P[;
&- "M!Q H I ?MKU[IP P%99 ! HP P8 NM T
7 NHP I J !P G M!O GNMT O ! !P + = 4 &

3 3 2+S M!NJM+ 7

#

! 27 2 IMT N JGN NHP 79MNNP !Q N JNH F 7G9PPL+
T O PM I G L PGMQP G IP E T7J9 !P G MN HM!O
T A G I%G 9 O G NG 9 QHN9T ! H G NH !P8
#!O M99NH G OMT M! J!MKKJGN I%O GL N
/ 7NG IP MA P NHP Q J!O NH KHPP 7J9 NH JQHNG+
2 O PM I N IT 9MOT KMH P M!O 7 J!O IP OPMO8
@ N M!QP O PM I NHMN Q PG M OPMO I M! 9PM P N NH !U
#!OA PMNH%O GJKH 9 7P NH U GGPG ! IT 9 LG+
HMN 2 P %O M!O MG M! P I LP +
#H IP H G PPN G 9 P NGP97L GGPGG%O+
X HP! AJN 9 P%G GHMO G M P G KH !E T[

& 3 3 2+S M!NJM+ 7

P $G 7 I P !M S " ! R M9NHMGM \
5 GN NH J ! N A !Q IP 9PNNP G 7 I NHP 7 M \
" O NH IT 9MOT \ 2G IT 7MNHP P99 \
" O NH IT 9MOT ?J9 PN \ HMN 2 MGU MQM !8
0 ! NH !Q KM! AP 99 7 GHP AP P99+
% HP! GHP G P99 M!O ! NH !Q KM! AP 99+
"P A OT G9PPLG !' MLP9G% I !J IP!N+
#!O HP I I NM9 LM N NH M!QP9G 9 PG+
2 GM HP 9M O 9 !' HP U !O PO%G MJ9N+
#!O L PGP!N9T N U L GN N NP99 N T J
1 LM O !' IP 7 A !Q !Q NHPGP 99 !P G+
!KP T J O O 9PM P N 7 IT 77 KP G +
! 2G N P P!G \ NHP!2 OP7T T J GNM G S
H JU! %GN IT 9 OQ !Q QPN$ IP !U M!O LMLP +
#!OH P L GN H GPG 8 2 99 HP!KP N ! QHN+
% 2 O APGPPKH T J G HM P LMN P!KP+DD
4 J 9 UG M P LM9P M!O 9O M!O O IL N
IP I GMO P!NJ P+
! JGH NH J M N OPKP %O 8
/PM P IP M!O O NHP NH !Q 2 A O NHPP O
"MGN NH J ! 9PNNP G N IP 7 I NHP 7 M \
% IT Q O 9 O+
! I MNNP QPN NHPP Q !P+
#!OH P NH GP H GPG 8 2%99 AP NH NHPP GN M QHN+
= 4 &
X P99 ?J9 PN 2 99 9 P NH NHPP N ! QHN+
/PN%G GPP 7 I PM!G S1 I GKH P7[NH J M N G 7N

F V + 2 H G O HMG APP! PNM !PO AT G IP I OP I PO N G+ JN N G
! N O 77 KJ9N N GPP NHP Q NH 7NHMN LH 9 G LH KM9 GL N !' HMUGLP P H KH GJQ
QPGNPO NHP GJAGN NJN ! 7 NHP O 6 N JNH R H KH LP!G N NHP I !O M OPPL
9J IP 7 I PNMLHTG KM9 !]J T+
V +* 9 8 % 2 ' 1
HP 7 GN]JM N HMG S

6 -M O !' IP G 2 ! N 9PM P T J NHJG+R

JN NHP!M99 NHP P I M ! !Q O M9 QJP !' NHP PM 9T L9MT O 77P G 7 I NHP M IP!OPO
NPWN 7 NHP MJNH M!O NHP KHM!QPG GH H G MKKJ MNP EJOQ IP!N+ O PWM I L9P8 S

6 "MGN NH J ' 9PNNP G N IP 7 I NHP 7 M \R

NHMN I GN IL NM!N PLPN N ! G I NNPO !' NHP Q !M9 L9MT # P P ! N N
N JGN N NH G EJOQ IP!N &PKP!N PO N G HM P ! N 7 99 PO NHP PWM I L9P 7 G IP
7 NHP L POPKPGG G ! OPM9 !Q NH H G K W PKN !G MKK O !Q N NHP ! !
KML KP+

HP A T Q PG M ! !Q G IPNH !Q O NH MLL MKH+
X HMN KJ GPO 7 M!OP G NH G MT N ! QHN
K GG IT AGP]J PG M!O N JP !1 G \
X HMN NH M N KHWF &.. $ 3 $M H 9P 9:

O " 2 ! $! '$ X
! : P IP NHMN ! '$ "" P!KH !Q !
" 9O NMUP - # 5 I ! !Q
PP NH J" 1 ! 5 ! "" M!O 7MNHP +
: P IP NHP 3 # ,! 5 . KHM QP NHPP
X HMNP%P NH J HPM %GN GPPGN GNM!O M99 M9 7+
#!O O ! N !NP JLN IP !' IT K J GP+
X HT 2 OPGKP!O !N NH G APO 7 OPMNH+
2G LM N9T N APH 9O IT 9MOT%G 7MKP
JN KH P79T N NMUP NHP!KP 7 I HP OPMO 7 !QP
#L PK JG !Q8 M !Q NHMN 2 IJGN JGP
2!' OPM P IL9 T IP!N NHP P7 P HP!KP AP Q !P S
JN 7NH J EPM9 JG O GN PNJ !' N L T
2!' HMN 2 7J NHP GHM99 !NP!O N O +
T HPM P! 2 99 NPM NHPP E !N AT E !N+
#!O GN P NH G HJ!Q T KHJ KH TM O NH NHT 9 IAG
HP N IP M!O IT !NP!NG M P GM MQP 9O8
P 7 P KP M!O I P !PW MA9P 7M +
HM!' P IL NT N QP G NHP M !Q GPM+
2 99 AP Q !P G M!O ! N JA9P T J+
! GHM9N NH J GH IP 7 P!OGH L+SD MUP NH J
NHMN
/ P M!O AP L GLP JG8 M!O 7M P P99 Q O 7P99 +
O M99 NH G GM IP+ 2%99 H OP IP HP PMA JN8
" G 9 UG 2 7PM M!O H G !NP!NG 2 O JAN+ = -
! H J OPNPGNMA9P IM NH J IA 7OPMNH+
: Q%O NH NHP OPM PGN I GP9 7NHP PM NH+
HJG 2 P!7 KP NHT NNP!EM G N LP!
=% ' 3!, "!!!.! !
#!O !OPGL NP [%[[K M I NHPP NH I P 7 O[
H G G NHMN AM! GH%O HMJQHNT !NMQJP
HMN I J OP %O IT 9 P%G K JG !8SD NH H KH Q P7+
2N G GJLL GPO NHP 7M K PMNJ P O PO S
#!O HP P G K IP NK7O G IP 99M ! JG GHM IP
NHP OPMO A O PG 2 99 MLL PHP!O H I+S = "1 -
N L NHT J!HM99 %O N 9 9P !NMQJP+
M!' P!QPM!KP AP LJ GJ%O 7J NHP NHM!' OPMNH
!OP I !PO 99M ! 2 O MLL PHP!O NHPP
1APT M!O Q NH IP# 7 NH J IJGN O P+
! 2 IJGN !OPPO8 M!O NHP P7 P KM IP 2 H NHP +
: O QP!N9P T JNH NP I LN ! N M OPGLP MNP IM!+
O9T HP!KP M!O 9PM P I P N H ! U JL !' NHPGP Q !P8
/PN NHP I M77 QHN NHPP+S2 APGPPKH NHPP T JNH+
-JN D ! N M! NHP G !' JL !' IT HPMO +
T J Q !Q IP N 7J T S1 AP Q !P[
T HPM P! 2 9 P NHPP APNNP NHM!' ITGP978
O 2 K IP H NHP M I %O MQM !GN ITGP97
NMT ! N AP Q !P8S9 P M!O HP PM7NP GMT S
#' IMO IM!%G IP KT AMOP NHPP J!' M MT+
2 O OP7T NHT K I I GP MN ! D
#!O MLL PHP!O NHPP 7 F M 7P9 !' HP P+
! X 9N NH J L UP IP \ NHP!' HM P MN NHPP A T+
= 5. 3
3 1 / O 2 NHPT 7 QHN 2 99 Q KM99 NHP MNKH+
= 4 -MQP+

+ 9 -
V + (A %
V + ($ $ %
HP 7 99 !Q 9 !PG M P HP P !N OJKPO !' @ M!O NHP 7 9 M9 !P HMG
P T MN !M99T K !EPKNJ PO NHMN NHPT M P !NP L 9MN !G 7 M K IL G N HP
L !NP HMO L AMA9T G IP ILP 7PKN9T P MGPO ! NPG 7NHP L PM !' H G K LT $X P
Q P NHP I MG P7 !O NHP I S
6 IP 9 P NH J !' IT M IG8
"P P%G N NHT HPM9NH HP P%P NH J NJ IA9PGN !+
1 N JP ML NHPKM T8
HT O MQG M P]J KU HJG NH M U GG 2 O P+
5PLM N MQM !+R

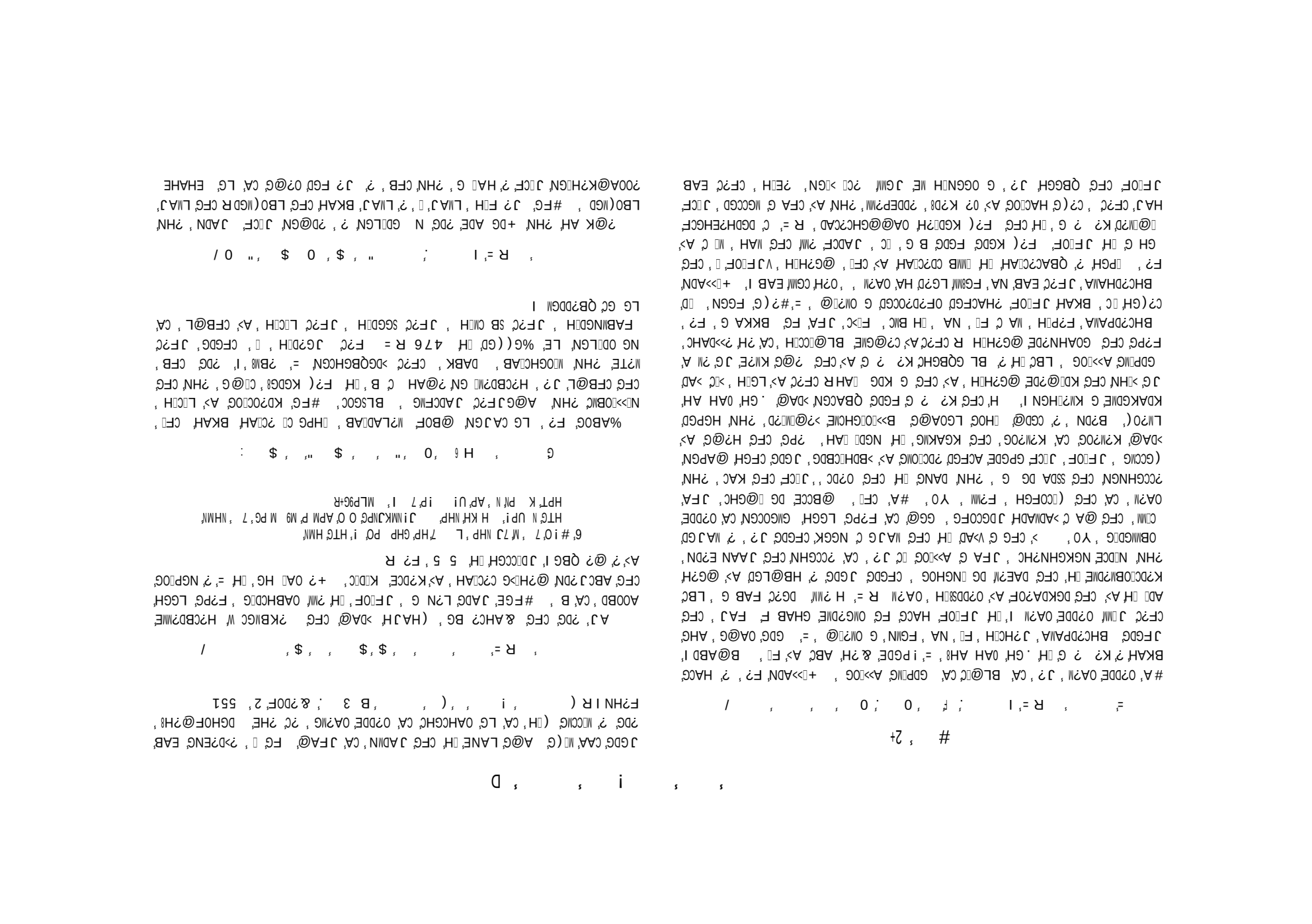
HP GLPPKH MG N GNM!OG !' J NP+ N KKJL PG 7 NT GP P!' 9 !PG 2N PWNP!OPO !9T
N N P!NT NH PP 9 !PG !' NHP Q !M9 K LT

GNM I G9M ![=> -+GS27 NH J AP I P K 7J9+
1LP!' NHP N IA 9MT IP NH ?J9 PN+ =
! 2!' 7M NH 2 998S/PN IP LP JGP NH G 7MKP8S
P KJN %G U !G IM!' ! A9P K J!NT - M G8S
X HMN GM O IT IM!' HP!' IT APN GGPO G J9
5 O ! N MNNP!O H I MG P OP \ 2 NH !U
" P N 9O IP - M G GH J9OHM P IM PO ?J9 PN
M O HP ! N G \ O O 2 O PM I N G \
1 M I 2 IMO HPM !Q H I NM9U 7 ?J9 PN
NH !U N MG G \S1 Q P IP NHT HM!O+
1!P N NH IP !' G J I G7 NJ!P%G A U +
2%99 AJ T NHPP !' M N J I LHM!N Q M P S
#' Q M P \ 1 ' ! ' 8 M 9M!NP ! G9MJQHNP %O T JNH+
O HP P 9 PG ?J9 PN M!O HP APMJNT IMUPG
H G MJ9N M 7PMGN !Q L PGP!KP 7J99 7 9 QHN+
5PMNH 9 P NH J NHP P AT M OPMO IM!' !NP %O+
=? 5 3 " ! &
" 7N HP!' IP!M P MN NHP L !N 7 OPMNH+
"M P NHPT APP!' IP T[H KH NHP UPPLP G KM99
#' 9 QHN! !Q AP7 P OPMNH ' 1 H I MT 2
M99DNH G M 9 QHN! !Q [S1 ' !T 9 P[IT 7P[
5PMNH NHMN HMNH GJKU%O NHP H !PT 7 NHT A PMNH+
"MNH HMO ! L P TPN JL !' NHT APMJNT
H J M N ! K !]JP %O 8 APMJNT%G P!G QL TPN
2G K IG !' !' NHT 9 LG M!O !' NHT KHPPUG+
#!O OPMNH%G LM9P 79MQ G ! N MO M!KPO NHP P+S
TAM9N 9 PGN NH J NHP P !' NHT A9 OT GHPPN \
1 HMN I P 7M J KM!' 2 O N NHPP+
HM!' NH NHMN HM!O NHMN KJN NHT T JNH !' N M !
GJ!OP H G NHMN MG NH !P P!P IT \
O Q P IP K JG !' [S#H OPM ?J9 PN
X HT M N NH J TPN G 7M \ HM99 2 AP9 P P
HMN J!GJAGNM!N MG OPMNH G M I JG8
#!O NHMN NHP 9PM!' MAH PO I !GNP UPPLG
HPP HP P !' OM U N AP H G LM M I J \
O 7PM 7NHMN 2 GN 99 99 GNMT NH NHPP 8
#!O !P P 7 I NH G LM9MKP 7O I ' ! QHN
5PLM N MQM !'8DHP P HP P 99 2 P I M !'
X NH I G NHMN M P NHT KHM I AP I M OG 8 1 HP P
X 99 2 GPN JL' IT P P 9MGN !Q PGN8
#!O GHMUP NHP T UP 7 !MJGL K JG GNM G
O I NH G 9O PM PO 79PGH+S3TPG 9 U T J 9MGN[
I G NMUP T J 9MGN P I A MKP ' M!O 9 LG 1 T J
HP O G 7A PMNH GPM9 NH M QHNP JG U GG
#' OMNP9PGG AM QM !' N P!Q GG !Q OPMNH S
IP A NNP K !OJKN K IP J!GM J T QJ OP[
H J OPGLP MNP L 9 N ! MN !KP J!' !'
HP OMGH !Q KUG NHT GPM G KU PM T AM U[
"P P%G N IT 9 P S= '- 9 1 N JP ML NHPKM T8
HT O JQG M P]J KU+S HJG NH M U GG 2 O P+ =

! " / ! 2 2 $!2$B "-, "

> M !N O M!K G AP IT GLPPO H 7N N ! QHN
"M P IT 9O 7PPN GNJ IA9PO MN Q M PG 2SDXH %G NHP P \F
% " P P%G !P M 7 P!O M!O !P NHMN U! G T J P99+
> 9 GG AP JL !' T J[P99 IP Q O IT 7 P!O+
X HMN N KH G T !O%NHMN M !9T 9P!OG H G 9 QHN
Q JAG M!O PTP9PGG GUJ99G 8 MG 2 O GKP !+
2N AJ !PNH !' NHP MLP9G% I !J IP!N+
% 2N O NH G H 9T G 8 M!O NHP P%G IT I MGNP +
1!P NHMN T J 9 P+
> XH G N \
% & IP +
> " 9 !Q HMNH HP APP!' NHP P 9
% OJ99 HM97 M!' H J +
> : NH IP N NHP MJ9N+
% 2 OM P ! N G 8

F NPP P!G !' H G NPWN HMG PGNPO M 9 !P JN 7NHP 7 GN]JM N
6 XH G N NHMN K !G NG G 9MNP NHP OPMO



@AB" J□CF" ?'QB?DDGM A@G >GMMAJ"?'LD? ?DC' H' GHDE') ".?DNAMKF"
□ CAM"?HN' E@'?DG O?MMGN'LE'CFG'LAE'CFDGG',"J? FGD I' AM□H FGN'
F? R =" '@?H'@?E' GG FAJ' @?HE'LMAANE'QB?DDGM"?'LD?J□M□H ' J? F-
LBO(MGD'@?E' K□O(' ABC'A>?' ?' LACCMG'A>?'F?E I' ?HN' BMMGD '□H' FD'
VMCCMG'(HAJH'□H' Hi M?HN"CFAB F' A@GC□@G ">ABHN ' KDG?NH '□C'
" 'LD?HOFG R >DA@' J□F□OF□C 'H?@G' R CA' BKKME'CFG @A C
NGM□ FC>BM'A>'F?NG'BHNGD'CFG BH'A>' ED□?' AD'A>>'C?MG'A>'CFG
@□ FC'F?PG'>ABHN'CFG' E0?@AD'□H' F?BOGD@'G QB□'□CG'C?MG'A>'CFG
=" MAJGD'?HN'CFG $G?> I' J□FGD□'CFG'FGN G'CF?C

/' 9 GPD' i'M99F'NHP'Q ppi'M AP p
X NH'GTKMI P' MG'GPN'MiO'PQ9MiNP P+R

5 ' R K'" O ' 3 ' ,K' 3 '$ ' /

#F□ ' ?HC□CFGC□O?M'OA@L□H?C□AH' A>'OAHCD?D□G ' AD□ □H?CGN'□H' CFG
DAPGHQ?M'KAGCDE'?HN' J? '? □NBAB ME' OBMC□P?CGN' LE' GCD?DO'
F?(KGDG'□H' CF□' K? ? G' @?E' LG' N□ C□HOCME' CD?OGN' CA' F?BOGD8'
CD?H M?C□AH' A>'CFG'=" "A@?BH□' A>'CFG' "A G I' JFGDG' JG' F?PG' MAPG'
NG ODDLGN'? ' ?'F?CG>BM'KG?OG R'?'CDBCF'>BM' A>'>?M GFAAN R'?'NG K?□D□H '
FAKGR'?'PA□N'DG? AH R'?' □O(' FG?M' YO

 R ,'%$ '$ ' D;' $ 'D ' ;" O '
L ," D;' ' ' ' $ '$ ' $ ' 7

CGGPGH' ?E' CF?C CFG @?'('FGDG'@G?HC'JGDG'CFA G'JADH'LE'
>G@?MG' KGOC?CAD' A>'CFG K□M?E' LBC□C ?KKG?D' O?DOGME'HGOG ?DE' A'
CA'M□@□C CFG B G A>'?'M?NE8'@?'(H'#FG'#J A'+GHCM@GH'A>')GDAH?'
JG F?PG'CFG = BH G KGMM□H '@?'(I' H'$APG8'$?LAB8'$A C'CFG'
M?NG'JG?D'@?('H'CFG>□D C□HCGDP□GJ'LGCJGGH'CFG(□H '?HN'CFG'
KD□HOG' R =" AJ'>?□D'LG>?MM'EABD'@? (I' ?E'.□DAH'CA'"A ?M□HG

' R ="%$ ' $' ,$ ' ' ' :' 7

H'CFG'KAG@'A>',"A@GB'?HN'0B□GCI'CFG G? AH'A>' ?KBMGC8'>G? C
□'J□HCGD R

6' HP' P T' iNP'i QHNPG' pGN P'NHP' H GN I MG'QM I PG
#i0'i ';NHP'GPMG'i'O NH' i NP'N'AMi]JP□N i GH'OM I PG+
#i0'7T GN' i' MLLP9□G'H JGP'NHP'KH P7' 7M99'NHP'UaE
LM NH'7 'i 'K GN'NHP' iNPO'JGP' 7'AMi]JPNG N'APQ i+R

6' HMN' pGN M O' NPNH'7 I'NH G K NT%G G OP R

/ H','A $' $ ' 3 ' /

FGH' F?(KGDG'F?' CA'NG?M'J□CF'NG ODDK□AH'A>'H?□BD?M' OGHGDE'
FG'?M@A C □HP?D□?LME'MAO?N□ G ' F□@ GM>'J□CF' CFG' BC@A C N□ C□HOCHG '
G'HGPG0'@□ C?'(G ' CFG' E0?@AD' DAPG ' A>'CFG' ABC□F' >AD'CFG' L□DOF
P AAN ' A>'CFG'HADCF' H' BOF'0? G ' F G J ? ' HAC' D□QB□DGN' CA' G@KMAE'
>?@M□?D'?HN'OAHPGHC□AH?M□@? G ' >AD'CFG' ?'(G A>'KDG GHC□H ' ?H' □NG?
@ADG'N□ C□HOCME'CA' F□ '?BN□GHOG'CF?H' ?'D□ □N'?NFGDGHOG'CA'CFG'M?J ' A>'
0A CB@G'VJG'G@KMAE'CFG'JADN'□H' □C ' M?D GD' GH G A>'@?HHGD ' JABMN'
F?PG'?MMA J GN' #FG' DAPG'A>'E0?@ADG

6' HMN' PGN M O' NPNH'7 I'NH G K NT%G G OP R

@AB" J□CF"?'QB?DDGM A@G'>GMMAJ"?'LD? ?DC' H' GHDE') ".?DNAMKF"
□ CAM"?HN' E@'?DG O?MMGN'LE'CFG'LAE'CFDGG',"J? FGD I' AM□H FGN'
F? R =" '@?H'@?E' GG FAJ' @?HE'LMAANE'QB?DDGM"?'LD?J□M□H ' J? F-
LBO(MGD'@?E' K□O(' ABC'A>?' ?' LACCMG'A>?'F?E I' ?HN' BMMGD '□H' FD'
VMCCMG'(HAJH'□H' Hi M?HN"CFAB F' A@GC□@G ">ABHN ' KDG?NH '□C'
" 'LD?HOFG R >DA@' J□F□OF□C 'H?@G' R CA' BKKME'CFG @A C
NGM□ FC>BM'A>'F?NG'BHNGD'CFG BH'A>' ED□?' AD'A>>'C?MG'A>'CFG
@□ FC'F?PG'>ABHN'CFG' E0?@AD'□H' F?BOGD8'G QB□'□CG'C?MG'A>'CFG
=" MAJGD'?HN'CFG $G?> I' J□FGD□'CFG'FGN G'CF?C

/' 9 GPD' i'M99F'NHP'Q ppi'M AP p
X NH'GTKMI P' MG'GPN'MiO'PQ9MiNP P+R

5 ' R K'" O ' 3 ' ,K' 3 '$ ' /

#F□ ' ?HC□CFGC□O?M'OA@L□H?C□AH' A>'OAHCD?D□G ' AD□ □H?CGN'□H' CFG
DAPGHQ?M'KAGCDE'?HN' J? '? □NBAB ME' OBMC□P?CGN' LE' GCD?DO'
F?(KGDG'□H' CF□' K? ? G' @?E' LG' N□ C□HOCME' CD?OGN' CA' F?BOGD8'
CD?H M?C□AH' A>'CFG'=" "A@?BH□' A>'CFG' "A G I' JFGDG' JG' F?PG' MAPG'
NG ODDLGN'? ' ?'F?CG>BM'KG?OG R'?'CDBCF'>BM' A>'>?M GFAAN R'?'NG K?□D□H '
FAKGR'?'PA□N'DG? AH R'?' □O(' FG?M' YO

 R ,'%$ '$ ' D;' $ 'D ' ;" O '
L ," D;' ' ' ' $ '$ ' $ ' 7

CGGPGH' ?E' CF?C CFG @?'('FGDG'@G?HC'JGDG'CFA G'JADH'LE'
>G@?MG' KGOC?CAD' A>'CFG K□M?E' LBC□C ?KKG?D' O?DOGME'HGOG ?DE' A'
CA'M□@□C CFG B G A>'?'M?NE8'@?'(H'#FG'#J A'+GHCM@GH'A>')GDAH?'
JG F?PG'CFG = BH G KGMM□H '@?'(I' H'$APG8'$?LAB8'$A C'CFG'
M?NG'JG?D'@?('H'CFG>□D C□HCGDP□GJ'LGCJGGH'CFG'(□H '?HN'CFG'
KD□HOG' R =" AJ'>?□D'LG>?MM'EABD'@?('I' ?E'.□DAH'CA'"A ?M□HG

' R ="%$ ' $' ,$ ' ' ' :' 7

H'CFG'KAG@'A>',"A@GB'?HN'0B□GCI'CFG G? AH'A>' ?KBMGC8'>G? C
□'J□HCGD R

6' HP' P T' iNP'i QHNPG' pGN P'NHP' H GN I MG'QM I PG
#i0'i ';NHP'GPMG'i'O NH' i NP'N'AMi]JP□N i GH'OM I PG+
#i0'7T GN' i' MLLP9□G'H JGP'NHP'KH P7' 7M99'NHP'UaE
LM NH'7 'i 'K GN'NHP' iNPO'JGP' 7'AMi]JPNG N'APQ i+R

6' HMN' PGN M O' NPNH'7 I'NH G K NT%G G OP R

/' 9 GPD' i'M99F'NHP'Q ppi'M AP p
X NH'GTKMI P' MG'GPN'MiO'PQ9MiNP P+R

5 ' R K'" O ' 3 ' ,K' 3 '$ ' /

#F□ ' ?HC□CFGC□O?M'OA@L□H?C□AH' A>'OAHCD?D□G ' AD□ □H?CGN'□H' CFG
DAPGHQ?M'KAGCDE'?HN' J? '? □NBAB ME' OBMC□P?CGN' LE' GCD?DO'
F?(KGDG'□H' CF□' K? ? G' @?E' LG' N□ C□HOCME' CD?OGN' CA' F?BOGD8'
CD?H M?C□AH' A>'CFG'=" "A@?BH□' A>'CFG' "A G I' JFGDG' JG' F?PG' MAPG'
NG ODDLGN'? ' ?'F?CG>BM'KG?OG R'?'CDBCF'>BM' A>'>?M GFAAN R'?'NG K?□D□H '
FAKGR'?'PA□N'DG? AH R'?' □O(' FG?M' YO

 R ,'%$ '$ ' D;' $ 'D ' ;" O '
L ," D;' ' ' ' $ '$ ' $ ' 7

CGGPGH' ?E' CF?C CFG @?'('FGDG'@G?HC'JGDG'CFA G'JADH'LE'
>G@?MG' KGOC?CAD' A>'CFG K□M?E' LBC□C ?KKG?D' O?DOGME'HGOG ?DE' A'
CA'M□@□C CFG B G A>'?'M?NE8'@?'(H'#FG'#J A'+GHCM@GH'A>')GDAH?'
JG F?PG'CFG = BH G KGMM□H '@?'(I' H'$APG8'$?LAB8'$A C'CFG'
M?NG'JG?D'@?('H'CFG>□D C□HCGDP□GJ'LGCJGGH'CFG'(□H '?HN'CFG'
KD□HOG' R =" AJ'>?□D'LG>?MM'EABD'@?('I' ?E'.□DAH'CA'"A ?M□HG

' R =" A□'

E ' ' J ?

HG ' A>¢ CFG KD□HO□KMG M?□N NAJH □H &D' F□CGD8 ' PGDE ?LMG CD?OC R ' =' H' CCG@K¢ CA G KM?□H ?HN □MMB CD?CG P?D□AB ' ? ? G 'A>' F?(KGDG ' AH ?' HGJ' D□HO□KMG A>' D□C□O□ @ ' NGD□PGN >DA@ &D ' $AO (G8 ' %AOCD□HG A>' CFG AO□?C□AH A>' NG? I' &D' F□CGD8 ' @A C H GH□AB ' CFGADE JABMN MA G @BOF □H LG□H ' KDG GHCGN □H ?HE ACFGD CF?H F□ ' AJH JADN ' G @?E SB C @GHC□AH CF?¢ F□ ' MG?N□H ' NAOCD□HG ' ? ' ?KKM□GN CA F?(KGDG ' □ ' CF?¢ CFG G OGGN□H ' J?D@CF A>' F□ ' □@? □H?C□AH A>CGH BKKM□GN F□@ ' LE CFG KAJGD A>' ? AO□?C□AH ' J□CF JADN ' ?HN J□CF □NG? ' B G CGN CA CFG @□HN LE ?' KD□HO□KMG A>' BH□AH BHKGDOG□PGN LE F□@ GM>' ?HN □HNGKGHNGH¢ A>' CFG BLSGOC CA J F□OF CFGE ?DG ?KKM□GN ' G DG?N□ME ? DGG J□CF &D' F□CGD CF?¢ =' CF□ ' KDAKGH □CE □H CFG @□HN CA ? AO□?CG BLSGOC ' A DG@ACG □H CFG□D @G?H□H ' ?HN A FGCGDA GHGAB ' □H CFG□D H?CBDG ' @B C ' A>' HGOG □CE ' A@GC□@G ' NGOG□PG CFG ?DNABD A>' CFG JD□CGD □HCA JF□@ □O?M AD D□N□OBMAB ' OA@L□H?C□AH ' ' CFG DG?NGD ' FAJGPGD ' □ ' HA¢ LM□HNGN LE CF□ ' >? O□H?C□H ' KD□HO□KMG ' JF□OF ' JF□MG □¢ ODG?CG ' CFG ? AO□?C□AH ' OAHOG?M ' M□(GJ□ G □C ' G>>GOC ' FG □ ' □H C?HCME □@KDG GN J□CF CFG QB?□HCHG ' AD CFG ?L BDN□CE A>' CFG □@? GDE ' ?HN □ ' □HOM□HGN CA OF?D G CFG JD□CGD J□CF CFG □HCGHC□AH A>' ?' >AAM□ F QB□LLMG ' AD ?H □@KGDC□HGH¢ ?MMB □AH I' C □ ' □H CF□ ' K□D□C A>' ?' OAMN ?HN M□CGD?M OD□C□O□ @ ' FGDG A JGMM NG OD□LGN ' CF?¢ &D ' &AHO (' &? AH KDAHABHOG ' BKAH CFG K? ? G LG>ADG B R = #F□ ' D□N□OBMAB ' KGGOF □ ' >BMM A>' ?L CDB G QB□LLMG I' .B¢ CFG KD□HO□KMG A>' ? AO□?C□AH ' ? ' G KM?□HGN LE &D' F□CGD ' ?¢ AHOG DGOAHO□MG ' B 'CA CFG QB□LLMG ' #FG =' PAMB@GI A>' EABH ' ?D□ 8 >?OG B G C ' CFG =' LG?BCE8 ' KGH I' JF□OF F?CF =' JD□¢ I' CFGDG ' #FGH ' CFG AL OBD□C□G ' A>' CFG >?□D =' PAMB@G I' ?DG JD□CCGH □H CFG =' @?D □H A>' F□ ' GEG I' ? ' OA@@GHC ' A>' ?HO□GHC LAA (' ?DG ?MJ?E ' KD□HCGN □H CFG @?D □H ' $? CME ' CF□ f= LAA (' A>' MAPGI M?O (' = ?' OAPGD I' R CFG =' AMNGH CADE I' @B C LG MAO (GN □H J□CF =' AMNGH OM? K I' #FG □H GH□AB ' @?H? G@GHC¢ A>' CFG PG□H A>' □@? GDE □ '?¢ MG? C¢ ? 'DG@?D (?LMG ? ' □C ' = ?L CDB G QB□LLMG I

I' ') R =' 8 ' 1' !' &, '" !!"B2 '"2 ' ' - .,' YO

#FG @? QBG A>' M?N□G ' AD @?TAH ' □H F?(KGDG8 ' #□@AH ' □ ' KDG-OGNGN LE ?' BK□N ' JFA ?NNDG G ' CFG OA@K?HE □H ?' KGGOF ' #F□ ' =' NGP□OG I' J? ' ?' KD?OC□OG A>' OABDCME M□>G LG>ADG ?HN NBD□H ' CFG C□@G A>' F?(KGDG ' .B¢ FGDG FG ?E R

X :%O-+% (* ' +* '(' @:' B2* S +1 O

#FG = #?DC?D8 ' K?□HCGN LAJ' A>' M?CFI' □ ' CFG LAJ' A>' CFG □?C□O H?C□AH ' J□CF ?' NABLMG OBDPG ' ?HN F?(KGDG G@KMAEGN CFG GK□CFGC CA N□ C□H B□ F CFG LAJ ' A>' BK□N >DA@ CFG AMN !H M□ F MAH LAJ ' #FG =' ODAJ (GGKGD I' JFA O?DG ' CFG M?N□G ' F?N ?M A ?' LAJ ' FG □ ' CFG FB>>MG AD @?J (□HR CFG O?DGODAJ' A>' D? ' ?HN CD?J ' J□CF ?' LAJ' ?HN ?DDAJ' □H F□ ' F?HN ' =' #F?¢ >GMMAJ' F?HNMG ' F□ ' LAJ' M□(G ?' ODAJ ' (GGKGD I' ?E8 ' $G?D ' #FG =' J□CFABC LAA (' KDAMA BG ' >?□HCME KA(G ?>CGD CFG KDA@KCGD I' □ ' BKKA GN LE ?DCAH CA ?MMBNG CA CFG LAE ?OCAD ' CF?¢ JG ?>CGDJ?DN ' >□HN A >BMME HAC□OGN □H ?@MGC

' 8 -& ' ' ' -& Z

#FG =' @G? BDG I' J? ' CFG OABDCME N?HOG A>' CFG N?E ' A>' !M□T?LGCF ' HA¢ A AMG@H ? ' CFG K?P?H R CFG =' NAMG>BM K?P?H I' ? ' %?PGH?HC O?MM ' □C R □H JF□OF KD□HOG ' □H CFG□D @?HCMG ' ?HN M?JEGD ' □H CFG□D MAH ' DALG ' ?HN OABDCME N?@G ' J□CF GHAD@AB ' CD?□H ' JGK¢ CFG DB FG ' M□(G CFG C?□M ' A>' KG?OAO (' DA@' CF□ ' O□DOB@ C?HOG O?@G □C ' H?@G ' CFG K?P?H R CFG N?HOG A>' CFG KG?OAO (' #FG =' @G? BDG I' @?E LG LG ¢ NG OD□LGN □H F?(KGDG8 ' AJH JADN ' □H CFG @ABCF A>' CFG M□PGME .G?CD□OG ' □H ' &BOF NA ?LAB¢ AC F□H R =' #FG >?BM¢ J□MM LG □H CFG @B □O ' OAB □H ' □>' EAB' LG HA¢ JAAGN □H AAN C□@G ' □>' CFG KD□HOG LG CAA □@KADC?HC ' CGMM F□@ CFGDG □ ' @G? BDG □H GPGDECF□H ' ?HN A N?HOG AB¢ CFG ?H JGD ' AD FG?D @G ' GDA ' JAA□H ' JGNN□H ' ?HN DGKGHC□H ' □ ' ? ' ?' OACOF S□ ' ' -& $?HN ?' O□HQBG K?OG ' CFG >□D ¢ B□¢ □ ' FA¢ ?HN F? CE ' M□(G ?' OACOF S□ ' ?HN >BMM ? ' >?HC? C□O?M CFG JGNN□H ' @?HHGDME @ANG C ' ? ' ?' @G? BDG >BMM A>' C?CG ?HN ?HO□GHCDE ' ?HN CFGH OA@G ' DGKGHC?HOG ' ?HN ' J□CF F□ ' L?N MG ' >?MM ' □HCA CFG O□HQBG K?OG >? CGD ?HN >? CGD ' C□MM FG □H(' □HCA F□ ' D?PG I

' AX 1' ' ' ! Z

"A@XA NGOM?DG ' CF?¢ FG J□MM HA¢ N?HOG R

62' M I' ! N7 'NH G M I A9 !Q+R

G BL GQBGHCME ?E

R 2%9 AP M' KM!O9P H 9OP ' M!O 9 U !+R

HO□GHCME ' ?MM DAA@ ' A>' C?CG JGDG M□ FCGN LE J? GH CADOFG ' LADHG □H CFG F?HN ' A>' ?CCGHN?HC ' DA□ ?D¢ CFB ' NG OD□LG ' C□DG >G? C□H ' A>' +? CAH NG A□ ' R =' C @□N□□□ FC JFGH FG O?@G ABC A>' F□ ' OF?@LGD □HCA CFG F?MM CA BKKGD ' FG F?N GPGD' LG>ADG F□@ CJGMPG CADOFG ' LDGH ' HEH ' LADHG LE CJGMPG P?DMGCCG ' C?HN□H ' LG>ADG F□ ' C?LMG ?MM BKKGD I' #A FAMN CFG CADOF J? ' HAC ' FAJGPGD ' ?' NG D?N□H ' A>>□OG □H ! H M?HN ' >AD CFG GHCMG@GH KGH □AHGD ' A>' !M□T?LGCF FGMN CADOFG ' JF□MG ?QDM?E J? ' ?OCGN LG>ADG FGD □H CFG OF?KGM A>' □H 8 ' AMMG G ' ?@LD□N G

I' ') R =' % D ' $ ' ' $ ' 0 $' $ ' $ /

?DKGC ' CFAB F (HAJH □H C?ME ' JGDG HA¢ ?N?KCGN CA CFG ! H M□ F F?L□C ' □H CFG C□@G A>' !M□T?LGCF ' ?HN GPGH CFG KDG GHOG OF?@LGD A>' CF?¢ QBGGH J? ' ?OOADN□H ' CA GHCTHGD ' CDGJGN J□CF F?E LE JF□OF FG @G?H¢ DB FG ' #FG □@KBD□C□G ' JF□OF ?CFGDGN AH CFG >MAAD JGDG G? □ME DG@APGN J□CF CFG DB FG ' .B¢ CFG OB CA@' A>' CDGJ□H ' DB FG ' ?MCFAB F PGDE GHGD?M □H ! H M?HN ' J? ' HA¢ KGOBM□?D CA □C ' &D ' .DAJH ' □H F□ ' JAD (' AH F?(KGDG8 ' ?BCAL□A D?KF□O?M KAG@ ' F? ' CF□ ' AL GDP?-C□AH R =' H' ALSGOC□AH F? ' LGGH @?NG '□@KBC□H ' ?H GDDAD ' □H +DB@□A8 ' QBG C□AH ' ‹ DG CFG DB FG ' CDGJGN W8 .B¢ CFG OB CA@' A>' CDGJ□H ' DB FG ' □H ! H M?HN LGMAH GN ?M A CA C?ME ' CF□ ' @?E LG GGH □H AMN ?BCFAD ' ?HN CFG□D PGDE JADN ' .' HAJ' KB¢ A>' B G ' □ ' ?' KDAA>' >' □C I

g ') R =' % R' : ' $ ' /

G F?PG ?' CD□H ' A>' ?E□H ' FGDG JF□OF F?PG @BOF KBTTMGN CFG OA@@GHC?CAD ' FGH "A@GA G OM?□@ '=' ' ?@' NAHG I' &GDOBC□A ' KM?E-□H ' BKAH CFG JADN ' OD□G ' =' %BH8 ' CFG @AB G I' #F□ ' □ ' ?' KDAPGDL□?M KFD? G ' OAH C?HCME AOOBDD□H ' □H CFG AMN OA@GN□G ' C' □ ' KDAL?LME A@GCF□H ' M□(G CFG ACFGD O?HC KFD? G CF?¢ AOOBD ' □H' $G?D ' =' CFG O?¢ □ ' DGE I' #FG >AMMAJ□H ' M□HG R

6'27'NH JM N'OJ!' P% 'OM 'NHPP7 I'NHP I PRS

J? ' >BMME ? ' KBTTM□H ' C□MM +□>>ADN ?PG B ' ?' AMB□CAH R =' - ' ' ' $ ' R' CFGH ' □ ' ?' FD□ C@? ' ?@LAM ' ?¢ JF□OF ' F?PG A>CGH KM?EGN ' 'MA 'A>' JAAN □ ' LDAB FC □HCA CFG @□N C A>' CFG DAA@' ' CF□ ' □ ' NBH VCFG O?DC FAD G ' ?HN ?' ODE □ ' D?□ GN ' CF?¢ FG □ ' D' ' $ ' ' # JA' A>' CFG OA@K?HE ?NP?HOG ' G□CFGD J□CF AD J□CFABC DAKG ' CA ND? J' F□@ ABC ' >CGD DGKG?CGN ?CCG@KC ' CFGE >□HN CFG@ GMPG ' BH?LMG CA NA □C ' ?HN O?MM >AD @ADG ? □ C?HOG R #FG ?@G OAHC□HBG ' C□MM ?MM CFG OA@-K?HE C?(G K?DC □H □C ' JFGH NBH □ ' G CD□O?CGN A>' OABD G ' ?HN CFG @GDD□@GHC ?D□ G ' >DA@' CFG ?J (J?DN ?HN ?>>GOCGN G>>ADC ' A>' CFG DB C□O ' CA M□>C CFG MA ' ?HN >DA@' BHNDE ?DOF OAHCD□P?HOG ' CA MGC CFG GHN ' A>' □C >?MM AH AHG ?HACFGD8 ' CAG ' #F□ ' J□MM HA¢ LG CFAB FC ?' PGDE G QB□ □CG ?@B G@GHC ' ?HN EGC ' F?PG GGH @BOF FAHG C @□DCF ?C □C ' ?HN F?PG LGGH >?D @ADG GHCGDC?□HGN J□CF CFG MBN□ODAB ' OAHCADC□AH ' A>' KDGCGHNGN CDB MG ' CF?H J□CF CFG DG?M JD□CF□H ' CFG N?D (' OAJM A>' ?P?D□OG ?HN GHPE G F□L□CGN LE CFG ?@G NG OD□KC□AH A>' KGD AH ' □H' CFG GHCGGMGD ?@B G@GHC A>' O?DN ' CFG BH□PGD ?M BL C□CBCG >AD ?MM ABD ?HO□GHC KADC IR - ' : ' S D .' PAM ' P□□ ' K ' 262

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#F□ ' J? ' CFG AMN @ANG A>' ?KAMA E >AD CFG □HCDANBOC□AH A>' ?' >DGG G KDG □AH ' &GDOBC□A ?E ' FG J□MM ND? J' "A@GA >DA@' CFG =' @□DG A>' CF□ ' MAPG I' ?HN B G ' K?DGHCFGC□O?MME ' CFG ADN□H?DE >AD@' A>' ?KAMA E >AD KG? (□H ' A KDA>?HGME A>' MAPG ' +□>>ADN F? ' □PGH B ' ?' QBAC?-C□AH >DA@' ?H AMN CD?OC AH CFG AD □H A>' CAL?OOA ' JF□OF □ ' G ?OCME □H KA□HC R =' #FG C□@G F?CF LGGH JFGH □>' JG N□N KG?(' K>' CF□ ' MA?CF-A@G CB>>' CAL?OOA ' JG B GN CA KB¢ ?' ‹ □D DGPGDGHOG 8 LG>ADG ' LB¢ JG >AD GC ' AB□ AAN @?HHGD I' H' ?HACFGD HACG AH CFG ?@G JADN +□>>ADN ?E ' =' #FGDG □ ' @BOF >□MCFE CB>>' AH CF□ ' □@KMG □HCGDSGOC□AH >' A>' JF□OF HG□CFGD CGGPGH ' HAD &?MAHG ?KKG?D ' CA F?PG (HAJH CFG □@KADC ' □H CFG HACG ' CA "A@GA ?HN 0BM□GC IH L ' S D . 0 ' P□ ' K ' /1' ' PAM ' P□□ K ' 33

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G G CD?OC CFG >AMMAJ□H ' ?@B □H ' HACG >DA@' %ABOG8 ' =' MMB CD?-C□AH ' ' IR

=' #F□ ' M□HG ?MMBNG ' CA ?' PGDE □H BM?D BKGD C□C□AH ' FAC EGC >AD ACCGH □H A@G K?DC ' A>' CFG 0ABHCDE ' C J? ' LGM□GPGN ' CF?¢ OGDC?□H @?M□ -H?HC K□D□C ' JFA G NGM□ FC J? ' CA J?HNGD □H DAPG ' ?HN KMG? ?HC KM?OG ' ? B@GN AOO? □AH?MME CFG M□(GHG G ' A>' JA@GH OMACFGN □H JF□CW ' CF?¢ □H CF□ ' OF?D?OCGD CFGE A@GC□@G ' F?BHCGN C?LMG ' □H CFG

H FC C@G O?DDEH HCFGD F?HN C?KGD A> J? J F OF CFGE NDAKKGN AH CFG FAD G @?HG CFGDGLE KM?CH CFG@ HG CD?O?LMG (HAC CA CFG DG?C ?HHAE?HOG A>?CFG KAAD ?H@?M ?HN CFG PG ?CAH A> CFGD @? CGD #FG G F? ?DG @GHCAHGN HCFG JAD(A> MM?@ BPGD HG . FAK A> ?D HCFG CFDCGGHCF OGHCBDE #FGDG PGDE BHOA@@AH AMN KDHC LE ?H . BD @?D DGM?CH CA CF BLSGOC J COF GHCGD CFG C?LMG J CF ?M FCGN CADOF4 ?HN KDGP AB ME CA CFG AKGD?CAH A> GHC?H MH CFG FAD G8 @?HG KD?OC G FGD GHOF?HC@GHC AH CFG DAA@ JFA HCE ?ME H ?MGGK AH F L?O(?HN ?KK?DGHCME HH>MB-GHOGN LE CFG H FC @?DG #FG LGMG@HCG AD GM> CAHG JGDG DG ?DNGN ? 0F?D@ ? ?H C CFG M? C @GHCAHGN N G? G ?HN ? ?H C GP M KDC A> ?MM (HN LBC CFG OGD?BH G AD LOGCBM ?HN ?MM KGD>AD?CGN >MHC CAHG JGDG HAC AHME B GN >AD CFG ?@G KBDKA G LBC @ADG K?DCOB-M?DME >AD CFG KDACGOCAH A> FAD G ?HN ACFGD O?CCMG LE B KGHNH CFG@ HH C?LMG AD CEH CFG@ DABHN CFG HGO(A> CFG ?H@?M I #FG HG C MHG R

6 ,#!O AMUPG NHP P97 9 KUG !7 J9 G9JNN GH HM G R S

GG@ CA LG BHOAHHGOCGN JCF CFG KDGOGNH ?HN CA @?D(?BKGD-CCAH JFOF ? %D ?DLBDCAH F? AL GDPGN @?E F?PG AD HCGN >DA@ CFG 7 .JFOF J? BKKA GN CA LG CFG AKGD?CAH A> CFG JO(GN GMPG JFGHOG CFG OMACCGN F?D J? O?MMGN GM> MAO(?HN GM> (HAC #FB !N ?D C?M(A> =GM>H ?MM F? F?D H (HAC I

) H , 3 $ J " /

#FG OABDC OBKLA?DN J? CFG ADH?@GHC?M NGLA?DN GC ABC JCF ?MPGD ?HN LG?(GD AH N?E A> >G CPCE G F?PG H ?KM?E A> 511 =?OOA@KM FGN CFG OABDC OBKLA?DN I?HN H ?HACFGD LE F?K@?H H 474 = GDG F?M C?HN @E OABDC OBKLA?DN JCF C >BDHCBDG A> KM?CG I H C?ME CFG ?DC A> . GHPGHBCA GMMHC J? M?P FGN BKAH CFG G QB CG ADH?@GHC A> CFG OABDC OBKLA?DN

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R =S$ D ! $ 3: $ " J R:

#FG =. ?MM?N A> H AKFGCB?? ?HN CFG . G ?D @?NI J? ?@AH C CFG @A C KAKBM?D A> AMN !H M F L?MM?N ?MMB AH CA JFOF JGDG >?@M?D CA F?(KGDG8 ?BN GHOG *KAH CFG ?BCFADCE A> MG?DHGN &? CGD &ACF H $APG8 $?LABD8 $A C C J? ?H ?HO GHC L?MM?N H F?(KGDG8 N?E R

/ 2G NHP P ! N M AM99MO A T 7 NHP !Q M!O NHP PQQM \
$ HP 9O MG P T QJ 9NT 7 GJKH M AM99MO G I P NH PP MQPG G !KP8 AJN 2 NH !U ! %N G ! N N AP 7 J!O 7 N P P N J9O !P NHP GP P 7 NHP N !Q ! NHP NJ!P+
2 99 HM P NHMN GJAEPKN !P 9T N %P +R

G F?PG CJA PGD AH A> CF L?MM?N CFG AHG KBLM FGN H = AMMGOCAH A> MN . ?MM?N I QBACGN LE +DGE H 5/ CFG ACFGD H GDOE8 = "GMQBG I . ACF A> CFG G OA@KA CAH ?KKG?D ? >CFGE F?N LGGH ,HGJME JDC A8GD I HAC MAH LG>ADG AD KGDF?K ?>CGD F?(-KGDG8 C@G G BLSAH ?? C?HT?? A> G?OF R

4 I # J(A

6 2 PMO NHMN !KP !#7 KM
#L !KP9T QHN O O P Q!+
XH HMO N !M I P LHPNJM
#G L PNG NHPT O O 7P Q!
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O GJ P HP 8 4 ! N 7 I T I !O+
" P KM PO ! N 7 I M!U !O+
JN O O NHP I M99 O GOM !+
JN I M U HMN HMLLP! PO !M OMT+
#G HP JN 7H G !O 9MT+
" P GM M APQQM M99 I Q PT+
HP H KH O O KMJGP H I LM !+
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4 I ' K, " , & A

6 #U !Q !KP P Q!PO APT !O NHP GPMG+
#G P !M!K P!N GN PG 7 !O+
XH I ! 7M 7MKP K J9O P P L9PMGP
" P KM PO ! N 7 I M!U !O+

" P OPGL G%O NHP G PPNPGN APMJNT+
!O NHP Q PMNPGN 7 NJ!P N 8
N 9P !QNH HP I M PO N M APQQM 8
PP HMN JL O%G OM N KM !O +
HP A9 !O A T NHMN GH NG G N I +
5 O N H G K9 GPN !O GNPM9+
!O I MOP H I G !H G L P 7PP9+
" P NHMN !P P KM PO 7 I P!
JN O O 7P I M9PG P P HMNP+
N 9P !QNH MG G I NNP! J!OPO G !PO+
O M APQQM MN H G QMNP+R

5 H , : D J" R:

#FG AD H?M QB?DCA F? =8MM CA @E G J$ / C ?KKG?D A@GJF?C CD?H G CF?C &GDOBCA FABMN KG?(A> MGGKH H ?CDBO(MG LGN AD ?CDBHNMG LGN LACF JFOF JADN G KM?H CFG ADC A> LGNR ?DBHHH LGN #FG >BDHCBDG A> ?MGGKH OF?@LGD H F?(-KGDG8 C@G 0AH CGN A>?(C?HNH LGN ?HN ?CDBO(MG LGN =#FGDG8 F OF?@LGD F FAB G F O? CMG F C?HNH LGN ?HN CDBO(MG LGN I ?E @HG FA C A>CFG +?DCGD H#FG &GDDE PG A> HN AD #FG C?HNH LGN J? >AD CFG @? CGD CFG CDBO(MG LGN JFOF D?H BHNGD C >AD CFG GDP?HC C @?E GG@ CD?H G CFGDG>ADG F?(KGDG H?CBD?MME C?(G CF?C H KDG>GDGHOG CA CFG C?HNH LGN

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AMGDN G F? ?LG?BCB>BM DG@?D(AH CF K? ? G ?HN AH CFG JFAMG A>CFG OGHG JFOF JG G CD?OC R =CF MAPG KBDG MAPG CFGDG ?MJ?E ?H ?H GCE >AD CFG ?>GCE A> CFG ALSGOC ?? N HCGDG CGNHG LE JFOF C ? N C H B FGN >DA@ CFG OABHCGD>GC A>C H?@G A@-K?DG CF OGHG JCF OC OGHG A> CFG #G@KG C NA HAC (HAJ ?@ADG JAHNGD>BM H C?HOG A> F?(KGDG8 @? CGDE H KM?EH ?N C HOCME DG@G@LGD?LMG P?DGCE AH CFG ?@G DGK?G@LGDGN ?D CF?H H CFG CD?H KADCH MAPG OAH>G AH A> "A@GA ?HN 0BMGC ?HN GDNH?HN ?HN &D?HN? #FGDG GG@ @ADG K? AH H CFG AHG ?HN @ADG N H CE H CFG ACFGD EGC EAB >GQS CF?C CFG JGGC DM F MH GD H ?HN LB E @APG@GHC A> 0BMGC ?HN CFG O?M@GD ?HN @ADG @?NGHME >AHNHG A> &D?HN? @ FC G? ME K? HCA G?OF ACFGD I

Z R =# . : 3
% $ J '" D 'R I

#FG >?MOAHGD8 PA OG J? CFG PA OG JFOF CFG F?J (J? OAH CD? HGN LE MAH F?L C CA ALGE +GDP? G &?D(F?@ H F = ABHCDE AH-CGHC@GHC I F? K OCBDG QBGME NG OD LGN CFG KDAOG A> CD?HH F?J(CA CF ALGN GHOG =LE J?COF H ?HN (GGK H ?CFG@ >DA@ MGGK LE ?OAHC HB?M O?DDE H CFG@ BKAH EABD >C ?HN LE ?@A C >?@M?D CDA(H ?HN KM?E H J CF CFG@ J CF CFG J H A> ?NG?N >AJM AD BOF M(G ?HN LE A>CGH ?T H ?HN MAA(H CFG@ H CFG >?OG J CF ?MAP H ?HN GHCMG OABHCGH?HOG I F?J(A =@?HHGN I J? LDAB FC CA CFG MBDG =LE G? E NG DGG ?HN ?C M? C J? C?B FC CA (HAJ CFG PA OG ?HN MBDG A KGD>GOCME CF?C GCFGD BKAH CFG ABHN A> CFG AHG AD FC A> CFG ACFGD FG J MM KDG GHCME OA@G H ?HN LG @A C ALGN GHC I #FGDG ? ?(KGOBM?D KDAKD GCE H 0BM GC O?MM H "A@GA FGD C? GM GHCMG >AD CF KGO G J? ?@AH C CFG @A C LG?BC>BM ?HN GMG ?HC A> F?J(?HN J? G KGO?MME ?KKDAKD?CGN CA CFG B G ?KD HOG BD KAGC ?MJ?E B G CFG @? G JFOF F?PG LGGH NGD PGN >DA@ F AJH G KGD GHOG J CF G QB CG KDAKD GCE H #FG &GDDE PG A> HN AD ?M C?>>8 K? G CFG D . CFG @?MMG C BH>MGN GN F?J(CFGMMA >G?D CF?C %G NG@AH? $ R CF?C CFG J MN F?J(JFOF =OFGO(?C GPGDE >G?CFGD I #FG KADC J CF ?C? GM GHCMG K D CGNME NG OD LGN LE &? H GD R

YY HP! 7 M!P P I !Q 79 QHN
#N P K\9 QP!N9P H KH 2 KM99 I T I MGNP G+
#G HP P P GP!N M I PGGP!QP N HP I !
2 ! GJKH M L9MKP 79 PG MG HP GPP I G N GMT+
PP I P GPP I P ! N[NHP LM N OQP GL M!Q+
" P I MUPG H G GN L8 AJN M!N !Q A PMNH G 7 KPO
KM!KP9 P 8 NHP! NH GJKH GLPPO MG 7
" P KM PO 9 QHN! !Q !H G !QG HP GN UPG
HP N P I A9 !Q A O H P P! !OPMNH MLLPM G
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&□MCAH ' □H' CFG' GOAHN' LAA (' A>' = ?D?N□ G' $A C I' F? ' CFG' ?@G' □NG? R

6' HP' I A' 7'!MNJ P ' M!O ' LP HMLG ' HP ' Q M P+R

#FG' GN□CAD ' A>' &□MCAH' F?PG' □PGH' ?'K?D?MMGM' K? ? G' □H' $BODGC□B ' R

6'1 I ! LM P!G ' PMOP I ' P J I ' K I I J!P'GPLJ9KH J I +R

G' JABMN' ? (' N□N' F?(KGDG' ?HN' &□MCAH' A' CA' CFG' ?@G' 0A@@AH' ABDOG'W ?D@GD' F? ' HAC' AMPGN' CF□ ' QBG C□AH' □H' F□ ' =' ! ?E' AH' CFG' $G?DH□H ' A>' F?(KGDG I

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,'#F□ I' ?E ' &AHO (' &? AH ' ='□ ' AHG' A>' CFG' K? ? G ' □H' JF□OF' CFG' ?BCFAD' F? ' ?OD□>□OGN' D?@@?D' CA' DFE@G I' &D ' &AHO (' &? AH8 ' AL GDP?C□AH' □ ' @?NG' □H' CFG' ?@G' K□D□C' □H' JF□OF' FG' O?MM ' "A@GA8 ' □@K? □AHGN' M?H B? G' = QB?□HC' S?D AH I' .G>ADG' F?(KGDG' J? ' ?O-OB GN' A>' ?OD□>□O□H ' D?@@?D' □C' AB FC' CA' F?PG' LGGH' FAJH' CF?C' F□ ' □N□A@' J? ' G GHC□?MME' N□>>GDGHC' >DA@' CF?C' A>' F□ ' KDGNGOG AD ' ?HN' F□ ' OAHCG@KAD?D□G ' %D ' GDOE ' JFA' LDAB FC' CA' CFG' GMBO□N?C□AH' A>' ABD' AMN' ?BCFAD ' CFG' (HAJMGN G' A>' ?H' ?HC□QB?DE' ?HN' CFG' >GGM□H ' A>' ?' KAGC ' F? ' AL GDPGN ' CF?C' ='□H' PGDE' AMN' ! H M□ F' CFG' CF□DN' KGD AH' KMBD?M' A>' CFG' KDG GHC' CGH G' GHNGCF' □H' $' ? ' JGMM' ? ' CFG' □H BM?D ' ?HN' A>CGH' >?@M□?DME' □H' 4' /' ?HN' □C' F? ' LGGH' >BDCFGD' G KM?□HGN' LE' & D ' #A□MGC ' CF?C' ='CFG' CF□DN' KGD AH' KMBD?M' A>' CFG' H MA ? AH' KDG GHC' CGH G' GHNGCF' □H' $.' ?HN' A>' CFG' %?HA ? AH' □H' .' & ?MAHG ' JG' CF□H (' F? ' D□ FCME' C?CGN' CFG' KD□HO□KMG' BKAH' JF□OF' BOF' □N□A@ ' JF□OF' ?KKG?D' >?M G' 0AHOADN ' CA' * ' FABMN' LG' OADDGOCGN R CF?C' □ ' ='CA' BL C□CBCG' CFG' @ANGDH' □N□A@' □H' ?MM' KM?OG ' G OGKC' JFGDG' G□CFGD' CFG' @GCDG' AD' DFE@G' DGHNGD ' □C' □@KA □LMG I' .BC' CA' CFA G' JFA' O?H' >GGM' CFG' P?MBG' A>' ?' M□ FC' KD□H (M□H ' A>' ABD' ?HC□QBG' KFD? GAMA E ' □C' □ ' KMG? ?HC ' CA' NDAK' BKAH' CFG' □H C?HOG ' □H' JF□OF' OADDGOC□AH' ' □@KA □LMG' G' JABMN' HAC' K?DC' J□CF' CFG' G QB□ □CG' L□C' A>' >?M G' OAHOADN ' ? ' JG' @B C' HA J' CGD@' □C ' □H' CFG' M? C' JADN' A>' CFG' >ABD' >AMMA J□H ' M□HG ' >AD' ?MM' CF?C' F?(KGDG8 ' D?@@?D OADDGOCAD ' F?PG' GPGD' JD□CCGH' R

', 6' "M U' [HM U[NHP' 9M U' 'HPM P!%G' QMNP' G !QG+
! O' -H PAJG' %Q !G' M GP
-9 G' GNPPOG' N ' MNP ' MN' NH GP' GL !QG'
', 1 !' KHMEEP%O' 79 P G' NHMN' 9 PG+R

g' ') R =' Z ' .' ' /

+GAD G' □CFGD ' □H' F□ ' AL GQB□G ' BKAH' CFG' NG?CF' A>' D□HOG' GHDE ' CFB ' □HCDANBOG ' . D□C?HH□?' M?@GHC□H R

6'#9MG'? H ' ! 'GHM99' Q MKP' !T'N J !M I P!NG
$ 1 'H ! J 'L P' NH' OPPOG' 7'KH M9 P' \'R

#FG' CABDH?@GHC ' ?HN' CFG' OF□P?MD□G' JGDG' CFGH ' FAJGPGD ' LBC' =' ?H' □H BL C?HC□?M' K? G?HC' >?NGN I' &GH' F?N' MG?DHC' CA' DGPGH G' CFG□D' KD□P?CG' JDAH ' J□CFABC' CFG' K?D?KFGDH?M□?' A>' FGD?MN ' ?HN' J?DNGD ' H' CFG' AMN' OF□P?MDAB ' C□@G ' CFGE' @□ FC' BKKDG ' ?HE' ABCLDG?(' A>' F?CDGN' AD' K? □AH ' ?HN' OFGD□ F' CFG□D' @?M□OG' ? ?□H C' G?OF' ACFGD' BHC□M' □C' OABMN' LG' MG ?MME' D?C□>□GN ' A' CF?C' ?OOADN□H ' CA' CFG' KFD? G' A>' "□OF?DN' OGBD NG $□AH' □H' F□ ' ADN□H?HOG' >AD' KGD@□CC□H ' CABDH?@GHC ' ='CFG' KG?OG' A>' ABD' M?HN' LG' HAC' LDA (GH ' HAD' SB C□OG' F□HNDGN ' HAD' N?@? G' NAHG' CA' ABD' >ADG C I' #FG' KD□P?CG' OAHCG C ' A>' CJA' (H□ FC ' J? ' ?' P□AM?C□AH' A>' CFG' M?J ' A>' OF□P?MDE ' F?BOGD' F? ' ?' DG@?D (?LMG' G G@KM□>□O?C□AH' A>' CF□ ' □H' F□ ' =' H□ FC8 ' #?MG I' JFGDG' CFG' NB (G ' OA@□H ' CA' CFG' KM?□H ' ?J' DO□CG' ?HN' ?M?@AH' >□ FC□H ' M□(G' CJA' LBMM R

6' H G' OJUP' A G' K J GP ' NH' H G' GLJ OG' G I NP
! O' MN' M' GNM N' HP' MG' APN WN' NHP I ' N +
! O' LJ99PO' JN' M' G O' M!O' K PO SY " ' '
' I P ' JL' LM !' 7'9 G !Q' 7'T J ' HPMO8
T' I QHNT' M G ' HP' GHM99' M! !' AP' OPMO'
HMN' G I NPNH' M!T' GN EUP' NHMN' 2' I MT' GPP ! [
JN' NP99PNH' I P' HMN' I GNP P' I P!' TP' APP!+
HMN' AP' G ' HM OT' 7 ' N ' 7 QHNP!' HP P'
X NH JNP!' M!T' EJOQP' ' NHP ' 77 KP
' #G' NH JQH' N' P P' !' 9 GNPG' PM99T' %R' @ TM99T +

#F?C' NBGM ' JGDG' >DGQBGHC' □H' ! H M?HN' □H' CFG' DG□ H' A>' !M□T?LGCF ' JG' @□ FC' OAMMGOC ' □>' CFGDG' JGDG' HA' ACFGD' GP□NGHOG ' >DA@' F?(KGDG' ?MAHG ' #FG' @?CCGD' F?N' LGGH' DGNBOGN' CA' ?' O□GHOG ' #EL?MC' □ ' CFG' = OABD? GAB ' O?KC?□H' A>' OA@KM□@GHC ' R ?' KGD>GOC' @? CGD' A>' KBHOC□M□A
□

AHG' JFA' (□MM ' F□ ' ?NPGD ?DE' LE' DBMGR =' AHG ' CJA ' ?HN' CFG' CF□DN' □H' EABD' LA A@ I' #FG' GHCMG@?H' A>' CFG' ='>□D C' ?HN' GOAHN' O?B G' I' ' D' GHCMG@?H' JFA' J□MM' QB?DDGM' BKAH' CFG' PGDE' M□ FCG C' A>>GHOG ' #FG' NG DGG ' □H' QB?DDGMM□H ' JGDG' O?MMGN' CFG' O?B G ' $' ?HN' CFG G' F?PG' LGGH' @A C' F?KK□ME' D□N□OBMGN' LE' F?(KGDG' □H' ' , AB' $□(G' C R

/' > %' JN' 7 ' NHP' GP P!NH' KMJGP8 H ' O O' T J' 7 !O' NHP']JM P9' !' NHP' GP P!NH' KMJGP' 1
($% ' L !' M' 9 P' GP P!' N I PG' P I PO' 8 MG' NHJG ' G ' 2' O O' O G9 9KP' NHP' KJN' 7' M' KP NM !' K J N P %G' APM O ' HP' GP!N' I P' O ' 7' 2' GM O' H G' APM O' MG' ! N' KJN' P99 ' HP' MG' !' NHP' I !O' N' MG' ' NH G' G' KM99PO' NHP' ' (D % ' 27'2' GP!N' H I ' O' MQM ! ' N' MG' ! N' P99' KJN ' HP' J9O' GP!O' I P' O' HP' KJN' N' N ' L9PMGP' H I _ GP97' NH G' G' KM99PO' NHP' : -' % ' 27 ' MQM ! ' N' MG' ! N' P99' KJN ' HP' O GMA9PO' I T' 'EJOQ I P!N' NH G' G' KM99PO' NHP' -'2' ($ ' %$ ' 27 ' MQM ! ' N' MG' ! N' P99' KJN ' HP' J9O' M!G P ' 2' GLMUP' ! N' N JP' 8 NH G' G' KM99PO' NHP' - ' ' ' 27 ' MQM ! ' N' MG' ! N' P99' KJN ' HP' J9O' GMT ' 2' 9 P' ' NH G' G' KM99PO' NHP' ($ ()' > '%K . . ';' M!O' G ' N ' NHP' ' ((% '' M!O' NHP' ' (B

FGH' #AB0F CAHG' ?NN ' =' ' □D ' JG' QB?DDGM' □H' KD□HC' LE' CFG' LAA (I' FG' ?MMBNG ' CA' CFG' JAD (' A>' ?P□AMA' ?HN' ?D?HT?' JFA' M?□N' NAJH' M?J ' >AD' CFG' NBGMMA ' #FG' J□C' A>' F?(KGDG' □ ' CFG' LG C' 0A@@GHC?DE' BKAH' CFG' KF□MA AKFE' A>' &AHC?□ HG' R =' HQB□DG' JFE' CF?C' @?H' F?T?DN ' F□ ' M□>G' ?HN' FAHABD' BKAH' CFG' >ADCBHG' A>' F□ ' D?K□GD' ?HN' N? GD'S' MGC' F□@' ?OQB?□HC' EAB' J□CF' CFG' A00? □AH' A>' CFG' QB?DDGM ' FG' O?HHAC' NA' □C' J□CF-ABC' LMB F□H ' 8C□ ' A' □NMG' ?HN' >D□PAMAB I R Q1 .' LAA (' F□ ' OF?K ' MA ' . BC' KF□MA AKFE' ?HN' J□C' JGDG' GQB?MME' BH?P?□M□H ' CA' KBC' NAJH' CFG' QB?DDGM A@G' K□D□C' A>' CFG' C□@G ' ?HN' GHDE') ' A>' D?HOG' □H' P?□H' NGOM?DGN' ?MM' NBGMM□ C ' B□MCE' A>' F G @?SG CN ' ?HN' KBH□ F?LMG' J□CF' NG?CF'S' ?HN' 0?@G ' ' A>' ! H M?HN' ? ' P?□HME' NGHABHOGN' CFG@' □H' CFG' C?D' F?@LGD

#FG' KD?OC□OG' A>' NBGMM□H ' JGHC' AH' J□CF' B ' C□MM' CFG' O□P□M' J?D ' O?@G' CA' @GD G' KD□P?CG' QB?DDGM ' □H' KBLM□O' AHG ' . BDCAH ' □H' F□ ' =' H?CA@E' A>' &GM?HOFAME I' F? ' ?' L□CCGD' ?C□DG' ? ?□H C' CFG' HAL□M□CE ' JFGH' FG' ?E ' CFGE' ?DG' ,' M□(G' ABD' @ANGDH' DGHOF@GH ' CF?C' F?N' D?CFGD' MA G' ?' KABHN' A>' LMAAN' □H' ?' □H MG' OA@L?C ' CF?H' ?' NDAK' A>' JG?C' □H' ?HE' FAHG C' M?LABD I

' D =' $ ' ' ' ' 3 ' ' '
%$ ' .' .' $ ' /

&' OABHCGD>G□C' K□GOG' A>' @AHGE' ?HN' ?' M□K' JGDG' EHAHE@AB 4' ?HN' □H' @?HE' AMN' ND?@? ' JG' F?PG' CFG' ?@G' KM?E' BKAH' JADN ' ? ' FGDG ' H' "ALGDC' +DGGH8 ' = #F□GPG ' >?MM□H ' ABCI ' CFG' JADN' ' □ ' NG>□HGN' ? ' □H' ?' N□OC□AH?DE R =' HN' CFGDG>ADG' FG' JGHC' ?HN' AC' F□@' OGDC?□H' M□K ' JF□OF' ?DG' OABHCGD>G□C' K□GOG ' A>' @AHGE ' LG□H ' LD? ' ?HN' OAPGDGN' APGD' J□CF' □MPGD ' JF□OF' CFG' 0A@@AH' KGAKMG' O?MM' M□K I

') =' %$ ' 0 J ' $ /

AD G D?O□H ' ?HN' CFG' J□MN AA G' 0F? G' JGDG' ?@AH C' CFG' =' N□ KADC ' A>' DG?C' @GH' I' □H' CFG' C□@G' A>' ! M□T?LGCF ' C' □ ' O?DOGME' HGOG ?DE' CA' NG OD□LG' ?' KADC ' □>' KADC' □C' O?H' LG' O?MMGN ' JF□OMC' □ ' C□MM' B GN' ?@AH C' B ' FGH' CFG' =' J□C ' DBH' CFG' J□MN AA G' 0F? G I' JG ' F?PG' ?' CEKG' A>' □C ' >AMME ' ? ' CFG' =' J□COF' ?HN' KBD ' J□COF' ?HN' KBD I' □ ' NG OD□KC□PG' A>' □C ' LDBC?M□CE

' D I' S $.' ' ' $ ' " ' 0' $ ' ' ' 3 '

AMGD□N G' □HP□CG ' B ' CA' OA@K?DG ' □H' CF□ ' OGHG ' =' "A@GA8 ' F?M>' G GDCGN' ?HN' F?M> DG?M' G? G' A>' @□HN ' J□CF' F□ ' >□D C' @?HHGD' JFGH' □H' MAPG' J□CF' "A ?M□HG' ' □ ' J□MM' F?N' OA@G' CA' CFG' OMGHOF□H ' KA□HC I' "A@GA' F?N' HAC' AHME' DGOAPGDGN' CFG' H?CBD?M' CAHG' A>' L□ ' @□HN ' LBC' FG' F?N' OA@G' L?O (' CA' CFG' OAHPGHC□AH?M' ?□GCE R CFG' >□PG KM?E' A>' J□CCE' ADN ' R ZJF□OF' J? ' CFG' CAHG' A>' CFG' LG C' AO□GCE' □H' F?(KGDG8 ' C□@G ' =' AJ' ?DC' CFAB' JF?C' CFAB' ?DC I' ?E ' &GDOBC□A ' =' LE' ?DC' ? ' JGMM' ? ' LE' H?CBDG I

' ') R =' ' .' 7 /

FGH' JG' OAH □NGD' CFG' □TG' A>' CFG' >?H ' CFGH' □H' PA BG ' □C' NAG ' HAC' ?KKG?D' QB□CG' A' D□N□OBMAB ' CA' LGM□GPG' CFG' BD G' FABMN' F?PG' ?' GDP?HC' CA' LG?D' CFG' @?OF□HG ' F?(KGDG' F? ' □PGH' CFG' ?@G' A>>□OG' CA' D@?NA' □H' $APG8 ' $?LABD8 ' $A C R

1 H[M' I GN' OM !NT' I M!
' GPP' H I ' M9U' AP7 P' M' 9MOT ' M!O' N ' APM ' HP ' 7M!+R

A' ') R =' ' ' ' ' ' I

OOADN□H ' CA' &GDOBC□A8 ' ?H JGD' CFG' C□@G' J? ' HAAH' JFGH' CFG' GPGH□H ' ?MBC?C□AH' = AAN' NGH' I' LG ?H ' .BC' F?(KGDG' F?N' FGDG

!H M F @?HHGD DH F GEG #FG C?M?H OB CA@ A> OA@@GHO H CFG N?E F?M> ?H FABD ?>CGD BH GC ?HN DGO(AH CFDAB F CFG CJGHSE >ABD FABD D HOAH CGHC J CF BOF ?? N P AH A> C@G ? CF

A) R =($

CYPGH KA HCGN ABC CF?C CFG CGD@ $ J? ?HO GHCME B GN H OAHCD?N C HOC AH CA .? ? DPG CMM B G CFG JADN $? ?H ?LLDGP?C AH A> OF?K@?H %ABOG F? QBACGN ?? K? ? G >DA@ FGC-CAHG8 & DA B D >AD &? G CD?CG A> EC G I V 56/ H JF OF FG KG?(W A> CFG B BD AB KD?OC OG A> CFG O C TGH A> $AHNAH JF OF ? OAHOMB PG BKAH CF KA HC R =#FG G CDG@ CE A> CFG G @GH8 NG?M H F?CF LGGH ?HN A ODBGMM ? CFGDG ? ?H?CBD?M @?M OG GHGD?MME @KDG GN H CFG FG?DC A> CFG GHCMG@GH A> !H M?HN CAJ?DN CFG O C TGH A> $AHNAH H A@BOF ? > CFGE AN AB ME H?@G ?? @?H CFGE >ADCFJ CF O?MM F@? $ H (G NG K FC CFG O C TGH O?MMGCF GPGDE D? O?M ?K RF

I) R 6 X $ 2

" J? O?MMGN CFG NA 8 MGCCGD H F !H M F +D?@@?D .GH OAH AH ?E =" " CFG NA 8 MGCCGD ?HN FDDGCF H CFG ABHN I H ABD AMN JD CGD JG F?PG ?? PGDL >AD@GN >DA@ CFG HA G A> ?? NA #FB H ? FG V 477 R

6 HPT (M!O AM U MN ! QHN MQM !GN NHP I !8R

?HN H AMM?HN8 CD?H M?C AH A> MBC?DOF8 =& AD?M I= NA C LE H?CBDG >GMM ?HN QB?DDGM A@G PGH CA ?HN J?D BKAH ?? PGDE @?MM AOO? AH I !D? @B F? ?? @G?H H >AD " LG H CFG NA 8 MGCCGD JF OF C HAC NGD PGN >DA@ CFG ABHN ;H , " M CGD?? QB?G H >? ?HNA KD@?? G C O?H H?? PAO?CBD I

L) H ,%$ " J : 3 0 3 2

#FG = MAPGI CFB ND?JH J? CFG QBGGH A> M PG >AD = CFG J HN J C BK NI F?N = J H I F?(KGDG F?N FGDG CFG ?@G NG?? JF OF B G CGN F AJH LG?BC>BM NG OD KC AH ?C CFG OMA G A> CFG)GHB ?HN NAH R

6 HJG PM T 7 NHP 9O M MT GHP H PG
#!O T UPG HP G 9 P O PG8 AT H GP G 7M M O+
HP I GN PGG I J!NPO NH JQH NHP P I LNT G OPG+
2!HP 9 QHN KHM M]J KU9T G K ! PT%O+
" 9O !Q NHP K J GP N -MLH G HP P NHP]JPP!
PM!G N I I J P HP GP97 M!O ! M AP GPP!+%%

222+

0 R =& D $ RF

#FGDG ? M FC K?DC OMG A> BHCDBCF H . GHPAM A8 C?CG@GHC JF OF CA ? OGDC? H NG DGG SB C> G CF OF?D G A> $?NE ?KBMGC #EL?MC J? LGHC BKAH QB?DDGMM H J CF "A@GA LBC &GDOBC A >ADOGN AH F AJH QB?DDGM J CF #EL?MC %D 0AFH AH8 DG@?D(BKAH CF O DOB@-C?HOG J ADCFE F OF?D?OCGD ? ? @AD?M C R =#FG OF?D G A> >?M G-FAAN AH . GHPAM A CFAB F KDANBOGN ?C F?T?DN PGDE SB C #FG ?BCFAD JFA GG@ CA HCGHN CFG OF?D?OCGD A> . GHPAM A ? AAN @G?HC KGDF?K CA FAJ FAJ CFG LG C @HN H ? C?CG A> >?OC AH ?HN N OADN ?DG NGCADCGN CA OD@H?M K?DC?M CE I

- R I 3 $ D/

#F G KDG AH AOOBD H CFG D C ?DC A> GHDE) H AC-KBD8 OGMGLD?CGN KGGOF NG>GHN H CFG NGH?M A> F KD AHGD H CFGMMA JG F?PG I " $ D H CFG G O? G ? H CFG H C?HOG LG>ADG B CFG OA@@GHC?CAD MG?PG CFG G KDG AH H C AD H?M AL OBD CE & ?E JG PGHCBDG ? OAHSGOCBDG W #FG D JF OF KGD AH JFA ?DG BH?LMG JD CG ?DG DGQB DGN CA @?(G H CG?N A> CFG D H?CBDG ? H CFG >AD@ A> ? G LBC ?HO GHCME CFG B G A> CF @?D(J? HAC OAH> HGN CA MM CGD?CG KGD AH >AD ?@AH C CFG ? AH CFG @?D(A> CFG ODA ? ? ?H ?CCG C?C AH A> CFG AAN >? CF A> CFG KGD AH H _ J? DGQB DGN CA LG ?CC?OFGN CA CFG H?CBDG A> CFA G P FA OABMN JD CG ?HN CA C?HN H CFG KM?OG A> CFG H?CBDG A> CFA G JFA OABMN HAC JD CG V GG .M?O(CAHG8 A@@GHC?D G #FG ?H-O GHC B G A> CFG @?D(J? BH PGD ?M ?HN CFG JADN D J? JG LGM GPG CFB C?(GH CA H E CFG I 3 $ D J? CFGDG>ADG ?? >AD@ A> GS?OBM?C AH ?KKDA?OF H CA CFG OF?D?OCGD A> ?H A?CF H CFG ?@G @?HHGD ? ? GDC AH JGDG @?NG G@KF?C O LE CFG ?NN C AH A> =LE CFG DAAN I AD =LE CFG FAME DAAN I

R ,' D 0 D J : DR:

#FG >ADOG ?HN KDAKD GCE A> CF OA@K?D AH ?DG @?H>G C LBC >BMME CA BHNGD C?HN C JG @B C (HAJ FAJ CFG AMN GD A> F?(KGDG8 C@G J? ?OOABCDGN F?PE BH J? >DGN J CF ?? @?COF F KAJNGD J? O?DD GN H ?? >M? (?HN CFG @?COF ?HN CFG KAJNGD H BH (M>BM F?HN JGDG NABLCMG A@GC@G KDANBOC PG A> ?OO NGHC A CF?C CFG @?H ?C ?D@ J? M (G "A@GA H F K? AH = N @G@LGDGN J CF F AJH NG>GHOG I

) R : !$ " /

#FG C? G N DGOC AH H CFG >AM A GN C AH A> 423 =!HCGD "A@GA ?HN 0BM GC ?MA>C I H CFG >D C QB?DCA 51 CFG N DGOC AH = !HCGD "A@GA ?HN 0BM GC ?C CFG J HNAJ I #A BHNGD C?HN CFG G N DGOC AH JG @B C DG>GD CA CFG OAH CDBOC AH A> CFG AMN CFG?CDG = #AJ?DN CFG DG?D A> CFG C? G I ?E &?MAHG =CFGDG ?KKG?D CA F?PG LGGH ?? L?MOAHE AD BKKGD C? G CFG KM?C>AD@ A> JF OF J? KDAL?LME G FC AD H HG >GGC >DA@ CFG DABHN BKKA G C CA F?PG LGGH BKKADCGN LE KMM?D DA@ FGHOG H @?HE A> ABD AMN KM?E K?DC A> CFG N MA BG J? KA(GH ?HN H >DAHC A> C OBDC?H M (GJ G JGDG FBH A ? AOO? AH?MME CA OAHOG?M CFG KGD AH H C >DA@ CFG P GJ A> CFG ?BN GHOG C G?OF NG A> CF L?MOAHE J? ?? LA PGDE HOAH-PGH GHCME CB?CGN JF OF J? A@GC@G O?MMGN CFG 3 " 8 H CFG G LA G JF OF JGDG ?C ?? MAJGD KD OG A@G KGD AH ?CG GCFGD >DA@ GOAHA@E AD H BM?D CE I #FG L?MOAHE KDAL?LME GDPGN ?? P?D GCE A> KBDKA G &?MAHG ?E = FGH CFG O C TGH A> H GD ?DG CA ?KKG?D AH CFG J?MM A> CFG CAJH ?HN EABH DCFBD CA MG?K >DA@ CFG L?CCMG@GHC BKKA G ABD ?HOG CAD JGDG OAHCGHCGN J CF GG H CFG@ H CFG L?MOAHE ?MDG?NE NG OD LGN AD KGDF?K ?? >GJ LA?DN C?O(GN CA GCFGD ?HN K? HCGN A? CA DG G@LMG CFG DBNG N OAMABDGN ?M A> ?H AMN CAJH LGF HN JF OF CFG KM?C>AD@ @ FC F?PG LGGH KM?OGN HG?D CFG CAK AH JF OF CFG O C TGH CAAN I C ?KKG?D CA B KDAL?LMG CF?C GPGH H CFG G O? G CFG L?MOAHE GDPGN >AD CFG KM?C->AD@ ?HN CF?C ?? >GJ K? HCGN LA?DN H >DAHC BKKM GN CFG MMB AH A> J?M ?HN CAJGD #FGDG J? CMM ?HACFGD B]A> CFG L?MOAHE O-OADN H CA &?MAHG JFGH ?? KM?E J? G F L CGN J CF H ?? KM?E ? H ?@MGC CFG OABDC AD ?BN GHOG LG>ADG JFA@ CFG HCGDMBNG J? KGD->AD@GN ?C H CFG L?MOAHE #A &?MAHG8 F CAD O?M ?OOABHC A> CFG .H M F C? G ?HN CA &D AMM GD8 PZB?LMG NGC?M DG ?DN H CFG?CDG V= HH?M A> CFG C? G I PAM CFG DG?NGD DG>GDDGN >AD >BMMGD NGC? M BKAH CF ?HN ACFGD KA HC JF OF LG?D BKAH CFG GOAHA@E A> ABD ?HO GHC ND?@?

L D I B $ $ J /

H CFG NG OD KC AH A> CFG ?DNGH H F?BOGD8 CD?H M?C AH A> CFG = "A@?BHC A> CFG "A G I CFG KA@G D?H?CG D >D C @GHC AHGN ?@AH C CFG >DB C CDGG R

6 HP P P P @M!O NHMN N 2 7J99 P
17L I PQ M!MNPG M 7J99 Q PMM OPM9+R

#FG =ADOF?DN A> KA@G D?H?CG J CF KMG? ?HC >DB C I J? AHG A> CMG LG?BC>BM ALSGOC NG OD LGN LE AMA@AH H F ?HC OMG @AH C CFG >DB C LG?D H CDGG CFG KA@G D?H?CG D H A@G DG KGOC CFG @A C LG?BC>BM ?HN CFGDG>ADG H CFG ABCF A> !BDAKG ?HN H CFG !? C C F? LGOA@G CFG OF G>ADH?@GHC A>CFG ?DNGH .BC JFGDG N N F?(-KGDG >HN CF?C CFG H FC H ?MG F?BHCGN CFG KA@G D?H?CG CDGG KABD H >ADCF FGD AH >DA@ CFG ?@G LAB F JGG('?>CGD JGG('W %ABLCMG H A@G A> CFG AMN CD?PGM JCF JF OF FG J? >?@M?D F?BOGD KBC F H FC H ?MG =H ?>DG F DGGH M?BDGM CDGG I LBC CFG KDG>GDGHOG A> CFG H FC H ?MG H >DA@ CFG KA@G D?H?CG ('BHQBG C AH?LMG =#FG H FC-H ?MG H >DA@ CFG KA@G D?H?CG DAPG H CFG N?EC@G I ?E "B GM H F ?OOABHC A> MGKKA >D GHN JFA G AL GDP?C AH ? ? CD?PGMNGD ?DG ? ?OBCG ? F NG OD KC AH ?DG D?KF O ?HN >ADO LMG H>AD@ B CF?C CFDAB FABC F SABDHGE H CFG !? C FG HGPGD FG?DN BOF ?OFA D A> H FC H ?MG ? H ?? DAJ A> KA@G D?H?CG CDGG CF?C (DC CFG DA?N >DA@ @EDH?CA .ABNS?H CFG CDBCF A> NGC? M BOF ? CFG G CFG GH B A> F?(KGDG ? @BOF G F L CGN ? H F JAH-NGD>BM KAJGD A> GHGD?M ?C AH

JFOF JG @?EKDAKGDME'QBACG FGDG R =',&?7D('HF CF' OGHG FA?(KGDG8'
GHCMGHG 'HF CABOFH 'CFG CGHNGD' BKGD CDCAH 'CFG g A?
KDG GHC@GHC 'HF CFG FB@?HF @?HN '?HN' FAJ' F?DK ?'MDHG Q?' N CHO-
CAHF FG 0A@@AHME'ND?J 'LGCJGGH'CFG G AL 0BDG'>ADGO? CH 'A?' GHGD?M
G KGDGHOG'HF'G?OF'?HNP?NB?W'?HN'CFG PBM ?D GDDAD' A?'@GDG CD?NCAH'
HNGGN'C @?E LG' C?(GH'AHOG'>AD'?MM'? ,CFG CDBCF'CF?C F?(KGDG'HF
CFG ?L AMBCG' BHOPGD ?MCE' A?' FO 'GHOB '?MJ?E 'DGPGDGHOG' JF?CGPGD
?D GABC' A?' ABD @AD?M' H?CBDG' FG HGPGD' KDA>?HG 'FO '@B G JCF' ?
0AHCG@KCBAB'DG? AH@ '?J?E' A?' CFG GHB@HG' ?HN GHGD?M' FAJGPGD
BH?OOABHC?LMG'>GGMCH ' A?' @?H(HN I R =' ; PAM' CO'
K' DEQ ' F?(KGDG F?'FO@ GM? PGH' B'CFG (GE CA' FO 'KFMA AKFE
A?'KDG GHC@GHC ')GHB 'NDG?NOH 'CFG' NG?CF'A?' NAHO 'LE' CFG' LA?D'
?E R' X
6' HP'NH JQHN' 7 N O NH' IMUP' IT'7M IN'HPM N'A9PPO8
$ #iO' ' $' ($' ';
2'L LHPGT'NHT'OPMNH+R

BOF' KDG GHC@GHC ' JFOF @?E' AO' @?E' HAC' LG' DG?MO GN' ?KKGDC?H' CA'
CFG O@? H?CAH' JFGH' HF ?' FO 'FME' G OCCGN' C?CG' BO' KAG' F?' G -
FOLCGN' CFG' >GGMH 'BHNGO' CFDGG NO>>GDGHC' ? KGOC 'HF "A@GA'?HN'0BMOGC'
FGH' "A@GA'LG>ADG' AOH 'CA' CFG @?' QBGD?NG'G OM?O@ R

6 I T I iO' I GQ PG
IP'K iGp]JPiKP'TPN'HMiQ iQ' i'NHP'GNM G+
HM9?A NNP 9T'APQ i'H G 7PM 7J?'OMNP'
X NH'NH G'i QHN%G p P9G R S

FG O ' BHNGO' CFG 'H>MBGHOG' A?' FO ' F?LCB?M' @GM?HOFAME R CFG GHC@GHC
A?' BHDGQBCGN' MAPG' JFOF'OAMABD '?MM' FO ' O@? OH?CAH' JCF' ?' MAA@E
>ADG F?NAJH ' K?' OA@H ' GPGHC ' H' CFG K? ? G LG>ADG' B ' JFGH'
0BMCG' GG ' FGO' FB L?HN

6 #G' IP'OPMO' i'NHP'A NN I' 7M'N I A R

JG' F?PG' ,'CFG >G?O'I' JFOF' NAC' =' CG?OF'I' FGO' FG2DC' ,'NOP'H?C'AH I'
.BO' "A@GA'H' CFG' >C<F ?OC' F?' ?' KDG GHC@GHC' NDGOCME' OAHCD?DE' CA'
CFG ?KKDA?OFH ' O?C? CDAKFG ' ?HN' CFO ' ?DO G ' ABG' A>' FO ' =' BH?OOB -
CA@GN I' ?H@?M KDOC R

6 TA G I%G9 O'G NG9 QHN9T' i'H G'NH ip+R

M' CFG G C?CG ' A>' @OHN' ?DG' OA@@AH' CA' CFG' O@? OH?C'AH' NGGKME'
CDDGN LE'K? 'AH?CG' G@AC'AH ' ACFOH 'OH' ?M' F?(KGDG8 ' KFOMA'
4

AKFE' ?KKG?D ' CA' B ' >HGO' CF?H' CFG' NGOG?POH ' H?CBDG' A>' "A@GA8'
KDG ? G 'HF CFG M? C ?OC' ? 'OA@K?DGN' J'CF' CFG' CDBG' NP'H'H ' >G?D ' A>'
0BMCGC

5 'GL NG'K I?'MiO' 7PMKH'NHPI'Y' XHMN'M P'NHPGP+
HMN'GPPI'i N' 7'NH G' 9O'MiO' I KU'NHP'OMT8
3MKH' NH'MAJ i iQ'NMLP' i'H G'HMiO'IG
P2N' G MI'MiK piN A NHP H O'NH J'GPPGN+
JKH'NHP 'MLLM P9+ H JQH'NHP'9 iQ'9 iQ'9 ip
/ U' HP P'NH J' 9N'i '9 UpipGG' 7'M I Mi8
JN' I M U'%S#iO'9T'iQ' i'H P'7JiP M9'K JKH+
HP'9 iQ' IMGUMO'NHP'OPMO'M9 ip'JiK p %O+
/ UP' iP'MG9PPL'HP'pTP OG'K9 GPO'HP'HMiOG
O 9OPO'N QPNHP' i'HP'I OP6N'A PMGN
#G'%N p P'HP'i QHN9T'L GNJ p'NH JQH'NHP'K O Y
HP'KM I P'MN'9MGN SMiO' KH9T'QM 9T'K9MO
#G7 'N'A NHOMT'7PMGN['R

, R ,($;' ,$ ' O ' ' D R

#FG' ='0BHHOH ' 0AA(I' OH' CFG' CO@G' A>' F?(KGDG' J? ' ? ' FG O ' ?C
KDG GHC' ?' DG?O KGD AH?' >AO' 547 'CFG' KDG?0FGO' J? 'K?N' O ' FMMOH '
CFG' C?COAHGD 8 A@K?HE' >AO' FO ' M?LABO' CFG' @OH CDGM' CJGMPG' FOMMOH ' ?HN'
?HN' CJAKGHOG' >AO' FO ' M?LABO' CFG' @OH CDGM' CJGMPG' FOMMOH ' ?HN'
0AA(' >O<GGH' FOMMOH ' #FG' DGM?COPG' O?MG' A>' G CO@?COAH' >AO' CFGAMA E'
KAGCDE' ?HN' ? CDAHA@E' F?' HAC' LGGH' @BOF' ?MCGDGN' NBDOH ' CFDGG
OGHCBDOG ' GOCFGO' OH' CFG' OOCE' GHGD?MME' AO' OH' CFG' A@K?HE' JFOF'
DGKDG GHC ' CFG' OOCE8 'MCGD?CDBDG' .GH' 0AH AH' F?' NG ODOLGN' ?' @?' CGO'
0AA(' OH' FO ' AO' GAB' CEMG R

?OHCGO' F?' HA' NG ODOKCOAH' A?' CFO ' 0B CA@' LBC' F?(KGDG' ?J' FAJ'
LG?BC>BMME' OC ?00ADNGN' JOCF' CFG' OAHNBOC' A?' FO ' CADE' ?HN' FG' CFGDG-
>ADG' G@KF?CO?MME' DGKG?C ' OC OH' CFG' NODGOCOAH ' A?' CFG' >DO?D' ?'CGO'
0BMOGC8 ' BKKA GN' NG?CF' R

6'5 T'JL'T J'NPM 6'MiO' GN KU'T J' GPIM T'
1i'NH 7M 'K GP8 MiO'MG'NHP'KJGN I' G+
2i'M 'HP 'APGN'M MT'APM'HP'N 'KHJ KH+R

HOOGHC' 0B CA@ ' BDPOPG' JFGH' CFGE' ?DG' LBOMC' BKAH' CFG' BH?MCGDOH '
K?DC ' A>' H?CAH?M' OF?DO?OCGD' ?HN' F?PG' OAHHGOCAH' JOCF' BH?MCGDO?LMG'
MAO?M'OODOB@ C?HOG ' 0BMCGC' J?' O?DDOGN' CA' FGO' CA@L' ? ' CFG' @?N '
?HN' CFG' @?CDAH ' A>' C?ME' ?DG' COMM' O?DDOGN' "A GD ' F? ' @A C ?00B-
D?CGME' NG ODOLGN' BOF' ?' OGHG' R

6' JN'i 'AT'7'NG
#'OJ9?'MiO'O G1M9' i GP'MGGM 9%O'NHP'PM
#' M 9' N'KHMIN'9 JOP'MiO'9 JOP'TPN8
#iO'i 'N'GN MiOP'7MiNMGN K'N L'MLLPM %O[
H iQ iQ' NHPT'KM1PSMG'7 I'NHP'GHMOPG'AP9 '8
#99' 7M'QH GN9T' H NP'['Y1H'[GMT%2'K PO
Y5 'i N'NHP'9 iQ'HP P'AJ T NHP'OPMO'1

??' 7 ' 7

MN' ?KBMGC' □H' F□' G BLGD?HC' K□D□C' ?C' F□' N?B FCGD8' ?KKDA?OF□H' @?DD□? G' O?MM' >AD' = CJGHCEI' A>' CFG G' ?DC□ C ' #FG' OD□C□O' CF□H(' CF□' CAA' M?D G' ?' HB@LGD' "□C AH' ?E ' J□CF' JAHNGD>BM' □@KM□O□CS' =' !□CFGD' ?KBMGC' F?N' ?MCGDGN' F□' @□HN' CD?H GME' AD' ABD' ?BCFAD' >AD AC' JF?C' FG' F?N' SB C' @?NG' F□@' CGMM' B c' #F□' □' □HNGGN' CA' BHNGD C?HN' ?' KAGC' J□CF' ?N@□D?LMG' G ?OCHG ' #FG K? ? G' □' GHC□DGME' □H' (GGK□H' J□CF' F?(CKGDG8' F?L□C' A>' F□CC□H' A>>' ?' OF?D?OCGD' ?M@A C' LE' ?' JADN' ?KBMGC' □' GP□NGHCME' ?' @?H' A>' A CGHC?C□AH' LBC' F□' A CGHC?C□AH' ?' □' @A C' GHGD?MME' CFG' O? G' □' OAPGDGN' J□CF' ?' CF□H' PG□M' A>' ?>>GOCGN' □HN□>->GDGHOG' H' CFG' >□D C' ?OC' FG' ?E' CA' F□' BG C R

6' X P' HM P' M' N 79 !Q' 7 9 GH' AM!] JP\' N M O+R

H' CFG' CF□DN' ?OC' JFGH' FG' GCCMG' CFG' N?E' A>' ?D□ 8' @?DD□? G' FG' SB C' F□HC R

YY X P%9' UPPL' ! ' Q PMN' MO SM' 7 P!O' 'N +R

.BC' F?(KGDG' (HGJ' CF?C' CFG G' □HN□O?C□AH' A>' CFG' =' KD□NG' JF□OF' ?KG' FB@□M□CE' I' JGDG' HAC' □HOAH □ CGHC' J□CF' CFG' =' CJGHCE' OAA(I' CFG' DG DGC' CF?C

6' X P' GHM99' AP' I JKH' J!7J ! GH%O' 7 'NH G' N I P R'

?HN' CFG' AM□O□CBNG' G KDG GN' □H

6' / U' N 'NHP' AMU%O' I PMNG' Q O' #!QP9 KM+R

CGGPGH' CBDH' BK' F□' HA G' ?D□ CAOD?C□O?MME' ?C' F?(KGDG' >AD' □@-KBC□H' =' CA' ?H' C?M□?H' HALMG@?H' ?HN' F□' M?NE' ?MM' CFG' KGCCE' AM□O□CBNG' A>' ?' KD□P?CG' FAB G' OAHOGDH□H' ?' KDAP□HO□?M' GHCGDC?□H@GHC I' ?HN' FG' ?NN' PGDE' D?HNME' = #A' BOF' ?' LB CMG' ABD' ?BCFAD' @□ FC' F?PG' LGGH' J□CHG ' ?C' FA@G' LBC' CFG' M□(G' ?H □GC□G' OABMN' HAC' JGMM' F?PG' AOOBDDGN' □H' CFG' >?@□ME' A>' ?KBMGC I' CGGPGH' F?N' HAC' JGMM' DG?N' CFG' F□ CADE' A>' AO□GCE' G□CFGD' □H' C?ME' AD' □H' !H M?HN' CA' F?PG' >?MMGH' □HCA' CFG' @□ C?(G' A>' LGM□GP□H' CF?C' CFG' DG?C' JGDG' G G@KC' >DA@' BOF' =' ?H □GC□G I' #FG' L?DAH8' M?NE' APGDMAA(GN' CFG' L?DAH8' (□COFGH' >DA@' FGD' KD□P?CG' OF?@-LGD' ?HN' CFG' C□MM DAA@' ?HN' CFG' K□OGDE' HAC' BH>DGQBGHCME' AOOBK□GN' ?' M?D G' KADC□AH' A>' FGD' ?CCGHC□AH

3 3' H ,& ' ' '3 RF

C' F?' LGGH' OAHSGOCBDGN' CF?C' CFG' OF?DHGM FAB G' BHNGD' CFG' OFBDOF' ?C' CD?C>ADN' JF□OF' OAHC?□H' ?' P? C' OAMMGOC□AH' A>' FB@?H' LAHG ' B - G CGN' CA' F?(KGDG' CF□' NG OD□KC□AH' A>' =' CFG' ?HO□GHC' DGOGKC?OMG' I' A>' CFG' ?KBMGC

M ' R , .' K .' 2

0BM□GC' □' FGMN' CA' LG' NG?N' ?KBMGC8' SAE' ?DG' LBD□GN' J□CF' F□' OF□MN' #FG' @B □O□?H' CF?C' O?@G' CA' ?OOA@K?HE' FGD' CA' OFBDOF' DG@?□H' □H' CFG' F?MM' #FG' OGHG' JF□OF' >AMMAJ' LGCJGGH' GCGD' ?HN' CFG' @B □O□?H' F?' GHGD?MME' LGGH' OAH □NGDGN' □MM KM?OGN' !PGH' AMGD□N G' ?E ' =' 'CFG' ?BN□GHOG' (HAJ' CF?C' 0BM□GC' □' HAC' NG?N' CF□' OGHG' □' KGDF?K' G 0B - ?LMG I' "□ FCME' BHNGD CAAN' □C' ?KKG?D' CA' B' CF?C' CFG' OGHG' DGQB□DG' HA' ?KAMA E' C' J?' CFG' 0B CA@' A>' ABD' ?HO□GHC' CFG?CDG' CA' □HCDANBOG' □H' CFG' □DDG BM?D' K?B G' A>' ?' KM?E' CF?C' CAAN' □H' CFG' KM?OG' A>' ?' N□P□ □AH' □HCA' ?OC' A@G' FADC' N□PGD □AH' B0F' ?' ?' AH ' ?' N?HOG' AD' CFG' G CG@KADG' LB>>AAHGDE' A>' ?' OMAJH' C' CF□' KA□HC' A>' "A@GA' ?HN' 0BM□GC' CFGDG' □' ?' H?CBD?M' K?B G' □H' CFG' ?OC□AH' ?HN' ?C' CF□' KA□HC' B0F' ?H' □HCGDM□BNG' JABMN' KDAL?LME' F?PG' LGGH' KDG GHCGN' JFGCFGD' F?(-KGDG' F?N' JD□CCGH' AHG' AD' HAC' #FG' C? G' N□DGOC□AH' □H' CFG' G0AHN' QB?DCA' KBC' CF□' @?CCGD' ?' □C' ?KKG?D' CA' B' LGEAHN' ?' NABLC' #F?C' N□DGOC□AH' ?E ' =' !HCGD' □MM' G@KG I' ?HN' CFG' N□?MA BG' □@@GN□?CGME' LG □H' LGCJGGH' GCGD' ?HN' CFG' @B □O□?H' □MM' GHDKG' J?' CFG' $□ CAH' A>' F□' N?E' ?HN' J?' ?' DG?C' ?' KAKBM?D' >?PABD□CG' ?' #?DMGCAH' F?N' LGGH' LG>ADG' F□@' C' J?' J□ G' CFGDG>ADG' □H' F?(KGDG' CA' >□HN' A@G' LB □HG ' >AD')□MM' G@KG' CF?C' FABMN' HAC' LG' GHC□DGME' ABC' A>' F?D@AHE' J□CF' CFG' DG?C' LB □HG ' A>' F□' KM?E' #F□' OGHG' A>' CFG' @B □O□?H' □' PGDE' FADC' ?HN' DG ?DNGN' ?' ?' HGOG ?DE' K?DC' A>' CFG' DABC□HG' A>' CFG ?HO□GHC' C? G' □' G OGMMGHCME' @?H? GN' ACF□H' O?H' LG' @ADG' H?CBD?MME' G F□L□CGN' CF?H' CFG' □HN□>>GDGHOG' A>' F□DGM□H ' J□CF-ABC' ?CC?OF@GHC' CA' ?' >?@□ME' OGHG' A>' D□G>' GCGD' ?HN' CFG' @B □O□?H' L?HNE' SA(G ' ?HN' ?MCFAB F' CFG' @B □O□?H' CF□H(' GCGD' ?' =' KG C□GHC' (H?PG I' KGDF?K' >AD' F□' □HAKKADCBHG' ?MM□G ' CFGE' ?DG' DG?NE' GHAB F' CA' MAA(' ?>CGD' CFG□D' AJH' D?C□>□O?C□AH' GPGH' ?@□N C' CFG' ADDAJ' JF□OF' CFGE' GG' ?DABHN' CFG@' ' JGNN□H' AD' ?' LBD□?M' □' CFG' ?@G' CA' CFG@' =' A@G' JG8□M' □H' FGDG' C?DDE' >AD' CFG' @ABDHGD ' ?HN' C?E' N□HHGD I' A' F?(KGDG' DG?N' CFG' OABD G' A>' CFG' JADMN' ?HN' □C' □' HAC' @B0F' OF?H GN' #FG' QBAC?C□AH' LG □HH□H R

6' X HP!' Q L !Q' Q P7' NHP' HPM N' O NH' J!O' R S

□' >DA@' ?' FADC' KAG@' □H' = #FG' ?D?N□ G' A>' %?□HC□G' %GH□ G I' LE' "□OF?DN' !NJ?DN' @? CGD' A>' CFG' OF□MNDGH' A>' CFG' OF?KGM' CA' BGGH' !M□T?LGCF' #F□' J?' GC' ?' ?' >ABD K?DC' AH' LE' ND□?H' .?CCGH' AD ?H□ C' A>' C' ?BM8' □H' CFG' DG□ H' A>' F?DMG' ' ?HN' □' CFB' KD□HCGN' LBC' J□CFABC' ?HE' H?@G' □H' ?J(□H 8' =' □ CADE' A>' &B □O I' PAM' P' #FG' QBG C□AH' A>' GCGD',' FE' □MPGD' ABHN' JFE' @B □O' J□CF' FGD' □MPGD' ABHNWI' □' F?KK□ME' GHAB F' G KM?□HGN' LE' GDOE' R =' #F□' D□N□OBMG' □' HAC' A' @BOF' MGPGMMGN' ?C' CFG' AH ' □C GM>' VJF□OF' >AD' CFG' C□@G' □C' J?' JD□CCGH' □' HAC' □HGMG ?HC' ?' ?C' CFA G' >ADOGN' ?HN' BHH?CBD?M' G KM?H?-C□AH' A>CGH' □PGH' LE' B' K?□H>BM' GN□CAD' ?HN' G KA □CAD' A>' ?HO□GHC-?BCFAD I R M .' PAM' □' ?N' F?(KGDG' ?' KDG GHC□@GHC' A>' JF?C' FG' J?' CA' DGOG□PG' ?C' CFG' F?HN' A>' F□' AJH' OA@@GHC?CAD' W

' +

0 ' R

#A' CFG' KAGC□O?M' CD?PGMMGD' □C' JABMN' LG' N□>>□OBMC' CA' ?E' JFGCFGD' &?HCB?' JABMN' G O□CG' CFG' DG?CGD' □HCGDG C' ?' CFG' L□DCFKM?OG' A>')□D □M' AD' ?' CFG' OGHG' A>' "A@GA8' G □MG' BDGME' ?H' !H M□ F@?H' O?HHAC' J?M(' CFDAB F' CFG' CDGGC' A>' CF?C' O□CE' J□CFABC' CF□H(□H' A>' CFG' ?KACFG-O?DE' □H' JFA G

6' !PPOT' GH L' M' N N GP' HJ!Q' 6
!' M99 QMN ' GNJ77%O' $M!O' NHP' GU !G'
17' 99 GHML%O' 7 GHPG' 8 M!O' MA JN' H G' GHP9 PG'
#' APQQM 9T' MKK J!N' 7' P I LNT' A WPG+R

HE' NG OD□KC□AH' A>' CFG' F□ CAD□O?M' GPGHC' OAHHGOCGN' J□CF' &?HCB?' AD' ?HE' ?OOABHC' A>' □C' ?DOF□CGOCBD?M' @AHB@GHC ' JABMN' FGDG' LG' ABC' A>' KM?OG

' H ,' ' ' " ' ' $ 2

#FG' OD□C□O□ @' A>' CFG' DGHOF' OFAAM' F?' HAC' K?DGN' CF□' >?@AB' K?? G' 0A GKF' ?DCAH' ?H' GMG ?HC' OFAM?D' LBC' JFA' LGMAH GN' CA' CF□' OFAAM' F?' CFG' >AMMAJ□H' AL GDP?C□AH' □H' F□')□D □M' V 43' PAM' □ K' 37

=' C' @?E' HAC' LG' □@KDAKGD' CA' KDANBOG' CFG' >AMMAJ□H' M?D□H' □H C?HOG' A>' CFG' ?L BDN□CE' A>' □HCDANBO□H' MAH' ?HN' @□HBCG' NG OD□KC□AH' □HCA' CD? GNE' FGH' "A@GA' DGOG□PG' CFG' NDG?N>BM' ?HN' BHG KGOCGN' HGJ' A>' 0BM□GC8' NG?CF' CF□' >AHN' FB L?HN' □H' ?H' ? AHE' A>' D□G>' □@@GN□?CGME' DG AMPG' CA' KA□ AH' F□@ GM>' .BC' F□' ADDAJ' □' □HCGD-DBKCGN' JF□MG' FG' □PG' B' ?H' G ?OC' K□OCBDG' A>' CFG' ?KACFGO?DE8' FAK' >DA@' JFA@' FG' □HCGHNGN' CA' KBDOF? G' M□G' KA□ AH

Y2' O' P I P I AP' M!' ML NHPKM T % BK+

' ?KKG?M' CA' CFA G' JFA' (HAJ' ?HECF□H' A>' CFG' FB@?H' FG?DC' JFGCFGD' "A@GA' □H' CF□' N□ CDG >BM' □CB?C□AH' OABMN' F?PG' MG□ BDG' CA' CF□H(' A>' CFG' ?MM□ ?CAD' G@KCE' LA G ' ?HN' LM?NNGD ' ?HN' ACFGD' >BDH□CBDG' A>' CF□' LG ?DME' FAK' ?HN' CA' KA□HC' CFG@' ABC' A' N□ C□HOCME' CA' CFG' ?BN□GHOG' #FG' NG OD□KC□AH' □ ' □HNGGN' PGDE' M□PGME' ?HN' H?CBD?M' LBC' PGDE' □@KDA-KGDME' KBC' □HCA' CFG' @ABCF' A>' ?' KGD AH' ? □C?CGN' J□CF' BOF' K? □AH' ? ' è "A@GA' □' DGKDG GHCGN' CA' LG I

#FG' OD□C□O□ @' A>' ?DCAH' □H GH□AB' ?' □C' @?E' ?KKG?D' ?HN' CDBG' ?' ?KKM□GN' CA' @?HE' =' MAH' ?HN' @□HBCG' NG OD□KC□AH' □H' CD? GNE I' □' FGDG' L? GN' BKAH' ?' JDAH' KD□HO□KMG' G' ?E' CF?C' "A@GA' □H' F□' N□ - CDG >BM' □CB?C□AH' F?N' HAC' =' MG□ BDG' I' CA' CF□H(' A>' CFG' >BDH□CBDG' A>' CFG' ?KACFGO?DE8' FAK' F?C' CFGH' F?N' FG' MG□ BDG' CA' NA' W ?N' FG' MG□ BDG' C' DBH' A>>' □HCA' NGOM?@?C□AH' ? ?□H C' >?CG' ?HN' □HCA' CGN□AB' ?KA CDAKFG' ?HN' GHGD?M□ ?C□AH' ?' ?' MG' (□M>BM' ?DC□ C' CF?H' F?(-KGDG' JABMN' F?PG' @?NG' F□@' □HNBM G' □H' W DA@' CFG' @A@GHC' FG' F?N' ?□N R

6 X P99' ?J9 PN' 2' I 9' 9 P' NH' T J' N ! QHN S
/ P N%G' GPP' 7 ' I PM!G R

CFG' ?KACFGO?DE8' FAK' LGO?@G' CA' F□@' CFG' ALSGOC' A>' CFG' @A C' □HCGH G' □HCGDG C' +DG?C' K? □AH' JFGH' CFGE' F?PG' F?KGN' CFG@ GMPG' □HCA' >□D@' DG AMPG' ?CC?OF' CFG' @A C' N□ C□HOC' □@KADC?HOG' CA' CFG' @□HBCG C' ALSGOC' OAHHGOCGN' J□CF' CFG' G GOBC□AH' A>' CFG□D' KBDKA G' !MZ' F?N' GGH' CFG' ?KACFGO?DE8' FAK' □H' F□' KM?O□N' @A@GHC' ?' ?H' ALSGOC' A>' OA@@AH' OBD□A □CE' G' F?N' F? C□ME' MAA(GN' ?C' CFG' CADCA□ G' ?HN' CFG' ?MM□ ?CAD' CFG' G@KCE' LA G ' ?HN' CFG' G?DCFGH' KAC ' ' ?HN' FG' F?N' MAA(GN' ?C' CFG' C?CCGDGN' JGGN' ?HN' CFG' APGDJFGM@□H' LDAJ' A>' CFG□D' HGGNE # GD' .BC' FG' F?N' ?M' A' ?□N' JFGH' FG' >□D C' ?J' CFG G' CF□H R

F?(KGDG' 0?H' GG' AHME' ?' F?KGMG ' DB□H' ?@□N C' J□MNHG ' ?HN' NG AM?C□AH'W

6 #'Q M P\' 1' i ' ,' M' 9MiNP i
O ;HP P'9 PG'?J9 PN' MiO' HP ;APMJNT' IMUPG
H G' MJ9W'M 7PMGN iQ'L PGPiKP'7J99' 79 QHN+R

0)ADN JADCF' F?' ?' KF□MA AKF□O2M' DG@?D(' BKAH' F?(KGDG' JF□OF' □ '
?KK□O?LMG' CA' ?MM' F□' □O? GN□G ' R =' F?(KGDG8 ' J□□CH ' □H' CFG @A C
K?CFGC□D' 0GHG ' HGPGD' ?OC' BKAH' B ' ? ' K?CFGC□D' LGEAHN' CFG' LABHN ' A>'
KMG2 BDG I' ADN JADCF' ?NN ' CF?C' CF□ ' G>>GOC' =';H' ?' @BOF' DG?CGD'
NG DGG CF?H' @= FC' ?C' >D C' LG' □@? □HGN□ ' □A' LG' ? OD□LGN' CA' @?MM'
LBC' 0AHC□HB?M' ?HN' DG BM?D' □@KBM G ' A>' KMG2 BD?LMG' BDKD□ G' >DA@' CFG
@GCDC□O?M' ?DD?H G@GHC I U' H' "A@GA' ?HN' 0BM□GC' CFG' KD□HO□KMG' A>'
M□@□CH ' CFG K?CFGC□D' ?OOADN□H ' CA' CFG NG DGG' H' JF□OF C□' □' 0?MOBM?CGN'
CA' KDANBOG G@ACDAH ' A>' KMG2 BDG ' □HCGD JAPGH' J□CF' CFG' JFAMG' CDBO-
CBDG ?HN' OAHNBOC' A>' CFG' KM?E' #FG' CD2 □O?M' K?DC' A>' CFG' CADE' >DA@'
CFG >D C' OGHG' CA' CFG M? C' □ ' FGMN' □H' BLSGOC□AH' CA' CFG' LG?BC□>BM' C'
□ ' HAC' AHME' CF?C' CFG' LG?B□>BM' OA@G ' CA' CFG' DGM□G>' A>' CFG' CD2 □O ' ? '
□H $G?D' ?HN' CFGMMA' LBC' FGDG' CFG' CD2 □O □ ' AHME' ?' @ANG' A>' G' F□L□C□H '
CFG' LG?BC□>BM' BHNGD' □C ' @A C' CD□(□H ' ? KGOC ' F?(KGDG' HGPGD'
□HCGHNGN' CF?C' CFG' CADE A>' "A@GA' ?HN' 0BM□GC' FABMN' M?OGD?CG' CFG'
FG?DC' FGH' &D ' HOFL?MN' CFGDG>ADG' ?□N' □H' FGD' KDG>?OG' CA' CFG'
?OCGN KM?E' ," "A@GA' ?HN' 0BM□GC □ ' 0?MMGN' K?CFGC□D' CD2 GNE' LBC' □C □ '
HAC' A' □H' DG?M□CE R □C 0F?D@ ' CFG' BHNGD C?HN□H ' ?HN' NGM□ FC ' CFG'
'□@? □H?C□AH' J□CFABC' @GM□CH ' CFAB F' □C CAB0FG ' CFG' FG?DC I' FG' K?N'
CFG F□ FG C' OA@KM□@GHC' CA' F?(KGDG8 ' (□MM ?' ?H' ?DC□ C' >AD' FG' F?N'
CFADAB FME' JAD(GN'ABC' F□ ' AJH' □NG?' ,' CJ?E I' &D ' HOFL?MN'?NN '
=' JABMN' F?PG' DGHNGDGN' □C @ADG' G>>GOC□PG I' CJ?E S' DGHNGD' □C
=' @ADG' G>>GOC□PG I' C' □ ' QB□CG' B>>O□GHC' CA' DG>GD' CA' F□' ,' ?□B '
&?D□B C' CA' FAJ' F□' BOOG ' □H' OAHPGDC□H ' LG?BCE □HCA' JF?C □ ' 0?MMGN'
>ADOG' G' N□N' G ?OCME' JF?C' +?DD□O(8 ' MG ' (□M>BM' F?HN' PGHCBDGN' CA'
NAR CA' @?(G' 0BM□GC' J?(G' LG>ADG' "A@GA' N□G ' C' □ ' @?DPGMMAB ' FAJ'
?OBCG' ?HN' □H GH□AB ' @GH' B0F' ? ' #FA@? ' ?DCAH' >AD' G' ?@KMG'
FABMN' LG' LGCD?EGN' □HCA' OD□C□O □@' JF□OF' NG?M ' J□CF' B0F' ?' KAG@' ? '

LGOA@G' ABC' A>' (GGK□H ' H CG?N' A>' CFG' JGGCHG ' CF?C' =' GHN ' J□CF
?' MAH ' NGGK' □ F' M□(G CFG' LDGGTG' A>' CFG' GPGH□H I'h' JG' F?PG' ?' D?HC
?LABC' =' ODBGM' OBD GN' >?CG I' JF□OF' FD□G('M□(G CFG' B CE' J□HN' □H CFG
0F□H(' A>' ?' NG GDCGN' ?HN' KAPGDCE CD□O(GH' FBC' H CG?N' A>' CF?C
LG?B□>BM' OMA G' □H' JF□OF' =';CFG' KD□H ' ?HN' CFG' J□HCGD' @GGC' J□HCGD' I'^
? B@G ' CFG' OF?D?OCGD' A>' KD□H ' ?HN' KD□H ' CFG' ?NHG ' A>' J□HCGD' I'^
J G' F?PG' FGDG' ?' >□GDOC' CAD@ R =' BOF' FGGC ' A>' >DG' BOF' LBD C ' A>'
FADD□N' CFBHNGD I R JF□OF' KDANBOG ' CFG' G>>GOC' A>' @GDG' KFE □O?M' CGDDAD'
H CG?N' A>' =';CFG' >MAJGD' CF?C □ ' A>CME' FGN' AH' CFG' G?DCF' EGC' KBCC□H '
>ADCF' BHNE□H ' ANABD I' ' JG' F?PG' CFG' D?H(' ?HN' MA?CF A@G' JGGN ' A>'
CFG' OF?DHGM FAB G' C' □ ' A@G' KD?□ G' CA' ABD' ? G' CF?C' ?HE' HGJ'
?CCG@KC ' CA' =□@KDAPG I' F?(KGDG' JABMN' HAC' LG' CAMGD?CGN' C' □ ' ?'
F□ FGD' KD?□ G' CF?C' CFG' GHNG?PABD' CA' DGP□PG' BKAH' CFG' C? G' JF?C' CFG
DG?CG C' @? CGD' A>' CFG' ND?@?C□D' ?DC' DG?MME' JDACG' F?' ' □H' A@G' >GJ'
□H C?HOG '□GOG□PGN' ?NGQB?CG' GHOABD?' G@GHC' .BC' JG' F?PG'EGC' ?' DG?C'
NG?M' CA' MG?DH' ?HN' ?' DG?C' NG?M' CA' BHMG?DH' LG>ADG' CFG' KD□HO□KMG' BKAH'
JF□OF' "A@GA' ?HN' 0BM□GC' J?' ?' J□CCGH' J' JABMN' LG' CFADAB FME' ?KKDG-
0?2CGN' LE' ?H' ' □CF' CFG' @□MDAH ' CF?C' ' F?(KGDG '
CFDAB FABC' CFG' O□P□M□ GN' JADMN' CFGDG' □ ' HA' N□>>O□BMCE

J□NGME R
AMGD□N G' F?' NG OD□LGN' CFG' FA@A GHGAB HG R CFG' CAC?M□CE' A>'
□HCGDG C R ZJF□OF□ ' CFG' DG?C' OF?D?OCGD□ C□D' A>' CF□' ' KM?E' LE' AHG' A>'
CFA G' LG?BC□B\' ?H?MA □G ' J□F□OF' OABMN' AHME' KDAOGGN'>DA@' CFG' KGH'
A>'?' CDBG' KAGC R

=' FGH□OG' ?D□ G ' CFG' F?D@AHE' CF?C' CD□(G ' B ' □H' CFG' J□MNG C' H?CBD?M
M?HN 0?KG R □H CFG' DGM?C□PG' F?KG ' A>' DAO(' CFG' F?D@AHE' A>' OAMABD'
□H' CFG' FG?CF '>GDH ' ?HN' M□OFGH ' CFG' MG?PG ' A>' CFG' LGGOF' ?HN' CFG'
A?(' CFG' CG@ ' ?HN' D□OF' LDAJH' LD?HOFG ' A>' CFG' L□DOF' ?HN' ACFGD'
@ABHC?□H' CDGG '?P?DE□H '>DA@' PGD □H ' ?BCB@H' CA' DGCBDH□H ' K□H R'
K□M?HC?□AH 'WR DA@' CF□ ' CF?C CFG' H?GBD?M M?HN 0?KG □ ' G>>GOCGN' ? ' □C
JGDG' LE' ?' □H MG' GHGD E' @AN□>GN' "' ' □H' G?0F' 0A@KAHGH' K?DC'
HN' ? ' CF□' □ ' CFG' K?DC□OBM?D' G' OGMMGHOG' A>' CFG' F?(KGD□?H' ND?@?'
GHGD?MME' A' □ ' □C G' KGO□?MME' OF?D?OCGD□ C□D' A>' CFG' "A@GA' ?HN' 0BM□GC' IZ

'/NP M T'&PIM iG' 9P ‡L‡') +
' HM MUNP GN UPi'JiO' N UPi‡'
N N' /PKNJ PG' /' ‡L‡ ‡
' 2 O‡ 9P ‡L‡') +
1/‡ 22‡' 22' =

'1AGP MN iGL P7WPO'N 'NHP'GPK iO'PON i' 7/T KMJ' M99MOG+
N' " GN D' 7'3iQ9 GH' - PN T' 9P ‡L‡' '@ +
2' 9P OQP' MUP%G 9PI M9G+
?' 9P OQP'/NP M T'&PIM iG+
2 %-(' 8*

AKGH□H ' A>' CFG DA G' □ ' LDG?CFGN □HCA' CF□ ' KAG@' . BC' GPGH' @ADG D?K□NME' CF?H' CFG G?DM□G C' L□A A@ ' A>' EABCF ?HN' LG?BCE' NG07E' □C FBDDG ' AH' HAD' @DA@' CFG >D C' C@□NME LAMN' NGOM?D?CAH' A>' MAPG ?HN' @ANG C' DGCBDH ' CA CFG @A C' BHM□@□CGN' K? □AH' CA' ?H' □DDGPAO?LMG' BH□AH ' CFGH '?@□N C' ?MCGDH?C□H ' CAD@ ' A>' D?KCBDG ?HN' NG K?□D' CA' CFG NG?CF A>'CFG C□A' MAPGD ' □FA' C□MM ?KKG?D' GHP?LMG ? ' CFG□D' MAPG' BDP□PG ' CFG@' ?HN' ? ' LE' CFG□D' NG?CF CFGE F?PG ALC?□HGN' ?' CDB@KF ŧAPGD' GPGDE GK?D?CH ' KAJGD' #FG' JGGCG C ?HN' CFG L□CCGBG C' MAPG' ?HN' F?CDGN' >G C□P□CE' ?HN' N?D(' >ADGLAN□H 'CGHNGD G@LD?OG ' ?HN' GKBMOFDG ' CFG >BMHG ' A>'M□>G' ?HN' GM> ?HH□F□M?C□AH' ?DG ?MM FGDG LDAB FC OMA G' CA' G?OF ACFGD' ?HN' ?MM CFG G OAHCD? C ' ?DG' A' LMGHNGN' □H CFG F?D@AH□AB ' ?HN' JFAMG' MG?PG ' LGF□HN' □H CFG @□HN' DG G@LMG ' ?' □H MG' LBC' GHNMG ' JAHNGD>BM' JAD(' □HCA' ? BH□CE' A>' □@KDG □AH ' CF?C CFG GOF□A' JF□OF' CFG □ F I'U

H' GMGOCH ' CFG G K? ? G ' CA' G C?LM□ F' □H CFG @□HN ' A>' ABD' DG?NGD ' CFG DG?C KD□HO□KMG' A>'CFG BH□CE A>'GGM□H ' JF□OF' A' CFADAB FME KGDP?N□ ' CFG "A@GA' ?HN' 0BM□GC' ?HN' JF□OF' OAH CJCBCG ' CFG = K?D-C□OBM?D' G OGMMGHOD' A>' CFG F?(KGD□?H' ND?@?'I' JG' F?PG' □HN□DGOCME >BDH□ FGN CFG KDAA>' A>' CFG ? GDC□AH' J□CF' JF□OF' JG' GC ABC' CF?C CFG CD? □O?M' K?DC' A>' CFG CADE' >DA@' CFG >□D C' OGHG CA' CFG M? C' □ ' FGM□' □H' BLSGOC□A□' CA' CFG' LG?BC□>BM' #FG' CDBOCBDG' A>' CFG KM?E' G GHC□?MME ?HN' 0BM□GC' CA' ?KKDA?0F' CA' ?' KAG@ 'I' LBC' A>' OAB□ G @G?H□ DGQB□DGN□ CF□ ' AMGD□N G F? ' ?□N' CF?C =' F?(KGDG @G?H□ CFG "A@GA' CA' CDG K? ' BKAH' CFG ?CCGHC□AH' A>' ABD' DG?NGD ' J F□M C' JG' G ?@□HG' CFG ?HKKG@' KAG@ 'I' LBC' CFG ND?@?C□' KA JGD' F□PG' ?DDP□PGN' ?C ?' NBG' OAHOGK□AH' A>' CFG OAHNBOC' A>' CFG. CADE' ?HN' CFG NGPGMAK@GH□' A>' CFG OF?D?OCGD ' BHNGD' KD□HO□KMG A>' ?DC AH' J□F□OF' CF□ ' ND?@? J ? ' OAH CDBOCGN R CF?C A>' BL-CFAB F□ ' L□'CFG >ADOG A>'K? □AH' ?HN' □@? □H?C□AH ' CFDA J□H ' CFG□D' D□OF' OAMABD ' BKAH' CFG OF□G>' ?OCAD ' ?HN' OAMABD□H ' BKAH' ?H' □HN□ KGH ?L□G' M?J'A>'F?D@AHE ' ?MM'CFG' DABK ' ?DABHN'CFG@R J G F?MM'DGSGOC' ? ,BCCGDME' BHJADCFE ' ?MM' CF?C @□ O?MMGN' OD□C□O□ @' J F□OF' C?(G ' □C ' C?HN' BKAH' ?'

6' MIT'M I i'Q'HMNH'HP'NHP P'APPI'GPPI+
X NH'NPM G'MJQ'IPIN'Q'NHP'7 PGH' I i'Q%G'Op +R

C' □ ' DG@?D(?LMG' CF?C CFG' KGGOF' CFB ' 0A@@GHO□H ' J F□OF' OAHC?□H ' CJ□HCE' M□HG ' ? ' F□ FME' JDAB F□ C ? ' ?HEC□F□H ' □H ' F?(KGDG' ?DC' HAC' □H CFG>D C' OAKE' A>' CF□ '#FG' G KGD□GHOG' A>' CFG ?DC□ C' C?B F□ F□@' JFGDE' CA' M?E' AH' CFG' KAGC□O?M' 0AMABD□H ' LD□ F□GD' ?HN' LD□ F□GD' ><MA J' LG?BC□>BMME' CFG G M□HG ' KDGK?DG' B ' >AD' CFG ?KKG?D?HOG' A>' "A@GA R CFG HAJ'@B □H ' ?L CD?OCGN' "A@GA R CFG "A@GA' JFA ' M□(G CFG' MAPGD' A>' F?BOGD

6' MIT'M I i'Q'HMNH'HP'NHP P'APPI'GPPI+
X NH'NPM G'MJQ'IPIN'Q'NHP'7 PGH' I i'Q%G'Op +R

C' □ ' DG@?D(?LMG' CF?C CFG' KGGOF' CFB ' 0A@@GHO□H ' J F□OF' OAHC?□H ' CJ□HCE' M□HG ' ? ' F□ FME' JDAB F□ C ? ' ?HEC□F□H ' □H ' F?(KGDG' ?DC' HAC' □H CFG' >D C' OAKE' A>' CF□ '#FG' G KGD□GHOG' A>' CFG ?DC□ C' C?B F□ F□@' JFGDE' CA' M?E' AH' CFG' KAGC□O?M' 0AMABD□H ' LD□ F□GD' ?HN' LD□ F□GD' ><MA J' LG?BC□>BMME' CFG G M□HG ' KDGK?DG' B ' >AD' CFG ?KKG?D?HOG' A>' "A@GA R CFG HAJ'@B □H ' ?L CD?OCGN' "A@GA R CFG "A@GA' JFA ' M□(G CFG' MAPGD' A>' F?BOGD

6' - PNN PGM'AMAP'NHMN'PMP'2'i'J G%O+R

GD□CFGD' 0BM□GC' HAD' "A@GA' F?N' D□ F□ME' DG?N' CFGD□' AJH' FG?DC ' G' J? ' □ F□H '>AD' ?' F?NAJ R FG >?HO□GN' CF?C FG' 0ABMN' BL5GOC' FGD' >GGM□H ' CA' CFG' J□MM' A>' AC□FGD R

. BC' JFGH' F□ ' >D□GHN' F?' ' >?MMGH' F□ ' =' HG J□ME' GHCGDC?□HGN' DGPGH G' I' O?' C ' A>'' ?MM' OAHCDAM

?' / NP M T'&PIM iG' ‡ +

H' /PKNJ PG' 9‡' ‡L‡' +
N'? Hi'G i%K ik9JO iQ'&PIM UG' i'& Ip 'MiO'?J9 PN+

6'# MT'N 'HPM pi' pGLPKN P'9pi NT[R

#FGH' ? ?H' FAJ' >HGME CFG O?M@' LGHGPAMGHC AAN' GH G A>' .GH' PAM@A' LMGHN 'J□CF' CFG G AKKA □CG'

.BC' CFG @? QBGD?NG' J?□C ' G' F?PG' FGDG' CFG DG?M□ ?□AH' A>'EABCF ?H GD' 17#EL?MC' ?□ "A@GA8' KDG GHOG' F? ' CFDAJH' ?' F?NAJ'APGD' CFG LD□ FCHG 'A>'CFGD□' EABH 'MAPG' #FG' @?' (GD' ?DG' AHG R CFG' CADOFG' ?DG G □H B□ FGNR CFG' PA□OG' A>'CFG' DGPGMDE' F? ' OG? GN

"A@GA' F?' MG?KGN' CFQ' J?M' A>' ?KBMG□8' ?DNGH' #FGDG' ?DG' HA' MAH GD

6 3M NH N PMO !Q'GNM G NHNM' I MUP'OM U'HPM pi'9 QHN+R

G' F?' >ABHN' ?' GQBG CGDGN' KA□' >?D' ?K?D□' >DA@' CF?□' L?HQBG□H F?MM >DA@' JF□OF' F□' '0BM□G□' NG OGHNGN' ?@□N □' CFG Z?E' DABK ' CF?□' >MA?CGN ?LAB□'H'CFG' ?DNGH'□A' F?H

6'JL i'NHP'KHPPU' 7'i QHN' #'G'M KH'EP PJ' i'MI'7 NH L%G'PM +.

□G □ ' ?MAHG' #FG' @AAH

6' LG' NH'G 9 P'N99'NH GP'7 J N N PP'N LG+R

G' FG2D ' @' CFG N□ C?H□ CDGGC CFG'M□ FC FG?2D□GN' &.GDOB□A' O?MM□H 'BKAH' F□@' LE' CFG H?@G ' A>

6'"JI J G'LMG6 i' IMOIMI'9 P +R

.B□' FG' FGGN ' F□@' HAC' 0BM□GC' ?KKG?D ' FG' KG?(

6'1 ';GLPMU'MQM i 'A QH'MIQP9[7 'NH 'M N #'G' Q9 J□N 'NH G i QHN'AP iQ' %P 'IT'HPMO+ #'G' G'M i QPO' IPGGPIQP ' 7'HPM pi' iN 'NHP' H NP'JL NJ IPO' iO% iQ'PTPG 1 7' I NM96' NHMN'7M 'AMKU'N 'QMCF' i'H I X HPi'HP'APGN OPG'NHP'9MCT LMK iQ'K9 JOG+ #'iO'GM 9G'JL i'NHP'A G I' 7'NHP'M +R

DA@' CF□ ' KAGC□O?M GMGP?C□AH' □C JABMN' GG@' ?M@A C □@KA □LMG'>AD' CFG MAPGD' CA' NG OGHN' CA' G?DCF R ?NH' EGC CFG G?DCF F?□H' AH ' A>' CGHNGD-HG ' ?HN' KBD□CE' J□F□OF' GQB?MEF LGMAH ' CA' CFG' F□ FG C' DG □AH' A>' KAGCDE' #FG' >G?D ' A>' 0BM□GC' >AD' F□ ' ?>GCE R CFG = >?DGJ GMM' 0A@K□-@GHC' I R CFG

6'2i'N JNH'7M ' iNMQJP'2'M I'N '7 i0&R S'

CFG =' NA' HAC' J G ? D R CFG

0? GI'A>

D 6 M9P7J9' PPOG'MI0'L PK'JGEJ KPO'79 P G+R

GDG' □ ' ?' HGJ'M□H('□H'CFG 0AHNB0C' A>' CFG CADE' S HN' JF?C' ?'LG?B-C□>BM' CD?H □C□AH' F?PG'J G'@?NG'>DA@'CFG GMGP?CGN'KAGCDE' A>' K? □AH'CA' CFG' 0?DOGME' MG ' GMGP?CGN' KAGCDE' A>' KFE□MA AKFE' #FG' AMN' @?H' JFA G' K□AB ' CFAB FC ' F?KG' CFG@ GMPG ' □HCA' JGGC' ?HN' AMG@H 0?NGHOG ' C?HN ' ? ' CFG'?HC?' AH□ C'SDD□HO□KMG' A>' CFG' K? □AH?CG' OAH-'>M□OC ' CF?C' ?DG' A□H 'AH' ?DABHN' F□@' G' □ ' CA'LG' ?' DG?C' ? GHC' □H CFG' JAD(□H 'A>' CFG' ND?@?' G' JABMN' OMA G' BK' CFG N□ GH □AH ' A>' CFG' DP?M' FAB G R FG' JABMN' @?(G CFG' HGJ' MAPGD ' LMG GN' □H' CFG□D BH□AH R FG' JABMN' ? B? G' CFG' @□ GDE A>' "A@GA8 ' G □MGR FG' JABMN' ?PG' F□ ' M?NE' >DA@' F' CFG' CA@L' ?KKG?D ' CA' F?PG' GK?D?CGN' CFG@' ? ?□H' □H MO>G ' ?MCFAB F' CFG' CA@L' ?KKG?D ' CA' F?PG' GK?D?CGN' CFG@' #FG□' AAN' AMN' @?H' J□M' DGME' CAA' @BOF' BKAH' F□ ' KF□MA AKFE ?HN' F□ ' (□M>BM' NG?M□H ' J□CF' FB@?H' ?OC□AH ' ? ' CFG' MAPGD ' F?PG' ?MDG?NE' DGM□GN' CAA' @BOF' BKAH' CFG' □HCG' D□CE' A>' C>G□D' K? □AH' ? ' ?' F□GMN' ? ?□H C' O?M?@□CE' #FG' F?M□ BDKD□ G' CFG' □HCG' F?M> M?NHG ' A>' CFG' >D□?D' J FGH' "A@GA' CGMM ' FG□@' JFGDG' F□ ' =' FG?DC□ ' NG?□' MAPG□ ' GC I' ?DG' NGM□ FC>BM' #FG' DGKDAA>' CF?□ ' @G?HC' >A□' ?' 0A@@GHN?C□AH R CFG =' 0A@G' EABH ' J?PGDG□I R' CFG =' J□ GME' ?HN' MAJ'I R ?DG' ?MM' CDBG CA' H?CBDC' . BC' "A@GA' F?' NG DGG' CFDAB F' CFG' ?@GN@B@' ? ' CFG' KAG' MAA(GN' ?C' FN' BH>AD@GN' ODG?C□AH ' #FG' GOAHN□ ' J□FGDG' CFG' OD□C□O' DGSGOC ' CF?□ @GN□B@' >AD' CFG @ C K?DC' CFDAB F' □H0?K?0□CE A>' B □H ' □C' ?HN' KGGD ' CFDAB F' CFG' @(GN' M? ' A>' J F?□F□FG' O?MM ' 0A@@AH' GH G' CF?□ F□ ' GEG ' >AD AA□F' @?E' HAC' LG' N?TTMGN' #FG' □F□DN□ □ ' J□FGDG' CFG' OD□C□O' >DA@' ?' BKGD-?LBHN?HOG' A>' CFG' KAJ'GD' A>' NGCGOC□H ' J F?C' ?KKG?D ' CFG' D□NO□OBMAB ' □NG' A>'CF□H ' VJ F□OF' DG' BM□' >DA@' ?' NG>□O□GH0E' A>' □@?' □H?C□AH ' C?(G ' ?' O?DO?CBD□ C8 ' P□GJ' A>' CFG' F□ FG C' G GDO□ G ' A>' CFG' □HCGMMGOC' ?HN' GDC ' F□ ' AJH' OMGPGDHG ' LE' KDG GHC□H ' ?' 3 ' #FG' >D C E CGO' CFAB F' □C' @?E'LG' CFG' @A C' N□>□OBMC' □ ' CFG' @A C ?>G ' CFG' CF□DN' CFAB F' □C ?KKG?D ' CFG' @A C □H □NCAB ' □ ' CFG' MG? C □HSBD□AB ' CFG' GOAHN' □ ' ?C' AHOG' G? E ?HN' NGL? □H ' □C' @?E' LG' □H' □H' CGGPGH ' ?HN' GHN' □H' @HGD

#FG'=' □MPGD' JGGCI' ABHN'A>'='MAPGD' 8'CAH BG ' LE' H□ FC I' □ ' FB FGN' = #FG' DGE GEGN' @ADHI' GG ' CFG' >D□?D' □H' F□ ' OGMM' LG?D□H ' F□ ' =' A □GD'

'Y NMT'AJN'M'9 NN9P'?' 9'K I'P'MQM i8R

CFG

'Y?7'NHMN'NHT'API N' 7'9 P'AP'H i J M A9P'R S

?HN ?KBMGC ? H?@G A> CD>G . BC ?H GP M FABD ? ?KKDA?OF H #FG LD?JM JCF JFOF CFG ND?@? AKGHGN ? CA LG DGHGJGNR

6 HP OMT G H N NHP MLJ9PNG MA MO+R

#FG =>GDE #EL?MCI ?HN CFG =LAMN & GDOBCAI ?DG CFG >D C POC@ A> CF ? >?OCAB F?CGR ?HN "A@GA ? L?H FGN #FG ?OCAH NAG HAC @APG M? H ME R ?MM ? FG?C ?HN KDGOKC?CAH 0BMGC C ?MAHG H FGD LAJGD BHOAH OAB A> ?MM LBC FGD @K? AHGN @? H H FG CFH(?MABN H CFG AMCBNG JFOF ? ?DABHN FGD JCF ?OF?D?OCGD CO PGFG@GHOG A> CG@KGD?@GHC$ LBC H CF ? AMMAQBE =CFGDG ? A@G-CFH A ?M@A C H>?HCHG H FGD KGD>GOC @KMOCE A KM?E>BM ?HN >?HC? CO H CFG @? GDE ?HN M?H B? G CF?C CFG OF?D@ A> GHC@GHC ?HN HHAOGHOG ? CFDAJH APGD CFG JFAMG I U #FG OGHG H JFOF CFG BD G CGMM FGD N SACHCGN CADE A> #EL?MC8 NG?CF ? ?@? CGD-KGOG G F?PG FGDG CA GHOABHCGD CFG A>CGH DGKG?CGN ALSGOCAH CF?C F?(KGDG B G OAHOGC JFGH FG AB FC CA LG G KDG H CFG M?H B? G A> PGFG@GHC K? AH #FG OAHOGC ?DG HAC H ?OOADN?HOG JCF CFG GHGD?M C? CG A> KBD AJH ? G CFAB F CFGE JGDG A JCF CF?C A> F?(KGDG8 . BC CMGE F?PG ?@BOF F FGD SB C>O?CAH #FGE ?DG CFG DG BMC A> CDAH G@ACAH GG(H CA DGMGPG C GM> LE ?P AMGHC G>>ADC A> CFG HCGMMGOC CF?C CFG JMM @?E DGOAPGD C L?M?HOG @@G-NCGME ?>CGD CFG MHG H JFOF JG F?PG CF?C KM?E BKAH JADN JFA G OM@? R

69M I ! M2 7NHP P AP GJKH M! S

JG OA@G ?C AHOG CA ?H G OM?@?CAH A> CFG NGGKG C K?CFA ?HN @KMOCE R

61 A PMU IT HPM N[SL AM!U !N8R

?HN CFGH JFGH 0BMGC (HAJ CF?C "A@GA H AC NG?N LBC CF?C #EL?MC F? >?MMGH LE CFG F?HN A> FGD FB L?HN JF?C ?H?CBD?M DGPBM AH A> >GGM H BOOGGN

61 NHMN OPKP N GH J9O O P99
2! GJKH M Q QP JG LM9MKP [R

#FG CD?H CAH >DA@ FGD DGKDA?OF A> #EL?MC8 @BDNGDGD CA ? MADAB CDB C H CFG HCG DCE A> FGD MADN H BDK? H ME LG?BC>BM AC MG LG?BC>BM H CFG K? AH JFOF "A@GA G FLC H CFG >D?D8 OGMM .ACF A> CFG MAPGD H CFG G OGHG FAJ CFG HCGH CE A> CFGD ?L?H-NAH@GHC CA ?H APGD@? CGD H JMM =#FGE GG AHME CFG@ GMPG H CFG BHPGD G I #F?C '0 FG CDBG @AD?M A>CFGD>?CG . BC GPGH BHNGD CFG NDG C O?M?@CE CFGE O?COF ?C CFG AHG SAE JFOF MG>C R CFG FADC @GGC H LG>ADG CFG K?DC H HN JF?C ? K?DC H CF?C GDG ? ?H OA@G CFG CDB@KF A> CFG LG?BC>BM APGD CFG @GDGME CD? O #FGE ?DG AHOG @ADG O?MZK' #FGD MAPG ? ?H LDG?CFG A> ?MM CFG JGGC FC ?HN ABHN H ? JADMN A> LG?BCE #FGE ?DG K?DC H LBC CFG ?MDFA C F?KKE 0BMGC ?E R

62N G ! N TPN !PM OMT S
P9 P P I P 9 P N MG NHP ! QHN !QM9P+R

"A@GA JFA GG CFG N?H GD A> NGM?E H HAC NGOGPGN R

62N MG NHP 9M U NHP HP M9O 7NHP I !+R

8#FGH JF?C ? LBD C A>KAGCDE >AMMAJ

6 QHN%G PM!O9PG M P AJ !N JN M!O E KJ!O OMT
NM!OG N LN P !NHP I GNT I J!NM !G% N LG+R

#FG OGHG OMA G J CF CF?C G QB CG N KM?E A> JA@?HME CGHNGHSG H 0BMGC JFOF FBDDG >DA@ CFG >AD GC>BMHG A>SAE H FGD FB L?HN8 KDG GHOG CA ?KKDGFGH AH >AD F ?>GCE >CGD CF OGHG JG ?DG ?M@A C OAHCGHC CA CF(? "A@GA >?HOGN FG CFAB FC

6K IP HMN G KM!+
2N KM!! NK J!NP M9NHP+PWKHM!QP 7E T+

#FG ADDAJ NAG OA@G BKAH KAAD 0BMGC JCF DGNABLMGN >ADOG #FG ?L AMBCG >?CFGD CFG BHEGMNH @ACFGD CFG CDG?0FGDAB BD G Z?MM FBDDEH FGD HCA ?MA?CFGN @?DD? GR @ FC ND PG AHG MG DG AMPGN CA CFG PGD G A> @?NHG . BC >DA@ CF @A@GHC FGD MAPG F? LGOA@ FGDA @ FG GG

6 L NT G NN !Q !NHP K9 JOG R S

FG DGSGOC FGD BD GR FG DG AMPG CA NGOGPG FGD K?DGHC #F

G+?M I PG !%G HM MKNP GN KG 7X I P! NH O PO N ! 9+ + L+ = +

OGHG LDH A C FGD OF?D?OCGD H C CDAH G C ?HN @A C LG?BC>BM DGMG> #FG BD G H CFG DA HG A> FGD H?CBDG F? N?DGN CA C?M(' CA CFG J>G A> "A@GA R CFG ?MM MAPH ?HN NGPACGN J>GR A> CFG DGGH GEG A> ?D ' #FG BD G @ CAA(' CFG AHG K? AH A> 0BMGC R CFG GH G D? GN HCA ABM R >AD ?' DAPGMMH QB?MCE CF?C FGD MA>CE @? H?-CAH JABMN BCCGDME NG K G = @A C JO(GN >GHN I AC A 0BMGC8 ACFGD OABH GMMAD #FG >D?D G C@?CGN FGD OAH C?HOE ?HZ FG NN =KE ?' (HN A> FAKG I CF?C C @ FC LG DGJ?DNGN G ?J CF?C 0BMGC JABMN ?C ?MM F?T?DN KBC ?J?E =CFG F?@G I A> @?DDEH ?D GMM F?N CFG >D?D DGO(AHGN BKAH FGD =CDGH CF A> JMM I #FG OGHG H F OGMM ?HN CFG BL GQBGHC OGHG JFGH FG J?MMAJ CFG ND?B FC ?DG ?@AH C CFG @A C KAJGD>BM H CFG KM?E ?HN EGC JG HGPGD MA G FC A> CFG F FG C KAGCDE @H MH JF?C D? D?HN JCF JF?C LG?BC>BM FGH 0BMGC BKKA GN CA LG NG?N H?CBDG ? ?H ? GDC FGD G@KDG APGD CFG CGCOFE ?HN ?L AMBCG >?CFGD ?HN CFG @ACFGD JGGK APGD CFG

61!P L !P !P L M!O9 !Q KH 9O+R

GDG ? ?H CFG GHCMG KAGCDE A> OA@@AH >GGMH OA@G CA CFG DGM>G A> CFG OGHG ?HN CFG >D?D LDH H ?' F FGD KAGCDE H CFG OAH AM?CAH A> NPHG CDBCF

JG ?KKDA?OF CFG O?C? CDAKFG CFG KAGCO?M O? C A> "A@GA8 @HN LGOA@G GPGH @ADG OMG?DME NG>HGN CF?H H CFG G?DMGD OGHG C J? >D C >?HO>BM CFGH @? H?CPG CFGH @K? AHGN LBC JFGH NGGK ADDAJ F? LGGH ?NNGN CA F MAPG ?HN FG CDG?N BKAH CFG CFDG FAMN A> CFG JADMN A> F?NAJ C KBC AH GPGH ?' F FGD OF?D?OCGD A> LG?BCE ' G F?PG GM GJFGDG KA(GH C A> CFG OGMGLD?CGN KGGOF ?LABC CFG KACFGO?DE DG>B H CA LGMGPG CF?C C >AD@ ?H G OGKCAH CA CFG GHGD?M OF?D?OCGD A> CFG LG?BCE CF?C CFDAJ C D OF GPGHH M FC APGD CFG OMA H OGHG #FG GHCMGHG A> "A@GA ?KK?DGHC GPGH JFMG FG ?E R

6 HP N I P M!O IT !NP!NG M P GM MQP 9O8R

>AD FG ?NN JCF ?' CDAH G>>ADC CA F >?CF>BM .?MCF? ?D R

GHCDG?CG CA ?D R = LG AHG I R ?DG >BMM A> CFG ?@G CGHNGD-HG G ' OAH CD?HGN CA >? FC J CF F@R FG M?E F@R LBC FG ?M@A C JGGK APGD F@ ?

61!P N NH I P !G J I G7 NJ!P%G A U+R

#FG DG@?HNGD A> "A@GA8 KGGOF H CFG CA@L ? ' AMGD N G F? KBC C ,CFG @? CGD G ?@KMG FAJ LG?BCE O?H ?C AHOG HODG? G ?HN @AN>E K? AH I

6 HP P
X 92GPN JL IT P P 9MGN !Q PGN+
#!O GHMUP NHP T UP 7 !MJGL K JG GNM G
O I NH G 9O PM PO 79PGH+R

#F ' CFG AHG KADCAH A> CFG =@GM?HOFAME GMG E AH CFG >D?MCE A> MAPG >DA@ C AJH H?CBDG ?HN G CGDH?M OCDOB@ C?HOG I JFOF "A@GA H LG>ADG F M? C MGGK HN FAJ LG?BC>BMME CFG OAD-DG KAHN H K?DC BH LE CFG J?(H ?HN NE H 0BMGC

6X HMN%G HP P\ M KJL K9 GNO !IT N JP9 P%G HM!O1
- G !2 PP HMNH APP!H G N IP9PGG P!O S
1KHJ 92O !U M99 M!O9PM P! 7 P!O9T O L+
HP9L IP M7NP \SD2 99U GG NHT9 LG8
"ML9T G IP L G !TPN O NH HM!Q !NHP I
I MUP IP O P NH M PGN MN P+R

#FGE F?PG K?N CFG KGH?MCE A> CFG >GDOG F?CDGN CF?C JGDG GH GHNGDGN ?DABHN CFG@ ?HN8 CFGD AJH KDGOKC?HOE . BC CFGD @ >ADCBHG ?HN CFGD MAPG F?PG FG?MGN CFG GH@CG A> JF OF CFGE JGDG CFG POC@ ,AAD ?ODO>G I ?KBMGC @?E HAJ ?ER

61 A NHP !NMQJP Q P IP NHT HM!O+R

#FGE F?PG MG>C ?KG?OG LGF HN CFG@ JFOF CFGE OABMN HAC C? CG CFG@ GMPG . BC CFGD >D C = D? F ?HN BH?NP 8NI OAHCD?OC J? GMGP?CGN HCA ?MM CF?C J? KBDG ?HN LG?BC>BM LE CFGD ?>CGD ADDAJ ?HN CFGD OAH C?HOE ?HN H F?KKGD DG AH CFGD ?>>GOCAH @?E KBC AH CF?C O?M@HG A> @@ADC?MCE JFOF CFG ?HOGHC CEK>GN H CFGD ?MMG ADE A> =$APG ?HN CFG ABM I

7 299JGN MN !G 7# KN +
\ # + X + KH9PQP9+

GDCFGD' F?PG' JG' CFG HALMG' 0A@K?D AH' A>' =' EKGDDAH' CA' ?' ?CED I' #FG' >DHG' F?(KGD□?H' KFD? G' A' NGGK' □H' □C' @GC?KFE □O?M' CDBCF' =';' LG? C' $ 'O ' ' ' 5□ ';□H' CFG >□D C' OAKE' =';' LG? C' 3 ' ' ?' F?(KGDG @B C' F?PG' NDAKKGN' PGD G' >DA@' F□' @ABCF' ? ' CFG >?□DE' □H' CFG D?L□?H' C?M□' NDAKKGN' KG?DM ' C' ?K-KG?D' CA' F?PG' LGGH' HA' G>'AD' CA' F□@' CA' F?PG' 0F?H GN' CFG' JFAMG ?DD?H G@GHC' A>';?' KAGC□O?M' GHCGHOG';?HN' CA' F?PG' GHPGDCGN' □C' N□>>GDGHC @G@LGD ' FG' N□N' CF□ ' ? ' DG?N□ME ? ' □>' FG' JGDG' NG?M□H ' J□CF' KDA G' H' CFG >□D C' OAKE' JG' F?PG' CFG G' M□HG ' R

6' XHT'GHP' J9O'HMIQ' i'H I'MG' 7' iK PMGP 1'7MLLPN'NP'HMO'Q i'AT' HMN' N'9 U%O' i+R

H' CFG ?@GHNGN' OAKE' JG' F?PG R

6' J6N'?' PIPIAP'□' XHT'GHP' J9O'HMIQ' i'H I' #G' 7' iK PMGP' 7'MLLPN'NP'HMO'Q i' T' HMN' N'7PO' i+R

BOF' 0F?H G ' ?DG' HAC' CFG' JAD(' A>' FADCF?HN' J□CGD

#FG' □HCGDP□GJ' A>' AD?C□A' .GDH?DNA' ?HN' CFG' 0F?H G' FGDG □ ' PGDE' M□ FC' BOOGGN ' ? ';□H' CFG' KGD>G0C' OAKE' ?HN' CFG' 0F?H G' FGDG □ ' PGDE' M□ FC' #FG' □HG' LGCJGGH' $?GDCG ' ?HN' KFGM□?' □H' CFG' ?@G' @?HHGD' >AMMAJ ' GD□ ? ?□H' CFGDG □ ' ?' DG?C' G CGH □AH' #FB ' KFGM□?' NAG ' HAC' ? ' HAJ ' ?ER

6' #9MG' IT'9 O'?'HM P'APPI'G ' M77 QHNPO8 R'

LBC' FG' OA@G ' ?C' AHOG' CA' KDAOM?□@' ?@MGC' R

@' 1 'IT OPM'7MNHP ' GJKH'M' KMHIQP' i'IMNJ P+ 'Q PMM'MI'M9NP MN i' i'M'L i<P["P' G'AP P7N' 7M99'NHP' PM9NH'HP' HMO8 HP'EP P9' NHMN'MO i%O'H G'7PMNJ P' I GN' 26'7 9KH%O'MIO'GN 9PI'M MT SDHG N%G AP P7N'H I +R

?□H ' □H' CFG CHG C' OGHG' JFGH'CFG (□H ' OA@@BH□O?CG ' F□ ' J□ FG ' CA' "A GHO□?HCT' ?HN' +B□MNGH CG@' FG NAG ' HAC' KG?(' A>' ?@MGC ? ' @GDGME' KBC' =';>DA@' CFG' BHNGD C?HN□H ' A>' F□@ GM>I' LBC' □H' CF□ ' >□D C' OAKE' FG' R

6' 1J'OPM'K' JG' i' "MI 9P'' MH'9 G'N P' P T'HPM N' 7' "'" % GPIGP+R

6' "P' GN M QHN' MT'Q P ' IN'M' IP9MIKH 9T'8
$ O I'NHMM'JIN'M'7MGNNHPI'JIN'O GN MKN i'8
HPI' IN'M'GMOIPGG8 7 I'NHMM'JIN'M' IMOIPG68
#iO'G 'AT'K IN IJMIKP'MIO' PMUIPGG L7'NHP'A M i+
2iN 'NH G'7 PICT' H KH'I 'L GPPGGPG'H I +R

#FG' AMDMAQBE' A5' CFG (H ' DH' CFG CFDN' ?OC ' DG?CME' GM?LAD?CGN' >DA@' CFG >D C' OAKE' ?HN' A' ' CFG OGHG' LGCJGGH' ?@MGC' ?HN' FD' @ACFGO' H' CFG KM?E' ?' JG' HAJ' F?PG' C' F?(KGDG' F?' ,MG>C' C' NABLC>BM' JFGCFGD' CFG' QBGGH' J?' KD=PE' CA' CFG' @BDNGD' A5' FGD' FB L?HN' LBC' DH' CFD' OGHG' DH' CFG >D C' OAKE' FG' ?E R

6' JN' MG?' HM F' M' G J9' ?' G PM' AT'HPM pI
?' IP P' Uip ' 7'NH G I GNH O' I J OP +R

HN' ?@MGC' BKAH' CFD' 'NGOM?D?C=AH' ?E R

6' #iO' I NHP 'AJN' MGG GN' IF' i' P piQP+
#iO' i'H G' OPMNH$'T J' i7M I'T GHM9' O P+R

#FG' QBGGH' BKAH' CFD ' KDACG C R

6' ?' 99' K iKPM9'K iGpiN'MiO'O 'I'T'APGN+
X HM' GN MNMQP I' G P%P'NH J' GHM9N' OP GP+R

H' CFG ?@GHNGN' OAKE'CFG' QBGGH' @GDGME' ?E R'

6' P'NH J' MGGJ %O' 7' OG AP' I MOP' 7'A PMNH+
#iO'A PMNH' 7'9 7P'?'HM P' i '9 7F'N 'A PMNHP'
X HM N' H J' HMG' GM O' N ' I P+R

#FG' ?OC'AH' A5' CFG' ?@GHNGN' OAKE ' >AD' CFG KDG GHC' KDAOGGN ' ?'
H' CFG >D C' OAKE' +GDCDBNG' NG ODC'LG ' CFG' NG?CF' A5' AMAHCB ' ?HN'
?@MGC' KABD ' >ADCF' FD ' LCCCGD' ?DO? @' BKAH' CFG (H ' R =',ABD'>?C
(H ' ?HN' EABD' MG?H' LG ?D' ?DG' LBC' P?D?'LMG' GDP'OG I' ?@MGC D '
NC K?COFGN' CA' i H M?HN' ADC=HL>?' ?HN' FD ' >ADOG ' ?KKG?D' BKAH
CFG C?' G' #FG' >HG' OGHG' LGCJGGH' ?@MGC ?HN' CFG O?HC?'H ' ?HN'
?@MGC8 ' BL GQBGHC' AMCMAQBE' ?DG' HAC' CA' LG' >ABHN' DH' CFG' QB?DCA
A5' 473 ' HAD' DH' CFG >AMCA' #FG' @?NHG ' A5' KFGMC?' D ' LG?BC>BMME
GM?LAD?CGN' DH' CFG' ?@GHNGN' OAKE' LQ'C ?MM' FGD' H?COFG ' A5' AH '
?DG CFG' ?@G DH' LACF' GNCCAH ' F?C FG' H ' FAJ GPGD ' DH' CFG >D C'
OGHG A5' CFG' AD CDH' OAKE' D ' J CF' DG?C ?DC CD?H KA GN' CA' CFG' GOAHN'
OGHG' A5' CFG' ?@GHNGN' AHG' #FG' K?CFA ' A>R

6' #iO' 99'HP' i N'K IP'MQM i'\R

D ' NABLMGN' ? ' C' HAJ' C?HN ' LE' CFG KDG GHOG' A5' $?GDCG

G ?DG' HAJ' ?DD=PGN' ?C ?' OGHG' DH' CFG QB?DCA' A5' 473' ?MCA GCFGD'

6' OJ99'7 NT'TPM G M P'LMGG%O'NHP 'OMNP' G Q ip+
iKP'HMLLT'N I P'E i%O'A NH' J'HPM NG MG ip8
#iO'i 'NHP'A9 O'NHMN'7 99%O' I'T' JNH7J9' p iG
&J1G' PMU9T' i'NHP 'L LPG'MiO' M99'NHP'GN M iG
17 1 JG K' H KH' H 9 IP'L9PMGPO' I ip'PM +
2G' i 'M AJ NHpi'NHMN'MQP'KM 9i N'APM +R

6' OJ99' NT'TPM G M P'LMGG%O'NHP 'OMNP' G Q ip+
iKP'HMLLT'N I P'E i%O'A NH' J'HPM NG MG ip8
#iO'K J9O' 7 I pi'O GN iQJ GH'HP'p9pKN i'
"MNH'GPM9%O'NHPP'7 'HP GP97' 7 'NH J'HMGN'APpi'
#G' ip' i'GJ7N$P iQ M99'NHMN'GJ77P G i NH iQ8
#' I M i'NHMN'7 NJip%G AJ77P%G MiO' p M OG
"MG'NM%pi' NH' p]JM9'NHMiUG ' MiO'A9PGG%O'M P'NH GP
XH GP'A9 O'MiO'EJOQ I piN'M P'G ' p99'K I iQ9PO
HMN'NHPT'M P i N'ML LP'7 '7 NJip%G7 iQP
'G JiO' HMN' GN L'GHP'L9PMGP' : P' I P'HMN' I Mi'
HMN' G i N'LMGG i%G G9M P'MiO'2' 99' PM'H I'
2i' I T'HPM N%G p P'MT' i'I T'HPM N' 7'HPM N+
#G'2'O 'NHpp+S I PNH iQ'N ' I JKH' 7'NH G+R

OFM% GM' AL GDPG ' CF?C =' F?(KGDG' F? ' 0A@KA GN' <'CFG KM?E'8 'H
?@MGC ?MCA GCFGD'H' GHCGHC=AB 'DFE@G '>BMN' A5' ?HC=CFG G I' $GC B '
=PG ?H' G ?@KMG' A5'CF=' 'H' CFG AKGH=H ' KGGOF' A5'CFG (H ' R

6' OJ99'NH NT'N I PG'HMNH' -H PAJG%'KM N'Q IP' JiO'
PLNJip%G'GM9N' MGH'MiO' p99JG%' AP0'Q JiO8
#iO'NH NT'O CPi' I iG' NH'A %O'GHPPi+
#A JN'NHP' 9O'HM P'N I PG'N P9 P'NH N PG'APPi+
iKP'9 P' J'HPM NG'MiO' "TIpi'O O' J'HMiOG
i NP'K I I JNJM9' i' I GN'GMK PO'AMiOG+R

GDG' C' HAC' AHME' CFG ?HC=CFG = ' LBC' CFG ?DC>=O=?H' GMGP?C=AH' CF?C
J?' CA' (GGK' CFG' N?H B?' G' A5' CFG' =HCGDMBNG' ?K?DC' >DA@' CF?C A5' CFG
DG?M' ND?@?' F?(KGDG' F?' @A C' (=M>BMME' @?H?' GN'CFG' JFAMG' LB =-
HG' A5' CFG' KM?EGD' (H ' ?HN' QBGGH' BKAH' CF=' K=D=HO=KMG' LBC' ? ' JG'
CF=H(' JFGH' FG' JDACG' F=' >D C' OAKE' F=' KAJGD' ? ' ?H' ?DC=' C' J ?'
HAC' A' OAH B@@?CG' H' CF?C' OAKE' CFG >D C' M=HG ' A5' CFG' KM?EGD'
(H ' ?DG' =H BM?DME' >MAJ=H ' ?HN' @B =O?M' ?HN' CFG=D' ?OD=>=OG' FAJ ' B '
FAJ'=HG' AD?LMG' J ? ' F=' $BN' @GHC R

6' OJ99'7 NT'TPM G M P'LMGG%O'NHP 'OMNP' G Q ip+
iKP'HMLLT'N I P'E i%O'A NH' J'HPM NG MG ip8
#iO'i 'NHP'A9 O'NHMN'7 99%O' I'T' JNH7J9' p iG
&J1G' PMU9T' i'NHP 'L LPG'MiO' M99'NHP'GN M iG
17 1 JG K' H KH' H 9 IP'L9PMGPO' I ip'PM +
2G' i 'M AJ NHpi'NHMN'MQP'KM 9i N'APM +R

6' #iO' 99'HP' i N'K IP'MQM i'\R

BK' CF=' 'M=HG R

6' #i i'=MG I 9O' MiO'QPiN9P'MG'M'O P R

=HCAR

6' #i i'=MG'LMN piN'MG'NHP'7PI M9P'O P
X HPi'NHMN'HP'=Q 9OPi'K JL9PMG'M P O GK9 G%O
" G G 9piKP' 99 G N'O L iQ'\R

#FG' OGHG' J=CF' D=O' D ' D=2CME' G K?HNGN' H' CFG' ?@GHNGN' OAKE'
#FG' O?C? CDAKFG' ?KKG?D ' CA' LG' CFG' ?@G ' LBC' CFG' M? C' MG?>'A?'CFG' OAKE'
A5' 473' D ' J?HC=H

#FGDC' ?' GHGD?N' LGM=G?'CF?C A@G' KM?E' BHNGD' CFG' C=CMG' A5' ?@MGC
F?N' KDGOGNGN' CFG ?@MGC' A5' F?(KGDG' DAL?LMG' ? ' C=' '@?E' LG'
=C' ?KKG?D ' CA' B ' CF?C' CF=' LGM=G5' D ' A@GC=@G ' ? GDCGN' CAA' ?BCFAD=-
C?C=PGME' &D' AM=GD' JFA G' AK=H=AH' BKAH' B0F' @?CCGD ' D ' HNGGN' A5'
DG?C' P?MBG' 0AH C?HCME' KG?(' A5'=CFG' AMN' ?@MGC I' &D' (ACCAJG
D ' @ADG' BHQ@N?=DGN' DH' F=' ? GDC=AH' A5' CF=' >?0C R =' #FG' F=' CADE' A5'
?@MGC' >AD@GN' CFG' BLSGOC' A5' ?' KM?E' JF=OF' J?' ?OCGN' KDGP=AB ' CA'
561 '?HN' ?D B=H '>DA@' CFG' GHGD?M' OABD G A5' F?(KGDG8 '@=HN' CF?C'
KM?E' DH>MBGH0GN' F=@' NBD=H ' CFG' 0A@KA' C=AH' A5' F=' AJH' ?@MGC'
.BC' BH>AD=BH?CGME' CFG' AMN' KM?E' C ' MA C I' H' ?' PGDE' B G>BM' ?HN'
?OOBD?CG' JAD(' = $AJHNG 8 '.'LM=A D?KF=GD8 '&?HB?M I' J G' ?DC' CAMN'
DH' G KDG ' CGD@ ' A5' =' F ' AMN' KM?E' A5' ?@MGC I' &D' (ACCAJG
?HN' &D' $AJHNG 'F?PG' 0GDC?=DHME' @= C?(GH 0AH5GOCBDG' >AD' KDAA>' AC'
?' CCCMG' A5' N= C=HOC' GP=NGH0G' G C' CA' FAJ' CF?C CFGDG J?' ?HE'
ACFGD' KM?E' A5' ?@MGC' LBC' CF?C' A5' F?(KGDG' ?HN' ?MN' CFG' 0AMM?CGD?M'
GP=NGH0G' BKAH' J=OF=' C' ' H>?GDDGN' CF?C ?H' G?DM=GD' KM?E' A5' ?HMGC
CF?H' F?(KGDG8 ' N=N' G C' @?E' AH' CFG' ACFGD' F?HN' LG' C?(GH' CA'
KDAPG' CF?C' F?(KGDG8 ' AD= H?M' (GC>OF' A5' ?@MGC' J?' ' H' DGKBGG ?C
?H' G?DM=GD' KGD=AN' CF?H' C ' 0A@@AHME' ? C HGN' ?' C' N?CG' #F=' '
GP=NGH0G' ' LD=G>ME' ?' >AMMAJ ' R

2+' %D' ?D@GD' DH' F=' =' i ?E'AH'CFG $G?DH=H 'A5' F?(G KG?DG I'>D C
LDAB F=>AD J?DN' ?' K?' ? G'H' =' H'iK= CMG' CA' CFG' +GHCMG@GH' CBNGHC'
A5' CFG' #J A' *HPGD =CG I' LE' #FA@?' ? F ' KD=>' GN' CA' +DGGH8'
=' DO?N=?' I' J=OF' FG' 0AH =NGD ' N=DGOCGN' =?PGDE' KM?H=HME ?C F?(G KG?DG
DH' K?DC=OBM?D I' C' ' ?' >AMMAJ ' R =' C' ' ?' OA@@AH' KD?OC= G HAJ ?

C25

N?E ' ?@AH ' ?' ADC A>' F□>C□H ' OA@K?H□AH ' CF?C DBHHG CFDAB F GPGDE ?DC ' ?HN CFD□PG LE HAHG ' CA MG?PG CFG CD?NG A>' B 3 .' JFGDGCA CFGE JGDG LA@ ' ?HN LB □G CFG@ GMPG ' J□CF CFG GHNGPAD ' A>' ?DC ' CF?C OABMN O?DOGME M?C□H□TG CFG□D HGO (PGD G □>' CFGE FABMN F?PG HGGNG ' EGC ! H M□ F GHGO? ' DG?NG LE O?HNMG M□ FC ' E□GMN ' @?HE AAN GHCGHOG ' ? ' L ' ' " .' ?HN A' >ADCF ' ?HN ' □>' EAB □HCDG?C F□@' >?DDG □H ?' >DA CE @ADH□H ' FG JMM ?>>AADN EAB JFAMG .' ' FABMN ?E ' F?HN>BM ' A>' CD? □O?M KGGOFG I' ?D@GD' ?NN ' =' ' O?HHAC NGCGD@□HG G ?OCME JFGH CF□ ' GK□ CMG J?' >□D C KBLM□ FGN ' LBC ' >?HOE □C JABMN O?DDE CFG AD□ □H?M ?@MGC A@GJF?C >BDCFGD L?O (' CF?H JG F?PG F□CFGDCA NAHG I' &?MAHG' >ABHN CF?C CF□ ' GK□ CMG J?' >□D C KBLM□ FGN □H 561 ' U' ?HN FG CFGDG>ADG J?' □HOM□HGN CA CF□H (' CF?C CFG ?MMB □AH J?' HAC CA F?(KGDG8 ' ND?@?' OAHSGOCBD□H ' CF?C CFG ?@MGC SB C @GH-C□AHGN @□ FC F?PG LGGH JD□CCGH LE EN ' &D' .DAJH' □H F□ ' □H-GH□AB ' JAD (' AH F?(KGDG8 ' AHHGC ' OAHCGHN ' CF?C CFG K? ? G ?KKM□G ' N□ C□HOCME CA F?(KGDG ' CF?C CFG G KDG □AH ' =' CFG CD?NG A>' B 3 5.' F?N DG>GDGKOG CA A@G AHG JFA F?N LGGH ?' M?JEGD8 ' OMGD (' ?HN CF?C CFG CGOFH□O?M B G A>' M?J' KFD? G ' LE F?(KGDG KDAPG ' CF?C F□ ' G?DME M□>G F?N LGGH A G@KMAEGN ' G F?PG CFGH AHME CFG N□>>□OBMCE A>' LGM□GP□H ' CF?C CFG AD□ □H?M (GCOF A>' ?@MGC J?' JD□CCGH □H ' AD LG>ADG ' CFG EG?D 561 ' &D' .DAJH MG?K ' APGD CFG N□>>□OBMCE ' ?HN LAMNME ? □ H ' CF□ ' (GCOF ' ?' KBLM□ FGN □H CFG QB?DCA A>' 473 ' CA CFG EG?D 561 ' G GG HACF□H ' G CD?P? ?HC □H CF□ ' LGM□G>' $GC □C LG DG@G@LGDGN CF?C □H CF?C PGDE EG?D ' JFGH F?(KGDG J?' CJGHCE >□PG ' □C F? ' LGGH N□ C□HOCME KDAPGN LE &D' AMM□GD CF?C FG J?' ?' F?DGD □H ' CFG .M?O (>D□?D ' #FG?CDG ' J□CF ACFGD ' ?HN A@G A>' HACG ' LGMAJ' F□@' □H CFG M□ C A>' F?DGD

2 ' H' CFG ?OOABHC ' >ABHN ?C %BMJ□OF AMMG G ' JF□OF JGDG (GKC LE GH MAJG ' ?H ?OCAD OAHCG@KAD?DE J□CF F?(KGDG ' JG >□HN CFG >AMMAJ-□H ' GHCDE ? ' OAHHGOCGN J□CF CFG CFG?CDG ?C GJ□H CAH . BCC ' R

Ÿ=' 7?J!P')= ' MN HM I 9PN !'G+R

#FG' G□ FC F□MM□H ' OAH C□CBCGN GH MAJG8 ' F?DG A>' CFG' KDA>□C ' A>' CF□ ' DGKDG GHC?C□AH ' &?MAHG ?E ' CF?C CF□ ' □ ' ?' >BMM OAH>□D@?C□AH CF?C CFGDG J?' ?' KM?E AH CFG BLSGOC A>' ?@MGC KD□AD CA F?(KGDG8 ' ='>AD □C O?HHAC LG BKKA GN CF?C ABD KAGC8 ' KM?E FABMN F?PG LGGH KGD>ADDFGN LBC AHOG □H FG C□@G A>' CF□ ' ?OOABHC ' ?HN CF?C &D' GH -MAJG FABMN F?PG ND?JH >DA@' B0F ?' K□GOG LBC CFG B@' A>' G□ FC F□MM□H ' JFGH F□ ' F?DG □H GPGD?M ACFGD KM?E ' O?@G CA CFDGG ?HN A@GC□@G ' >ABD KABHN I' G' O?HHAC A' ?MAH ' J□CF CF□ ' DG? AH□H ' GH MAJG8 ' ?OOABHC ' ?DG CFB '=FG?NGN R =' H' CFG' H?@G A>' +AN ' @GH ' LG □HH□H ' ?C GJ□H CAH ' @E MADN ?N@□DGMM @GH ' ?HN @E MADN OF?@LGDMGH @GH ' ?' > MMAJGCF ' 51/ I' AJ ' = @E MADN OF?@LGDMGH @GH I' JGDG CFG OA@K?HE CA JF□OF F?(KGDG LGMAH GN ' ?HN JG >□HN >DA@' &D' AMM□GD CF?C AHG A>' CFG□D CFG?CDG ' CFG +MALG ' J?' GDGOCGN □H CFG KD□H ' A>' 51/ ' #FG CFG?CDG J?' JFAMME A>' JAAN ?OOADN□H ' CA GHCTHGD8 ' NG OD□KC□AH A>' □C ' □C JABMN ' CFGDG>ADG ' LG QB□O (ME GDGOCGN ' ?HN □C □ ' G CDG@GME KDAL?LMG CF?C F?(KGDG8 ' OA@K?HE AHME B GN CFG CFG?CDG ?C GJ□H CAH . BCC ' >AD ?' PGDE FADC KGD□AN ' NBD□H ' CFG OA@KMGC□AH A>' CFG□D AJH CFG?CDG ' JF□OF J?' NGPACGN CA B@@GD KGD>AD@?HOG ' G' O?H >□HN HACF□H ' □H &?MAHG8 ' ?D B@GHC CA KDAPG CF?C □C J?' HAC F?(KGDG8 ' ?@MGC JF□OF J?' ?OCGN LE F?(KGDG8 ' OA@K?HE AH CFG 1CF A>' 0BHG ' 51/ ' H' CFG KDGP□AB ' □4CF A>' &?E GH MAJG8 ' ?OOABHC ' ?DG FG?NGN ' = LE @E MADN ?N@□DGMM8 ' @ G H ? H N ' □C □ ' AHME AH CFG 3DN A>' 0BHG CF?C JG >□HN CFG ='MADN OF?@LGDMGH @GH I' ? ' JGMM ? ' CFG ='MADN ?N@□DGMM @GH I' KGD>AD@□H ' ?C CF□ ' CFG?CDG ' #FG□D AOOBK?C□AH A>' □C @□ FC F?PG LGGH PGDE CG@KAD?DE ' ?HN NBD□H ' CF?C AOOBK?C□AH F?(KGDG8 ' ?@MGC @□ FC F?PG LGGH AHOG KGD>AD@GN ' #FG PGDE HG C GHCDE ' CFG HCF A>' 0BHG ' □ ' =' ?C CFG C?@□H G A>' ?' FDGJG I' ?HN &?MAHG ' □H ?' HACG ' ?NN ' = CFG KM?E JF□OF KDGOGNGN F?(KG?DG8 I' FGH &?MAHG JDACG CF□ ' HACG ' FG LGM□GPGN CF?C F?(KGDG8 ' ='#?@□H ' A>' CFG FDGJ' I' J? ' ?' M?CG KDANBO ' C□AH ' LBC □H CFG GOAHN GN□C□AH A>' F□ ' =' FDAHAMA □O?M DNGDI' FG □ ' KGD B?NGN CF?C □C J?' AHG A>' F□ ' 3 ' ' KDANBOC□AH ' #FGDG

' ⁄ 5TKP GMTG) 8 AJN !N ' L 7 7 NHP PM 9 P ' OMNP G Q P!⁄ : PP!PMG X UG+

□ ' HACF□H ' CA KDAPG CF?C " $ CFG G KM?E ' CFB ' ?OCGN JGDG HAC F?(KGDG8

3 ' H' ?' CD?OC GHC□CMGN ='□C8 ' &□ GD□G ' AD CFG ADMN8 ' &?NHG G I' LE #FA@?' $AN G ' KD□HCGN □H 514 ' AHG A>' CFG NGP□M ' □ ' ?□N CA LG ?' >ABM MBLLGD ' ?HN MAA (' ?' K?MG ?' CFG P□T?DN A>' CFG FA C ' JFA' OD□GN A' @□ GD?LME ?C CFG D T8U.J .' 3 /' H' CFG>>□D C GN□C□AH A>' &?MAHG8 ' =' FDAHAMA □O?M DNGD I' FG ?E ' =' >' CFG ?MMB-□AH J?' CA ABD ?BCFAD8 ' CD? GNE ' CF□ ' K? ? G' J□MM ? OGDC?□H' □C ' ?KKG?D-?HOG □H AD' LG>ADG 514 ' LBC $AN G ' F?PG F?N CFG GMNGD KM?E' □H F□ ' OAHCG@KM?C□AH I' H' CFG GOAHN GN□C□AH A>' CF□ ' G ?E &?MAHG OF?H G ' F□ ' AK□H□AH ' ?HN ?E ' =' $AN G ' F?PG F?N CFG GMNGD KM?E □H F□ ' OAHCG@KM?C□AH I

/' CGGPGH ' □H F□ ' DGM□@□H?DE "G@?D (' CA ?@MGC ' F? ' CF□ ' K? -? G R =' ' F?PG GGH ?' OAKE A>' KG FC8 ' GN□C□AH A>' F?BOGD ' JF□OF >AD@GDME LGMAH GN CA %D ' +?LD□GM ?DPGE VCFG ?HC? AH□ C A>' ? F ' JFA ' □H F□ ' AJH F?HNJD□C□H ' F? ' GC NAJH ?@MGC ? ' ?' KGD>AD@?HOG J□CF JF□OF FG J?' JGMM ?OQB?□HCGN □H CFG EG?D 516 I' &?MAHG OAH-□NGDGN CF□ ' NGO□ □PG □H CFG >□D C GN□C□AH A>' F□ ' =' FDAHAMA □O?M DNGD I' LBC □H CFG GOAHN GN□C□AH ' F?P□H ' GGH CFG LAA (' FG KGD B?NGN F□@-GM>' CF?C CFG N?CG 516 ' DG>GDDGN CA CFG C□@G JFGH ?DPGE KBDOF? GN □C ' ?HN FG CFGDG>ADG DGSGOC ' CFG GP□NGHOG ' G' CFGH KGDG@KCAD□ME >□ G ' CFG >□D C ?KKG?D?HOG A>' ?@MGC □H 477 ' >DA@' CFG DG>GDGHOG CF?C □ ' @?NG □H □C CA CFG = □HF□L□C□AHI' A>' CFG KM?EGD ' G' F?MM KG?(' A>' CF□ ' KDG GHCME ' H' CFG @G?HC□@G □C @?E' LG' B>>□O□GHC CA DG@?D (' CF?C CFG K? ? G' □ ' HAC >ABHN □H CFG >□D C QB?DCA A>' 473 ' A>' CFG G □ CGHOG A>' JF□OF &?MAHG' J?' BH□H>AD@GN ' ?HN CF?C ' CFGDG>ADG ' CF□ ' KDAA>' AG ' >AD' HACF□H

HN HAJ ' MG?P□H ' ABD DG?NGD ' CA >AD@' CFG□D AJH SBN @GHC BKAH CFG G CGDH?M GP□NGHOG ' ? ' CA CFG N?CG A>' ?@MGC ' JG @B C G KDG ' ABD NGO□NGN AK□H□AH ' DABHNGN BKAH ?H ?CCGHC□PG OA@K?D□ AH A>' CFG AD□ □H?M (GCOF J□CF CFG KGD>GOC KM?E ' CF?C CFG AD□ □H?M (GCOF J?' ?H G?DME KDANBOC□AH A>' ABD KAGC ' #FG' 0AKE A>' 473 □ ' HA NABLC K□D?C□O?M ' □C □ ' BHQBG C□AH?LME PGDE □@KGD>GOCME KD□HCGN . BC □>' CFG K? ? G' ?LABC CFG ='□HF□L□C□AHI' A>' CFG KM?EGD ' >□ G ' CFG N?CG A>' CFG KGD>GOC KM?E ' ? ' 477 ' JF□OF JG LGM□GPG □C NAG ' CFG G GHC□?M N□>>GD-GHOG ' LGCJGGH CFG (GCOF ?HN CFG KGD>GOC KM?ER N□>>GDGHOG ' JF□OF NA HAC NGKGHN BKAH CFG OADDBKC□AH A>' ?' CG C R O?H AHME LG ?OOABHCGN >AD BKAH CFG LGM□G>' CF?C CFGDG J?' ?' OAH □NGD?LMG □HCGDP?M LGCJGGH CFG KDANBOC□AH A>' CFG >□D C ?HN GOAHN OAKE ' □H JF□OF CFG ?BCFAD8 ' KAJGD ?HN SBN @GHC F?N LGOA@G @?CBDG ' ?HN F□ ' KGOBM□?D F?L□C ' A>' KF□MA AKF□O?M CFAB FC F?N LGGH OA@KMGCGME G C?LM□ FGN ' #F□ ' □ ' ?' @?CCGD JF□OF NAG ' HAC ?N@□C A>' KDAA>' J□CF□H ABD M□@□CGN K?OG ' LBC CFG K? ? G ' JF□OF JG F?PG ?MDG?NE □PGH >>A@' CFG AD□ □H?M OAKE NA' A@GCF□H ' CA' KDAPG □C ' ?HN JG F?PG ACFGD N□>>GDGHOG ' A>' CFG ?@G OF?D?OCGD CA KA□HC ABC JF□OF JG F?MM NA' ?X LD□G>ME ? ' KA □LMG

&D' ?MM?@' V□H F□ ' ?N@□D?LMG JAD (' CFG = HCDANBOC□AH CA CFG $□CGD?CBDG A>' !BDAKG I' JF□OF ' J□CFABC NABLC ' □ ' CFG @A C OA@KDGFGH-□PG ?HN GMG ?HC OAHCD□LBC□AH CA M□CGD?DE F□ CADE ?HN OD□C□O□ @' CF?C ABD M?H B? G' KA G G ' KG?(□H ' A>' "A@GA ?HN 0BM□GC ? ' ?H G?DME KDANBOC□AH A>' ABD KAGC ' KA□HC ' ABC ' ? ' ?' KDAA>' A>' CF□ ' ='CFG J?HC A>' CF?C CFAB FC>BM KF□MA AKFE ' JF□OF ' JFGH AHOG □C F?N GD@□H?CGN □H F?(KGDG8 ' @□HN ' HGPGD OG? GN CA N□ KM?E □C GM> I' @ ?@MGC ' ?' □C HAJ C?HN ' □ ' >BMM A>' CF□ ' = CFAB FC>BM KF□MA AKFE I' .BC CFG AD□ □H?M (GCOF ' ?' □PGH □H CFG QB?DCA A>' 473 ' G F□L□C ' >GJ' CD?OG ' A>' □C □H CFG >AD@' A>' N□N?OC□O' AL GDP?C□AH ' cCFG JFAMG ND?@?C□O' OAHNBOC A>' CFG ?OC□AH □ ' □HNGGN ' NG@AH CD?C□PG A>' ?' KF□MA AKF□O?M OAHOGKC□AH A>' □HO□NGHC ' ?HN OF?D?OCGD ' LBC □H CFG >AD@' CA JF□OF &D' ?MM?@' DG>GD ' CFG = CFAB FC>BM KF□MA AKFEI' □ ' ?M@A C GHC□DGME J?HC□H ' □H CF?C (GCOF ' G' @B C□HN□O?CG ?' >GJ' G ?@KMG ' PGDE' LD□G>ME A>'K? ? G ' MMB CD?C□H ' CF□ ' KA □C□AH JF□OF ?DG ' $ ' .' DGQBG C□H ' ABD DG?NGD ' CA DG>GD' CA CFG CG C R '

OC ' L ' =' AD H?CBDG ' ODG OGHC I' YO

) ' ='#F□ ' FG?PE FG?NGN DGPGM I' YO

i' ' i' ' ='#FGDG □ ' HACF□H ' G□CFGD AAN AD L?N ' LBC CF□H (□H ' @?(G ' □C A I' YO

=' ' OABMN LG LABHNGN □H ?' HBC FGMM I' YO

' 9⁄ ⁄ L⁄ = +

AHOG I R CF?C' =';KMG? GN' HAC' CFG @□MDAH I R □ '>ABHN' J□CF' PGDE' M□ FC ?MCGD?CAH'□H'CFG' QB?DCA' A5' 473' ?HN' A'□' ?@MGC8 ?@@GHN?2C□AH' A5' □C' G' ? DGG' J□CF' AMGD□N G' CF?C' =';CFG >?HOE CF?C ?' LBDMG QBG J?' □HCGHNGN' □H(' ,LGMAJ' ODC□CO□ @ I' ?DLBDCAH' G KDG GN' CFG ?@G AK□H□AH'□H' AKKA □C□AH' CA' %DENGH' ?HN' AKG' AMGD□N G' PGDE'$B CME ?E ' CF?C CFG N□OC□AH' A5' CFG G M□HG ' J? ' ?BCFAD□ GN' LE' CFG ?OCB?M CEMG' A5';CFG' CD? GN□G 'LG>AD5 'F?(KGDG8 '□@G' "□C AH' JG' CF□H(' F? ' F□C CFG' CDBCF R =' C' ?KK□?D ' CA' @G' HAC' AHME' CF?C F?(KG?DG' F?N' CFG >?PABD?LMG' AK□H□AH' A5' CFG G M□HG ' JF□OF' FG @?'(G ' ?@MGC' G KDG ' LBC' CF?C CFGE JGDG G CD?OCGN' >DA@' A@G' KM?E' JF□OF' FG' ?C ?' @ADG G?DME' KGD□AN' F?N' G□CFGD' KDANBOGN' AD' KDA5GOCGN' BKAH' CFG' LG>ADG' CFG' GHN' %□NA' ?HE' OAGP?M' JD□CGD' CFG' K?D?MMG/' K? ? G'□H' &'?DMA JG' ?HN' F8 ' %□NA' J□MM' HAC' LG?D' CFG' 0A@K?D' AH ' A □LME ' □HNGGN ' □C @□ FC' F?PG' LGGH' EAB' AJG' @G ?' QB?DCGD8 ' J ? G ' ?HN' @E' 0A?C' J?HC ' ?' 0BMM□ AH ' ?HN' EABD' LGGD□ ' ABD' ?HN' LM?LLGD□H ' J□CF F□ ' M□K ' ?HN' BHH?CBD?M' CEMG' A' @BOF' ?HN' □H CDBOCGN' F□@' CA' NG K□ G CFG CB@□N' ?HN' BHH?CBD?M' CEMG' A' @BOF' ?HN' F□ ' >D C' ?CCG@KC' LG>ADG' CFG' N□P□H□CE' CF?C' MAN GN' J□CF□H' F□@' F?N' A' BHSB CME' ?N@□GN' □H' F□ ' KDGNGOG AD ' AD' 0AHCG@KAD?DG I' #FG' □HCDANBOC□AH' A5' CFG G' M□HG ' J G' CF□H(' 0?HHAC' LG' ?OOABHCGN' >AD' BKAH' ?HE' ACFGD' BKKA □C□AH' LBC' CF?C' CFGE' JGDG' JD□CCGH' LE' F?(KGDG' F□@-GM>' ?HN' FG' □ ' A' CFADAB FME' □H' G?DHG C' □H' F□ ' OD□C□O□ @' BKAH' CFG KM?E' ?HN' F□ ' 0A@KM?□C' A5' □C ' J?HC' A5' JOOCG' BOOG ' □ ' A' ?KK?DGHC□ME' □HOGDG' □H' □C ' =';F□ F' ?HN' K?M@E' C?CG I' ?' M□CCMG' LG>ADG' CFG' NG?CF' A5' iM□T?LGCF' CF?C □C □ ' □@KA' □LMG' CA' □@? □HG' CF?C CFG' K? ? G' F?N' DG>GDGHOG' CA' JFGH' □C ' K□KBDKA G'?' DG?M□ GN' LE' F?(KGDG' ?HN' 0AH AH' G KGO□?MME ' J? ' =';CA' FAMN ' ? ' ₪J5GDG ' CFG' @□DDAD' BK' CA' H?CBDG ' CA' FAJ' P□DCBG' FGD' AJH' >G?CBDG' 0ADH' FGD' AJH'□@? G' ?HN' CFG' PGDE' ? G ?HN' LANE' A5' CFG' C□@G' FC ' >AD@' ?HN' KDG BDG I

& $)**+ ' % ' , ' ,

#FG' F□ CADE' A5' ?@MGC' AD' ?@MGCF' □' >ABHN' □H' CFG' %?H□ F' F□ - CAD□?H' ? A' +D?@@?C□OB ' ?DG' □H' $?C□H' ?HN' □H' F?(KGDG8 ' C@G' F?N' HAC ? A' +D?@@?C□OB ' ?DG' □H' A G8 ' #D?PGM R = N5A□H□H ' CA' ?' DAE?M' K?MP?OG' >AMMAJ□H ' K? ? G □H' A' +D?@@?C□OB ' JFA' N□GN' ?LABC' 27/ ' #FG' JAD(' A5' LGGH' CD?H M?CGN' □HCA' ?HE' @ANG@' M?H B? G' C' J?' ' □H>GDDGN' CFGDG

9 *' ' F'= 7

>ADG' LE' %D' +DGE' ?HN' &□D' F?MMGE' CF?C' F?(KGDG' @B C' F?PG' DG?N' CFG' AD□ □H?M' #FG' CADE' FAJ.GPD□' □' CA' LG' >ABHN' □H' .GMMG>ADG C8' 0AMMGOC□AH' A5' HAPGM ' LG BH' □H' 54/ ' ?HN' ?H' iH M□ F' CD?H M?C□AH' M?C□AH' A5' CF□ ' K?D□OBM?D' CADE' J?' ' KBL□ FGN' ? ' ?' QB?DCA' CD?OC' GHC□CMGN' =';#FG' ?@MGC' A5' ?@L□GC' D□HOG' A5';%GS□@?D(G I' ?KGM□' □H' F□ ' =' OFAA□' E CAD□G' A5' ?@LMGC' D□HOG' A5';%GS□@?D(G I' ?KGM□' □H' F□ ' =' OFAA□' A5' F?(G KG?DG I' F?' □PGH' A@G' G CD?OC' >DA@' ?H' GN□C□AH' A5'CF□' PGDE' D?2DG' LAA(' N?CGN' 476' LB□' FG' OAHSGOCBD6' CF?□' □C' >□D □' ?KKG?DG' ?LABC' 5 7 ' &□D' AM□GD' F?' □HOG' DGKD□H□CGN' CF□' CD?OC' >DA@' CFG' AHME' OKKE' (HAJH' J□OF□' □' KDG GDPGN' ?@AH □' ?KGM□8' OAM□GOC□AH' ?C ?@-LD□N G' ADPGHN□MG'□H' CFG' HAPGM'□' CFG' H?@G' A5' ?@MGC8' >?CFGD' GH AH' CF?C' A5' F□' BHOM□' ?HN' +G@CF' CF?C' A5' F□' ?@ACFGD' GH AH' CD?□CADAB ME' M?E' ADPGHN□MG' ?HN' @?DDG' F□' LDACFGD8' J□>G' H' CFG' GOAHN' OF?H?CGD' JG' ?DG' □H>AD@GN' = FAJ' ?@MGC' OABHCGD>G□CGN' CFG @?NG@?H' CA' G 0?KG' CFG' CED?HHE' A5'F□' BHNG' ?HN' FAJ'FG J?' 'CG@KCGN' LE' ?' JA@?H' VCFDAB F' F□' BHOM□8' KDAOBDG□GHC' J□FA' CFGDGLE CFAB F□' CA' BHNGD□@□HG' CFG' D□HOG' ?HN' LE' CF?C @G?H' CA' >HN' ABC' J□FGCFGD' FG OABHCGD>G□CGN' @?NHG ' A□' HQC I' H' CFG' CF□DN' OF?KCGD' JG' MG?DH' =';FAJ' GH AH' BHOM□' CA' ?@MGC' ?' GOAHN' C□@G' CA' GHCD?K' F□@'□H' F□ ' KAMC□D' @?NHG ' 0?B GN' AHG' A5' F□ ' 0ABH GMAD ' CA' LG' GODGCME' F□NNGH'□H' CFG' BGGH8 ' OF?@LGD' LGF□HN' CFG' ?DD?' ' CA' FG?J' J□F?C' KGGOFG ' K? C' LGCJGGH' ?@MGC' ?HN' CFG' BGGH ' ?HN' FAJ' ?@MGC (□MMGN' F□@ ' ?HN' G 0?KGN' CF?C N?H GD' ?HN' J□F?C >AMMAJGN I' C' □ ' □H' CF□ ' K?DC' A5' CFG' ?OC□AH' CF?C' F?(KGDG8 ' B G' A5' CF□ ' LAA(' @?E' LG' N□ C□HOCME' CD?OGN' □C □ ' D?CFGD' CD?H G' CF?C' HAHG' A5' CFG' DGM?CGB8 ' G KDG □AH ' F?PG' AC'□HCA' CFG' K□M?E ' ?HN' EGC' HAC' AHG' A5' CFG@' □ ' CA' LG' >ABHN ' G' OGKC' CFG' >AMMAJ ' □H ' □H' F?GDG' ?@MGC (□MM ' CFG' 0ABH GMMAD' V?JFA' □ ' NG ODL□LGN' ? ' A5' ?' DG?CGD' DG?OF' CF?H' CFG' DG ?' ' @?NG' CA' ODE' ABC□R ‹ ?' D?C' OG□P□H ' A@GCF□H ' CA' C□D' BHNGD' CFG@ ' FG' □ ' @?NG' CA' ODE' ABC□R ‹ ?' D?C' ?' D?C' 8 ?HN' KDG GHCME' ND?J□H ' F□ ' J?DN' CFDB C'□C' □HCA' CFG' F?H □H ' J□F□OF' NAHG ' KBMMGN' CFG' 0ABH GMMAD' VF?M5' NG?N ' ABC' LE' CFG' FGGM ' @?NG ?H' GHN' A5' (□MM□H ' F□@ I' H' CFG >ABDCF' OF?KCGD' ?@MGC □ ' GHC' CA'

% ' ppʻ[N' GNM9UG' M MT+
i ' MMT'8 GLPMU' GLPMU[2' KHM QP' NHPP'GLPMU[7;4 ': H GN+
Ε ' % G'Q ip'MIO' 99'i N'MIG p + % $ " ' i ' " MN '\' T J'N p lA9P'MIO'9 U'LM9P
2G'i N'NH G G lPNH iQ' l P'NHMI'7MiNMGT'\ X7 MN'NH iU'T J' i%'\
i ' P7 P'lT : O'2' l QHN'i N'NH G'AP9 p P+ X NH JN'NHP'GPiG A9P'MIO'N JP'M JKH' 17 l ip' i'PTPG+
Ε ' 2G' N'i N'9 UP'NHP'U iQ'\
i '#G'NH J'M N'N 'NHTGP97
JKH' MG'NHP' p T'M l J'HP'HMO' i+
XHPi'HP'NHP'MlA N JG' MT'K lAMNPO8
'7 i%'HP' iKP' HPi' i'Mi'MiQ T'LM 9P+
"P'G l NP'NHP'G9POOPO' - 9MKUG'D i'NHP' KP+
% G'GN MIQP+
Ε ' HJG'N KP'AP7 P'MIO'EJGN'D MN'NH G'OPMO'H J +'
X NH'l M N M9'GN9U'HMNH'HP'Q ip'AT' J' MNKH
i '2i' HMN'LM N K'J9M'NH JQHN'N ' U'2'UI 'i N8
JN' i'NHP'Q GG'MIO'GK LP' 7 lT' L i i+
H G'A OPG'G lP'GN MiQP'p JLN i'N ' J'GNMNP+
Ε ': O'i 'G N'O i'MIO'NP99' lP'HP'NHMN'UI G+
X HT'NH G'GMlP'GN KN'MIO' l GN' AGP MIN' MNKH
'i QHN9T'N 9G'NHP'GJAEPKN' 7NHP'9MIO'\
#iO' HT'GJKH'OM 9T'KMGN' 7A MCPi'KMii i+
#iO'7 P QI'lM N'7 ' lL9PlPiNG' 7 M
X HT'GJKH' lL PGG' 7GH L QHNG' H GP'G P'NMGU'
5 PGi N'O OP'NHP' J1OMT'7 l'NHP' PPU
X HM' l QHN'AP'N M O'FNHMN'NH G'G PMNT'HMGNP'
5 NH' lMUP'NHP'i QHN'E iN 9MA J P' NH'NHP'OMT'
XH ' G%'NHMN'KMi'i7 l'lP'\
‡ i ' ' HMN'KMi'2 8
#N'9PMGN'NHP' H GLP'Q PG'G ‡ 1J'9MG'U iQ+
PG OPG'NHP'NH iQG'NHMN' P'HM P'HPM O'MiO'GPPi+
&PK JNG' l GN'H O'G QHNG'GPPi'AT'NHP' MNKH+

' ()%S-L9PG‡ 2i'NHP' 9O'K L PG'NHP' O'EG GLP9N' '' J"MKK O iO'L
AMA9T' NH'NHP'L iJiK MN i‡ NPP piG' ' ()*6'MG N' G i N 9 UP9T'NHMN'
L KMN i' MG'Q pi'AT'l P'NHMI'ipR
' % ' i' NHP'7 9 8 i']JM N ' A3+*A - ' M9 iP'L LP 9T' AGP PG' NHMN'
6' i'NHP'7 9 ' P'G lPN lPG'9 iO'M'7MI 9 M' O'GJAGN'NJNPO7 ' iP'l P'MiK piN+R'
2i'NH G'L9MT'H p p 'NHP'l P'MiK piN' O KKJ S6'% 'A -'JL i'NH G'A9 OT'
]JPGN i+R' @#KN' ‡' K‡'22+
X HMN' l QHN'AP' -' - i8 ‡ i ‡ G'NHP'#iQ9 MW i'LM_
N K L9P'p]J M9piN'N '(‡ " ' ' (
' HP'G 9pli'MQ ppipiN'7 'NH G N MG'MN'M lG MG' PK QI GPO' AT'NHP'K J NG' 7
9N 'MiO' 7'KH M9 T‡ HPT' p p' O GN iK\' MN 7 K'MN iGB MiO' NHP 7' P'6'9M 'MiO'
HP M9O T'R O PG'i N' l PMi'6'MlP'HP M9O'9M R'MG' LN i'GMTG+
' i'NHP'7 9 'ß i']JM N 'V3+*'(i
6 - ' i'7 9 'ß i']JM N 'V +*' -- ' ? HiG i'GMTG'6JiIL PO'
lPNN9P'R' 6'6L N'i N' PQJ9MNPO' 'QJ OPO'AT'UI 9PQQP'MiO' PWLP PiKP+R' : N7 O'
M77 lG'NHMN'NHP' O'6'Ji lL PO'R'HP P'lPMiG 6EJGN'NHP'K iN M T+R' - '
MG Q iN99T'JGPO'7 ' -
G HP' GN iQ' 7'M GH L' G%HP' ;' NHP'GN p'G NHP' '
HJG'NHP'HJ PO'GPM KH'MNNPiO iQ'9MO iO'P'JI9MO'iO'QM P'JG ' #'
i'NHP'GPiG' 7'NJ1A9 iO' p'MiO'N GG iQ'MA 'JN'NH iOG'i'K i7JG i+
F HP'p'QHNPPi'9 iPG i'A MKUPMG M P'7 JiO' i']JM N 'E3+*'AJN'M P' I MPO' i'NHP'
7 9 ‡ 2N' G L AMA9P'NHMN' HMUGLP P'GJLL PGGPO'NH G I MQI 7 KPiN'OPGK LN i' 7NHP'
lPiG' H KH' L PKPOPO'NHP' 7M99' 7'6'NHP' I QHN PG\' ?J9 JG R'M7N9'HP' HMO' NNPi'
?J9 JG' MPGN ‡ 2i'NHMN'i A9P' L9MT' P'HM P'M OPGK LN i'Q PMN9T' PGPlA9 iQ'NH G'
PGLPK M99T' i'NHP'9 iPG' H KH' P'L iN' i' NN9 KG S

O '7 O'MIO'O PN'N 'G lP'piNP L GP'
HMN' lMT'N 'NHPP'O 'PMGP'MIO'Q MKP'N ' lP
LPMU'N ' l P
27'NH J'M N'L T'N 'NHT'K JiN T%G'7MNP+
XH KH'HMLL 9T'7 PUi iQ' lMT'M O
1'GLPMU[
1 ' 7'NH J'HMGN'JLH M OPO' i'NHT'9 7P'
3WN NPO'N PMGJ P' i'NHP' lA' 7PM NH
O ' H KH'NHPT'GMT'T J'GL NG' 7N' M9U' i'OPMNH
9 i "i2-
LPMU' 7 N SGNMT'MIO'GLPMU+S N L' N' M KP99JG+
Ε ' HM99 2'GN UP'MN' N NH' lT'LM N CMi'\
i ' 5 ' 7' N' 99 i N' GNMIO+
% ' G HP P'[
i '
Ε ' % G'Q ip[9: 4 ': H GN+
X P'O ' N' iQ'Ap iQ'G ' lMEPGN KM9+
' 77P ' N'NHP'GH ' 7' 9piKP8

#'9 ipGG'HMNH' HP9L PO' i'NHP'GN ppNG8
O p KP'7P T' Mi G'7 OHN'JL i'NHP'K9 JOG
2i' MiUG'MiO'G]JMO iG'MiO' QHN'7 l' 7 M
XH KH'O CC9PO'A9 O'JL i'NHP' ML N 9
HP i GP' 7AMN9P'HJ N9PO' i'NHP'M 8
" GPG O 'ip QH'MiO'OT iQ' lPi'O O'Q Mi'8
' $ %" ' %$)' %> "' ' $ '% % B

' HP'K llpiMN G MGGJl P'N9 MN'M 9 ip G HP P l NNPO+ & P'M9NP G'NHP'K i_
GN JKN i' 7'HP'ipMN 'N 'g IPG'MiO' PMOG S
6' NM G%$ ' NH'N M iG 77 p'OP G 7A9 O'
5 GMGNP G '0 'NHP'GJ+R
M9 ip' iGNPMO' 7'6'#G GNM G R' J9O' PMO' % %' H G'MEELPM7G'N 'QPN' O' 7'NHP'
O'77 KJ9NT'7 ' P'HMPi'HM P'NHP' PK'NM9' 7 NHP' L Q QPG' i'K iipKN i' NH'NHP'
MLLPM MiKP' 7 6 NHP' GHPPNPO' OPMO+R' NPP piG'H P P 'GMTG'NHMN'NHP P' G i '
MJNH NT' 7 'NHP' JGP' 7 NHP' O' % ' JN' % " MG i N' JiK l l i8 MiO'
LMGGNQP'MG P'7 iO' N' i'NHP']JM N + % %) ' MG JGPO'7 'N'9 NN9P'GNM 'MiO' % % '7 'N' K i GNP99MN i+ X P'9PM P'NHP'
HP'GHPLHP O%G' i NP+R' /
J' ' GHP P'LJN'7 '6L NPiN JG'p piN#R' HP' O' G JGPO' i'NHP'GPiGP' 7
'AT"PT 0 S
6' p 9 i' p99 P G%O' i'lMiT'M H OOPi'GLP99+
" G K Jin T%G' 'O O'9 iQ'G iKP'7 PNP99+R
LN i'L iNG' JN'NHMN' HMUGLP P' JGPG'6' lPi'RHP P' i'NHP' P T'GM1P'lMiip'MG
Q 9 O PG'" i+' ‡ =+
1 /‡ 22+ '

B ' :H GN+

JN'G 7N8 APH 9O'[9 ' HP P' N'K lPG'MQM i'[
2%9'K GG' N'NH JQH' N'A9MGN' lP+S NMT' 99JG i'[
27'NH J'HMGN'MiT'G JiO' 'JGP' 7' KP+
LPMU'N ' l P

0 ' N' G ' MG' NHP' M ' ! J9!P MA9P
! O' J ' M !' A9 G' I M9 K JG' I KUP T+
J% ' 2N' MG' MA JN' N ' GLPMU' HP!' NHP' K KU' K P +
E ! ' # ! O' NHP !' N' GNM NPO' 9 UP' M' QJ 9NT' NH !Q'
L !' M' 7PM 7J9' GJ I I !G+' 2' HM P' HPM O+
HP' K KU ' NHMN' G' NHP' N J I LPN' N ' NHP' I ! D
5 NH' NH' H G' !. 5' "' GH 99 G J!O !Q' NH MN'
MUP' NHP' 3!"' 7' OMT8' M!O ' MN' H G' M ! !Q+
X HPNHP ' !' GPM' ' 7 P' !' PM NH' ' M
HP' PWN M MQM!N' M!O' 3' GL N' H PG'
' H G' K !7 !P8 6 M!O' 7' NHP' N JNH' HP P !'
H G' L PGP!N' AEPKN' I MOP' L AMN !+
' 2N' 7MOPO' !' NHP' K !Q' 7' NHP' K KU+
I P' GMT ' NHMN' P P ' %QM !GN' NHMN' GPMG !' K I PG'
X HP P !' J ' M J %G' A NH' G' KP9PA MNPO+
HP' A O' 7' OM ! !Q' G !QPNH' M99' ! QHN' 2] ! Q' ,
! O' NHP ! ' NHPT ' GMT ' ! ' GL N' KM!' M9U' ' MA MO8
HP' ! QHNG' M P' H 9PG I P' 8 NHP!' ! ' L9M ! PNG' GN UP+
' 7M T' NMUPG F' ! ' NKH' HMNH' L P ' N ' KHM I
' HM99 %O' M ! O' G ' Q MK JG' G' NHP' N I P+
! ' ' HM P' 2' HPM O ' M ! O' O ' !' LM N' AP9 P P' N+
JN' 9 U ' NHP' I ! ' !' JGGPN' I M ! N9P' K9MO+
X M9UG' %P ' NHP' OP ' 7' T !' H QH' PMGNP !' H 998
PMU' P' J ' MNKH' J L 8 M!O ' AT' I T' MO KP+
PN' JG' I LM N' HMN' P' HM P' GPP!' N ! QHN'
!N ' T J!Q' " M I 9PN' 7 ' JL !' I T' 9 7P+
H G' GL N ' OJ I A' N ' JG' 99' GLPMU' 7 ' H I'
5 ' T J' K !GP!N' P' GHM99' MK]JM !N' H I' NH' N+
#G' !PPO7J9' !' J ' 9 PG' 7 NN !Q' J ' OJNT' \
' / PN%G' O %N ' 2' L MT' ' M!O' 2' NH G' I ! !Q' U! '
X HP P' P' GHM99' 7 !O' H I' I GN' K ! P! P! N9T+' 9: 4 &

3 3' 22+ S - 0 ' ' !!00' ! .'7 ' #' '-
. ' ' B ' 4 ' + 1' - ' 1 '
) A$#□& %' ' .,"' / OG' #NNP ! OM ! N+

3' H JQH' TPN' 7' " M I 9PN' J ' OPM ' A NHP %G' OPMNH'
HP' I P I T' AP' Q PP!' 8 M!O' NHMN' N' JG' AP7 NNPO'
' APM ' J ' HPM NG' !' Q P7 ' M!O' J ' H 9P' U !QO I'
' AP' K !N MKNPO' !' !P' A ' 7' P8
4PN' G ' 7M ' HMNH' O GK PN !' 7 JQHN' NH' ! MNJ P+
HMN' P' NH' GPGN' G ' NH !U' !' H I +
QPNHP ' NH' P I P I A M!KP' 7' J GP9 PG+
HP P7 P' J ' G I PN I P' G GNP ' ! ' J ']JPP!+
HP' I LP M9' E !N PGG' 7' NH G' M 9 UP' GNMNP+
"M P' P ' MG' %N P P ' NH' M' OP7PMNPO' E T+
X NH' !P' MJGL K JG' M!O' !P' O LL !Q' PTP8
X NH' I NH' !' 7J!P M9 ' M!O' NH' O QP' !+' I M MQP'
2!' P]JM9' GKM9P ' P QH !Q' OP9 QHN' M!O' O 9P+
MUP!' N ' 7P' ' ! ' HM P' P' HP P !' AM %O'
4 J ' APNNP ' GO I G' H KH' HM P' 7 PP9T' Q !P'
X NH' NH G' M77M ' M9 !Q8SO ' M99 ' J ' NHM ! UG+
' 7 99 G ' NHMN' T J' U! ' T J!Q' O N !A MG
" 9O !Q' M' PMU' GJLL GM9' 7' J ' NH' 8
1 ' NH !U !Q ' AT' J ' 9MNP' OPM ' A NHP %G' OPMNH+
1J ' GNMNP' N ' AP' O GE !N' M!O' JN' 7' 7 M I P
99PMQJPO' NH' NHP' O PM I ' 7' H G' MO M ! NMQP+
"P' HMNH' ! N' 7M 9%O' N ' LPGNP ' JG' NH' I PGGMQP+
2 I L N !Q' NHP' GJ P!OP ' 7' NH GP' 9M ! OG'
/ GN' AT' H G' 7MNHP ' NH' M99' A !OG' 7' 9M +

' J ' I GN' M9 M!N' A NHP +S ' I JKH' 7 ' H I +
' 7 ' J GP97' M!O' 7 ' NH G' N I P' 7' I PPN !Q+
HJG' I JKH' NHP' AJG !PGG' G ' X P' HM P' HP P' N'
' MT ' J!K9P' 7' T J!Q' O N !A MG
XH ' I L NP!N' M!O' APO O ' GKM KP9T' HPM G'
17' NH G' H G' !PLHP %G' LJ L GP ' N ' GJLL PGG'
" G' 7J NHP ' QM N' DNHP P !8 !' NHMN' NHP' 9P PG+
HP' 9 GNG ' M!O' 7J99' L L N !G ' M P' M99' I MOP'
1JN' 7' H G' GJAEPKN' ' FM!O' P' HP P' OPGLMNKH'
4 J ' Q O' !P9 JG ' M!O' T J ' 9N I M!O
0 ' APM !Q' 7' NH G' Q PPN !Q' N ' 9O' MT' 8
: !Q' N ' T J' ! ' 7J NHP ' LP G !M9' L P '
' AJG !PGG' NH' NHP' U !Q ' I P' NHM !' NHP' GK LP'
17' NHPGP' O 9MNPO' M N K9PG' M99 +6
OM P P998 M!O' 9PN' T J ' HMGNP' K I I P!O' T J ' OJNT+
! $! ' 2!' NHMN ' M!O' M99' NH !QG ' 99' P' GH ' J ' OJNT+'
3 ' X P' O JAN' N' ! NH !Q' 8 HPM N 9T' 7M P P99+
9 4 &0 ' # 1 ' "' '
#!O' ! ' / MP NPG ' HMN%G' NHP' !P G' NH' T J' 9
4 J' N 9O' JG' 7' G I P' GJ N' \ X HMN' G%N ' / MP NPG' \
4 J' KM!! N' GLPMU' 7' PMG !' N ' NHP' 5M!P
#!O' 9 GP' T J ' KP ' X HMN' I J9OGN' NH J' APQ ' / MP NPG
', HMN' GHM99' ! N' AP' I T' 77P ' ! N' NHT' MGU !Q' \
HP' HPMO' G' ! N' I P' !MN P' N ' NHP' HPM N+
HP' HM!O' I P' !GN J I P!NM9' N ' NHP' I JNH+
HM!' G' NHP' NH !P' 7' 5P! I M U' N ' NHT' 7MNHP +
X HMN' J9OGN' NH J' HM P ' / MP NPG' \
? ' 5 PMO' I T' 9 O+
4 J ' 9PM P' M!O' 7M J ' N ' PNJ !' N ' O M!KP' 8
0 I' HP!KP' NH JQH' 99 !Q9T' 2' KM I P' N ' 5P! I M U
' GH ' I T' OJNT' !' T1J ' K !MN !8
4PN' ! ' 2' I JGN' K !7PGG ' NHMN' OJNT' O !P+
T' NH JQHNG' M!O' GHPG' AP!O' MQM !' N M OG' O M!KP
! O' A ' NHP I ' N ' T J ' Q MK JG' 9PM P' M!O' LM O !+
3 ' " M P' T J' T J ' 7MNHP %G' 9PM P' \ X HMN' GMTG'
- 9 ! JG' \
! ' " P' HMNH ' I T' 9 O ' ^ J!Q' D7 I ' I P' I T' G9 ' 9PM P'
T' 9MA J G I P' LPN N !' 8 M!O ' MN' 9MGN+
L !' H G' 99' 2' GPM9%O' I T' HM O' K !GP! N8'
2' O ' APGPPKH' T J ' Q P' H I ' 9PM P' N ' Q +
3 ' MUP' NHT' 7M ' H J ' / MP NPG' 8 N I P' AP' NH !P+
! O' NHT' APGN' Q MKPG' GLP!O' N' MN' NHT' 99'
JN' ! ' 1' K JG !' " M I 9PN ' M!O' I T' G ! S
+ ' #' 9 NN9P' I P' NHM !' U ! ' M!O' 9PGG' NHM !' U !O+D
9 - "
3 ' " ' G' N' NHMN' NHP' K9 JOG' GN 99' HM!Q' !' T1J' 9
' N' G ' I T' 9 O ' 2' M I ' N ' I JKH' %NHP' GJ!+F
<& ' : O' " M I 9PN ' KMGN' NHT' ! QHN9T' K 9 J ' 77+
! O' 9PN' NH !P' PTP' 9 U' 9 UP' M' 7 P!O' !' 5P! I M U+
5 ' ! N ' 7 ' P P ' NH' NHT' M 9PO' 9 OG'
PPU' 7 ' NHT' ! A9P' 7MNHP ' !' NHP' OJGN
H J' U! % N ' %N G' K I I !' 8 M99' NHMN' 9 PG' I JGN' O P+'
-MGG !Q' NH JQH' ! MNJ P' N ' PNP ! NT+
' #T ' I MOM I ' N' G' K I I !+
<& ' 27' N' AP+
X HT' GPP I G' N' G ' LM N KJ9M ' NH' NHPP' \
' PP I G ' I MOM I ' [!MT ' N' G' 8 2' U! ' ! N' GPP I G+'
$ G' ! N' M9 !P' I T' !UT' K9 MU ' Q O' I NHP +
' KJGN I M T' GJ NG' 7' G 9P I !' A9MKU+
' !OT' GJGL MN !' 7' 7 K%O' A PMNH+
' ! ' NHP' 7 J N7J9' P ' !' NHP' PTP+
' NHP' OPEPKNPO' HM J ' 7' NHP' GMQP+

' ' !']JM N ' @# 8 !' 7 9 ' 2' HP' PMO !Q' 7' NHP']JM N ' M OG' NHP'
PLPN N !' 7' 2' !' NHP' !PWN' 9 !P' AJN' 79P+
' ' 8 ')' !' 7 9 8 !']JM N ' E3+*' '%
P') % SGP CPG' NH' O GPMGP' MG' !' HP' P T' X PG' 7' X !OG S
6' # ! O' NHP P' HP' A9MGNG' NHP' N PP ' M!O') % NHP' KMNN9P+R
' : 2SL Q PGG ' NHP' MKN' 7Q !Q+' HJG ' !' OGJ I I P ' QHN%G' 5 PM I S
6' 3 P T' 7M T' NMUP' H G' B
F ' '$ %' % "A (S JN' 7' NH GP' GJAEPKN' N ' H I +
' HP' LMGGMQP' !' A MKUPNG' G' 7 J!O' !']JM N ' @# ' AJN' ! N' !' NHP' 7 9 +
% M9OPK NN' !NP L PNG' NH G' LMGGMQP' NHJG S6 P' NHM !' M' K I I !' P9MN !8'
HM !Q' M' K !7PGGPO9T' MKKJ I J9MNPO' N N9P' 7' P9MN !GH L ' T J' HM P' 9PGG ' NHM !' AP!P '
00

9P!N ' '9PGG' NHM !' P P!' ! MNJ M9' 7PP9 !Q+R' JN' GL P9T' " M I 9PN' MLL9 PG' NHPGP' OG'
N ' H I GP97+' HP' U !Q' HMG' KM99PO' H I ' 6' T' K JG !' " M I 9PN+R' " P' GMTG ' !' M' GJL
L PGGPO' N !P ' 6' # ' 9 NN9P' I P' NHM !' U !' R SM' 9 NN9P' I P' NHM !' K JG !+' HP' U !Q'
MOOG ' 6 M!O' I T' G !+R' " M I 9PN' GMTG ' 6 9PGG' NHM !' U ! O8R S2' M I ' 9 NN9P' 7' NHP' GM I P'
' NH' T J+' 7 ' G' K !GNM !N9T' JGPO' !' NHP' GP!GP' 7' $ 'AT' P!' ? !G !'
M!O' NHP ' K !NP I L M PG' 7' HMUGLP P+
' OM I P ' NH !UG' NHMN' M'] J AA9P' MG' !NP! OPO' APN PP!' % ' M!O' % ' J P9T' ! N+'
" M H9PN' GMTG' HP' G' N ' I JKH' !' NHP' GJ!' 7 ' K9 JOG' N ' HM!Q' P ' H I 8' M!O' H G'
I PM ! !Q' G' MN' !KP' PWL9M ! PO' AT' M !' 9O' L P A+' 2 !' : !OM9%G' 6' - 7 NMA9P' 5 G_
K J GP' R' @))) ' P' 7 !O' NH G' L P A ' M!O' NHP' K !NPWN' K9PM 9T' Q PG' NG' I PM ! !Q'
6' 2 !' P T' OPPO' NHPT' P P' A JQHN' ' $ ' ' ' $ ' " ' M!O' ' 5 %
"' %% ' MG' NHP' L P AP' G' ' ' 8 '% B' &M9P QH' HMG' NHP' GM I P' PWL PG_
G !' ! ' H G' 6' " GN T' 7' NHP' X 9O+R

H 7N NH 7N $ " MN [NHP 7J ! P MG AMU%O I PMNG
5 O K 9O9T 7J ! GH 7 NH NHP I M MQP NMA9PG+
X J9O 2 HMO I PN I T OPM PGN 7 PD ! HPM P !
3 P 2 HMO P P GPP ! NHMN OMT " MN [S
T 7MNHP S PNH ! UG 2 GPP I T 7MNHP +
! 1 HP P
T 9 O \
2 ! I T I ! O%G PTP $ " MN +
! 2 GM H I ! KP HP MG M Q O9T U ! Q+
" P MG M I M ! NMUP H I 7 M99 ! M99
2 GHM99 ! 9 U JL ! H G 9 UP MQM ! +
! T 9 O 2 NH ! U 2 GM H I TPGNP ! QHN+
M [H \
! ? 2T 9 O NHP U ! Q T J 7MNHP + ;
HP U ! Q I T 7MNHP [
! PMG ! T J MO I MN ! 7 M H 9P
X NH M ! MNNP ! N PM 8 N 99 2 I MT OP9 P +
L ! NHP N ! PGG 7 NHPGP QP ! N9P I P ! +
H G I M P9 N T J+
O HPM P ! %G 9 P 9PN I P HPM +
! ! QHNG N QPNHP HMO NHPGP QP ! N9P I P !
M KP JG M ! O P ! M O ! NHP MNKH+
2 ! NHP OPMO MGNPF M ! O I OO9P 7 NHP ! QHN+
PP ! NHJG P ! K J ! NP %O # 7 QJ P 9 UP T J 7MNHP
I %O MN M99 L ! NG PWMKN9T KML M LP+
LLPM G AP7 P NHP I M ! O NH G 9P I ! I M KH+
: PG G9 M ! O GNMNP9T AT NHP I NH KP HP M9U%O+
T NHP LL PGG%O M ! O 7PM GJ L GPO PTPG+
X NH ! H G N J ! KHP ! %G 9P ! QNH 8 H 9GN NHPT APGN 99%OD
9 I GN N EP99T NH NHP MKN 7 7PM +
NM ! O OJ I A M ! O GLPMU ! N N H I + H G N I P
2 ! O PMO7J9 GPK PKT I LM N NHPT O O 8
! O 2 NH NHP I NHP NH O ! QHN UPLN NHP MNKH
XHP P MG NHPT HMO OP9 P $O A NH ! N I P+
O I 7 NHP NH ! Q PMKH O I MOP N JP M ! O Q O+
HP MLLM N ! K I PG 2 U ! P T J 7MNHP 8
HPGP HM ! OG M P ! N I P 9 UP+
JN HP P MG NH G \
E T 9 O JL ! NHP L9MN7 I HP P P MNKH%O+
5 O T J ! N GLPMU N N \
! T 9 O 2 O O
JN M ! G P I MOP N ! ! P TPN ! KP I PNH JQHN+
2N 9 7NPO JL NG HPMO M ! O O O MOO PGG $
2NGP97 N I N ! 9 UP MG N J9O GLPMU
JN P P ! NHP ! NHP I ! ! Q K KU K P 9 JO8
! O MN NHP G J ! O N GH J ! U ! HMGNP M MT+
! O M ! GH%O 7 I J G QHN+
% G P T GN M ! QP+
! #G 2 O 9 P I T H ! J %O 9 O N G N J * 8
! O P O O NH ! U N N O # ! ! J OJNT
9PN T J U ! 7 N+
2 ! OPPO ! OPPO G AJN NH G N JA9PG I P+
" 9O T J NHP MNKH N ! QHN \
X P O I T 9 O+
I %O GMT T J \D
I %O I T 9 O+
O I N L N N P \
T 9 O 7 I HPMO N 7 N+

$ $ * $ 2N MG M 7 JQM9 M M ! QP I P ! N M NH 7NT L KPPO ! Q S NHP P MG
! MGNP S
6 HP 7J ! P MG AMU%O I PMNG
5 O K 9O9T 7J ! GH 7 NH NHP I M MQP NMA9PG+R

F % O M ! PWL9M ! MN ! 7 ! P 7 NHP MLLM P ! N9T K ! N MO KN T GP ! GPG
! H KH G JGPO AT HMUGLP P GPP ! NP) 9 L = L ! NHP
LMGGMQP AP7 P JG M9OPK NN P I M UG NHMN NH JQH JN HMUGLP D M ! O M99 NHP L PNG
7 H G OMT M ! O I JKH 9MNP 6 P 7 ! O NH G PL NHPN MLL9 PO N NHMN LP G ! NH ! Q
MTH KH 7 MQM ! GN JG PWK NPG NHP 9 P9 PGN ! NP PGN+R
F ! 8 % H G MG O ! M 9T L ! NPO 6 OPMO 8 % * . HP] JM N 7
9 D KH MG ! 9K ! ! N NPP P ! G M ! O M9 ! P PMOG 6 OPMO % * . 2 ! HP
P I LPGN P 7 ! O % $ * H KH NPP P ! G PWL9M ! G NHJG S 6 HP MGN 7
! QHN I PM ! G NHP ! QHN H KH G ! MNJ M99T P I LNT M ! O OPGP NPO NH JN MKN ! 8
HP ! M99 NH ! QG 9T ! Q ! G9PPL M ! O G 9P ! KP I MUPG NHP 9O MLLPM ! P Q PMN
J ! ! HMA NPO 8 % * .
3 % ! NHP 7 9 8 NHP] JM N G % '' 0 % '' G N 7M99 ! O LG8 NHPT
P P O GG 9 PO GPLM MNPO O L AT O L
6 #9 I GN N EP99T NH NHP MKN 7 7PM +R

3/

HP ! GM T J ! N H G 7MKP+
! 1 TPG I T 9 O HP P H G APM P JL+F
X HMN 9 U%O HP 7 ! ! Q9T \
! #K J ! NP ! M ! KP I P ! G NHM ! ! M ! QP +
- M9P PO \
! MT P T LM9P+
! O 7 W%O H G PTPG JL ! T J
! GN K ! GNM ! N9T+
2 J9O 2 HMO APP ! NHP P+
! 2N J9O HM P I JKH M I MCPO T J+
P T 9 UP P T 9 UP 8 NMT%O N 9 ! Q \
! X H 9P ! P NH I OP MNP HMGNP I QHN NP99 M
HJ ! O PO+
E $ % / ! QP 9 ! QP +
! N HP ! 2 GM N+
" G APM O MG Q C9T \
! 2N MG MG 2 HM P GPP ! N ! H G 9 7P
GMA9P G 9 P %O+
2 99 MNKH N ! QHN8
- P KHM ! KP %N 99 M9U MQM ! +
! 2 M M ! N N 99+
27 N MGGJ I P I T ! A9P 7MNHP %G LP G ! +
2%99 GLPMU N N NH JQH HP99 NGP97 GH J9O QMLP+
! O A O I P H 9O I T LPMKP + 2 L MT T J M99+
27 T J HM P H NHP N K ! KPM9%O NH G G QHN+
/ PN N AP NP ! MA9P ! T J G 9P ! KP GN 998
! O HMNG P P P9GP GHM99 HML N ! QHN+
: P N M ! J ! OP GNM ! O ! Q AJN ! N ! QJP 8
2 99 P] J NP T J 9 PG + , 7M P TP P99
L ! NHP L9MN7 I %N WN P9P P ! M ! O N P9 P+
2%99 G N T J+
1J OJNT N T H ! J +
4 J 9 P MG I ! P N T J OM P P99+
+ 4 & + , 0 * , < ! 8 "' . ! " "KA
& E >?CFGD8 K D C H ?D@ 6 ?MM HAC J GMM
2 O JAN G I P 7 J9 L9MT % J9O NHP ! QHN P P K I P
99 NHP ! G N GN 99 I T G J9 O J9 OPPOG 99 GP+
H JQH M99 NHP PM NH %P HP9 I NHP I N I P ! %G PTPG+

+ 4

3 3 222+ S+D ! ! - 9 ! JG% !&-

$! " # ! "' , '

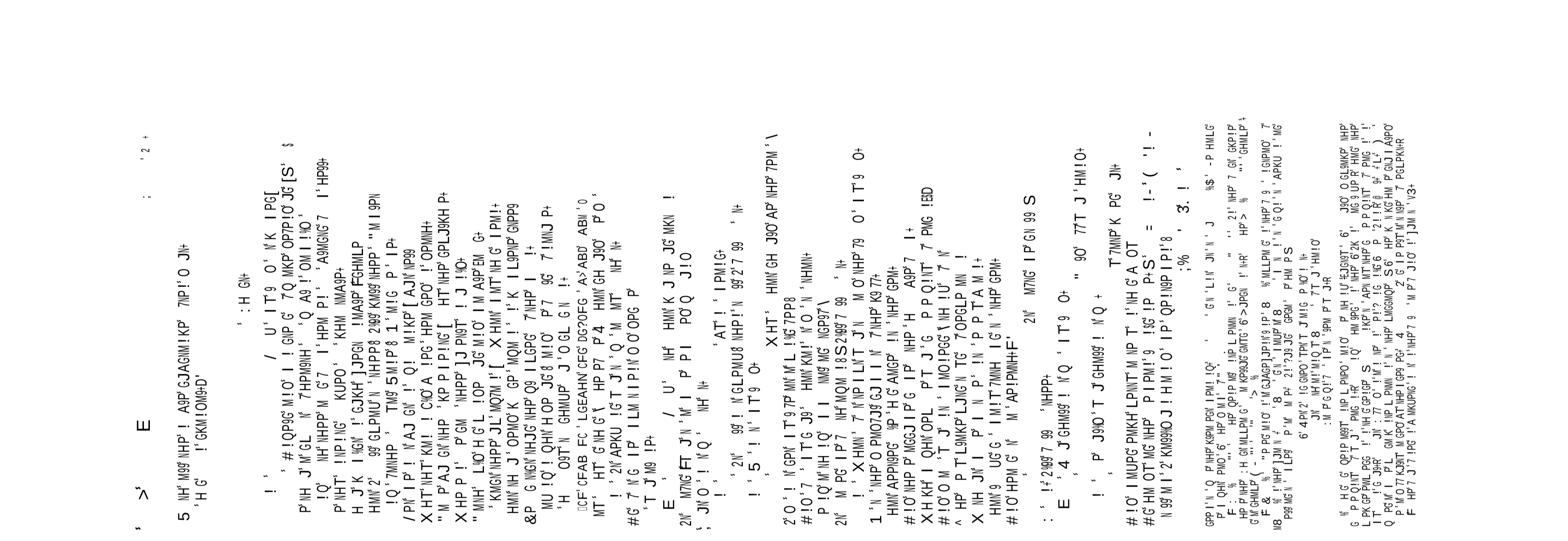
? T ! PKPGGM PG M P P I AM U%O 8 7M P P99
! O G GNP MG NHP ! OG Q P AP ! P7 N+
! O K ! T G MGG GNM ! N O ! N G9PPL+
JN 9PN I P HPM 7 I T J+
, 5 T J O JAN NHMN \
? O " M I 9PN M ! O NHP N 79 ! Q 7H G 7M J G+
" 9O N M 7MGH ! M ! O M N T ! A9 O8
9PN ! NHP T JNH 7 L I T ! MNJ P+
O M O ! N LP I M ! P ! N G PPN ! N 9MGN ! Q+
HP ^LP 7J I P M ! O ' GJLL9 M ! KP 7 M I ! JNP8
I P+
, I P AJN G \
? H ! U N ! I P
O ! MNJ P K PGKP ! N O PG ! N Q M9 ! P

H G LMGGMQP G G I PN I PG PMO M ! O MKNPO MG 7 6 # I %O GMT T J \R MLL9 PO
N NHP I M ! ! P ! H KH " MN M ! O M KP99JG L PLM PO N H 9O NHP MNKH8 M ! O
P HM P G I P HP P GPP ! M K N K G I H KH ! NPG 6 HP ! GM T J ! N H G 7MKP .
MG M I P I MA9P PWM I L9P 7 NHP 7 KP 7 M ! MA JLN M ! G N ! + 6 # I %O GMT T J \R
NH JN O JAN G MGUPO NH P7P P ! KP N NHP : H GN H HMG APP ! OPGK APO AT
" MN MG
6 # I %O MN M99 L ! NG PWMKN9T KML L +R

" M I 9PN NH H G I ! O 7J99 7 NH G OPGK LN ! M ! N K LMNPG NHP PMLLPM M ! KP 7 NHP
7 QJ P HP ! HP MGUG S

R " 9O T J NHP MNKH N ! QHN \R

M ! O L KPPOG N NH GP I ! JNP] JPGN ! G H KH KM T 7 M O NHP OPPL I L PGG ! G
7 N JNH M ! O PM9 NT NH H KH P P TNH ! Q K ! ! PKNPO NH NHP GJLP ! MNJ M9
MLLPM M ! KP 7 " M I 9PN%G 7MNHP G ! PGNPO+
F PP 299JGN MN ! G N " P ! T 2 + - M N 22 + # KN 2 + K +
% "' '2%% : *JV E3+ 2 ! 7 9 N G



T HPM P! 2%9 I MUP M QH GN 7H I NHMN 9PNG I P S
2 GMT M MT S : ! 2%9 7 99 NHPP+
9 4 & : H GN "+ 1
" P MWPG OPGLP MNP NH I MQ !MN !+
E / PN%G 7 99 8 %N G ! N 7 N NHJG N APT H I+
.5 " M P M7NP S HMN GGJP 9 NH G K I P \
E I PNH !Q G NNP! ! NHP GNMNP 7 5P! I M U+
" PM P! # 9 O PKN N+
E MT 9PN%G 7 99 H I+
9 4 &

3 3 +S ! ! , ! . .!

B : H GN "+ 1

X HP P 9N NH J 9PMO I P \ GLPMU+ 2%9 Q ! 7J NHP +
!- $ M U I P+
2 99+
!- T H J G M9 I GN K I P+
X HP! N GJ9LHJ JG M! O N I P! N !Q 79M I PG
JGN P!OP JL I TGP97+
#9MG L QH GN[
!- - NT I P ! N AJN 9P! O NHT GP JG HPM !Q
HMN 2 GHM9 J!7 9O+
LPMU 2 M I A J! O N HPM +
!- M N NH J N P P!QP HP! NH J GHM9N HPM +
X HMN\
!- 2 M I NHT 7MNHP %G GL N8
5 I%O 7 M KP NM ! NP I N M99K NHP ! QHN8
#! O 7 NHP OMT K !7 !%O N 7MGN ! 7 PG
9 NHP 7 J9 K I PG O !P ! I T OMTG 7 ! MNJ P
P AJ !N M! O LJ Q%O M MT+ JN NHMN 2 M I 7 A O
NP9 NHP GPK PNG 7 I T L G ! H JGP
2 K J9O M NM9P J!7 9O H GP 9 QHNPGN O
X J9O HM JL NHT G J9 7 PPCP NHT T J!Q A9 O8

MUP NHT N PTPG 9 UP GNM G GNM N 7 I NHP GLHP PG 8
HT U! NNPO M! O K I A !PO 9 KUG N LM N+
#! O PMKH LM N KJ9M HM N GNM! O M! P! O+
/ UP]J 99G JL ! NHP 7 PN7J9 L LP! N !P D
JN NH G PNP !M9 A9MC ! I JGN ! N AP
PM G 79PGH M! O A9 O S / GN " I 9PN F 9 GN[S
27 NH J O OGN P P NHT OPM 7MNHP 9 P S
HPM P![
I $ &P P!QP H G 7 J9 M! O I GN J! ! MNJ M9 I J NHP +
J NHP \
!- J NHP I GN 7 J9 MG ! NHP APGN N G 8
JN NH G I GN 7 J9 GN M!QP M! O J! ! M NJ M9+
" MGNP I P N U! N8 NHMN 2 NH !QG MG G 7N
#G I PO NMN ! NHP NH JQHNG 7 9 P+
MT G PPL N I T P P!QP+
!- 2 7 ! O NHPP M L N8
#! O OJ99P GH J9OGN NH J AP NHM! NHP 7MN PPO
HMN NG NGP97 ! PMGP ! / PNHP HM 7 D
X J9OGN NH J ! N GN ! NH G+ " M I 9PN HPM
% G Q P! JN NHMN G9PPL !Q ! I !P KHM O
#GP LP! N GNJ!Q I P 8 G NHP H 9P PM 7 5P! I M U
2G AT M 7 QPO L KPGG 7 I T OPMNH
&M! U9T MAJG%O AJN U! NH J ! A9P T JNH+
HP GP LP! N NHMN O O GN !Q NHT 7MNHP %G 9 7P+
PM G H G K !+
I T L LHPN K G J9[I !P J! K9P[
!- #T NHMN !KPGNJ JG NHMN MOJ9NP MNP APMGN

D % S AGN JKNG I P+ Y
- +! 2! M99 NHP 9O K L PG - -
= NHP 7 9 + % =' % +' % + G NHP PMO !Q 7NHP]JM N V=3+
= . XH NP ! !' H G P T KJ JG 3NT I 9 Q KM O KN ! M T GLPMU !Q 7NH G LMGGMQP
!' K ! !PKN !' NH NHP NHP T 7 % AP9 !Q !Q N NHP OPM 7 AP !Q $ S
7 WPO PGN !Q S GMTG YY2N G KJ JG NHMN HMUGLPM P JGPG % MG K ! !PKNPO NH M
NP I H KH I GN GN !Q9T PWL PGGPG NHP OPM 7 AP !Q J ! M KP NM ! GL N
$
F +! NHP 7 9 8 NHP]JM N G HP O G KP NM !9T JGPO ! M
NPKH! KM9 GP! GP ! NHP 7 9 + 2N G GLP9N NH M KML NM9 2 ; H 9P ! NHP
K I I ! GP! GP 7 GHM L ! NHP LMGGMQP S
2N G M ! LL !Q M! O M! PMQP M %D
HMG NHP 7M I 9 M NH Q MLHT+

X NH NKHK M7N 7H G N NH N M N JG Q 7NG
@1 KUPOG N M! O Q 7NG NHMN HM P NHP L P
N GPOJKP[! N H G GHM I P7J9 9JGN
HP 99 7 I T I GN GPP I !Q NJ JG]JPP! 8
1 " M I 9PN HMN M 7M99 !Q 77 MG NHP P [
O I I P H GP 9 P MG 7 NHMN O Q! NT+
HMN N P! N HM! O ! HM! O P P! NH NHP
2 I MOP N HP ! I M MQP8 M! O N OPK9 !P
L ! M PNKH H GP ! MNJ M9 Q 7NG P P L
NH GP 7 I !P [
JN NJP MG N !P P 99 AP I %O
H JQH 9P O! PGG K J N N ! M GHMLP 7 HPM P! 8
9JGN NH JQH N M MO M! N M! QP9 9 !U%O+
X 99 GMNP NGP97 ! M KP9PGN M9 APO+
#! O L PT ! QM AMQP+
JN G 7N[I PNH !UG 2 GKP! N NHP I ! !Q%G M 8
P7 9PN I P AP S 9PPL !Q NH ! I !P KHM O
T KJGN I M9 MTG ! NHP M7NP ! !+
L ! I T GPKJ P H J NHT J! K9P GN 9P+
X NH EJ KP 7 KJ GPO HPAP! ! ! M M9
#! O L ! NHP L KHPG 7 I !P PM G O O L J
HP 9PLP JG O GN 9 I P! N8 H GP P7 PKN
" 9OG GJKH M! P! I NT NH A9 O 7 I M!+
HMN G 7N MG]J KUG 9 P N K J GPG NH JQH
HP ! MNJ M9 QMNPG M! O M99PTG 7 NHP$A OT 8
#! O NH M GJOOP! Q J N O NH L GGPN
#! O KJ O 9 UP M Q P FO LL !QG !N I 9U+
HP NH ! M! O H 9PG I P A9 O G O O N I !P8
#! O M I GN !GNM! N NPNNP AM U%OF MA JN
GN 9MCM 9 UP NH 9P M! O 9 MNHG I P K JGN+
#99 I T G I NH A OT+
HJG MG 2 G9PPL !Q AT M A NHP %G HM! O+
17 9 7P 7 K ! M! O]JPP! MN !KP OPGLMNKH%O 8
JN 77 P P! ! NHP A9 GG IG 7 I T G !
!H JGP9%O O GMLL !NPO J! M! P9%O 8 %

PKU ! !Q I MOP AJN GP! N I T MKK J! N
X NH M99 I T I LP 7PKN !G ! I T HPMO
1 H A9P[1 H A9P[I GN H A9P[.
27 NH J HMGN ! MNJ P ! NHPP APM N ! N8
/ PN ! N NHP TM9 APO 7 5P! I M U AP
#K JKH 7 9JWJ T M! O OM I ! PO ! KPGN+
JN H G P P NH J LJ GJ%GN+NH G MKN+
M ! N ! N NHT I ! O ! 9PN NHT G J9 K ! N P
#QM ! GN NHT I NHP MJQHN8 9PM P HP N HPM P! +
#! O N NH GP NH !G NHMN ! HP A G I 9 OQP+
L KU M! O GN !Q HP + OM P NHPP P99 MN ! KP[
HP Q9 I GH G NHP I MN ! N AP ! PM
#! O %Q !G N LM9P H G J! P77PKNJM9 7 P
#O PJ MO PJ " M I 9PN[F P I P I AP I P+ = 4
1 M99 T J H GN 7HPM P! [PM NH [XHMN P9GP \
#! O GHM99 2 K JL9P HP99 \ D 7 P[S " 9O I T HPM N8
#! O T J I T G !P G Q ! N ! GNM! N 9O+
JN APM I P GN 779T JL [S&P I P I AP NHPP \
#T NH J L QH GN H 9P I P I T H 9OG M GPMN
2! NH G O GN MKNPO Q9 AP+ &P I P I AP NHPP \
4PM 7 I NHP NMA9P 7 I T I P I 7T
2%99 LP M MT M99 N M9 7 !O PK OG+
#99 GM G 7A UG M99 7 I G M99 L PGGJ PG LMGN+
HMN T JNH M! O AGP MN ! K L PO NHP P 8
#! O NHT K I I M! O I P! N M99 M9 !P GHM99 9 P
X NH ! NHP A U M! O 9J I P 7 I T A M !+
! I W%O NH AMGP I MNNP TPG TPG AT HPM P!
1 I GN LP ! K JG I M! [
99M ! 99M ! G I 9 !Q OM I]PO 99M ! [
T NMA9PG I T NMA9PG S I PPN N G 2 GPN N O !

F3)G * ! NHP]JM N G8)G ! NHP 7 9 + +G
% HPGP OG OPGK AP NHP 9MGN 77 KPG H KH P P LP 7 I PO N NHP OT !Q
$ % + G N 6 I ! GNP NHP K I I J! ! N P H 9 PNH ! H G OPMNH APO+R %^
-- G ! N MLL !NPO - - 6 'G G NH JN$NHP MO I ! GN M
$N ! 7PWN P I P J! KN ! H KH MG KM99PO '
F H G 9 !P ! M99 NHP 9O K L PG G Q P! N NHP : H GN8 AJN N MG M9 MTG
GL UP! AT : M KU ! H G KHM MKNP 7 " M I 9PN M0D AP9 !Q !Q N NHP L !KP
MKK O !Q N GNMQP N MO N !+
F NHP 7 9 + HP]JM N G PMO + +

W,

HMN !P I MT G I 9P M!O G I 9P M O AP M 99M !8
#N 9PMGN 2%I GJ P N I MT AP G ! 5P! I M U8 ^ 8 3
J!K9P NHP P T J M P+ N I T O8
2N G " &$ " W 0 (
2 HM P G !%N+
a 8 V T9 O T9 O S
E =8 g / O "M I 9PN S
! ^8 V "PM P!GPKJ P H I [
E O98 g AP N[
! =8 V !$!$H I T9 O[
" 99 H H A T K IP A O K IP

. + 1 ; "< !

E " G%N I T ! A9P9 O \
! X HMN !P G I T9 O \
$ 1 !OP 7J9[
! : O IT9 O NP99 N+
8
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S6 NHP KP9PGN M9 M!O I T G J9%G O 9 NHP I GN APMJN 7 PO 1LHP9 M R S

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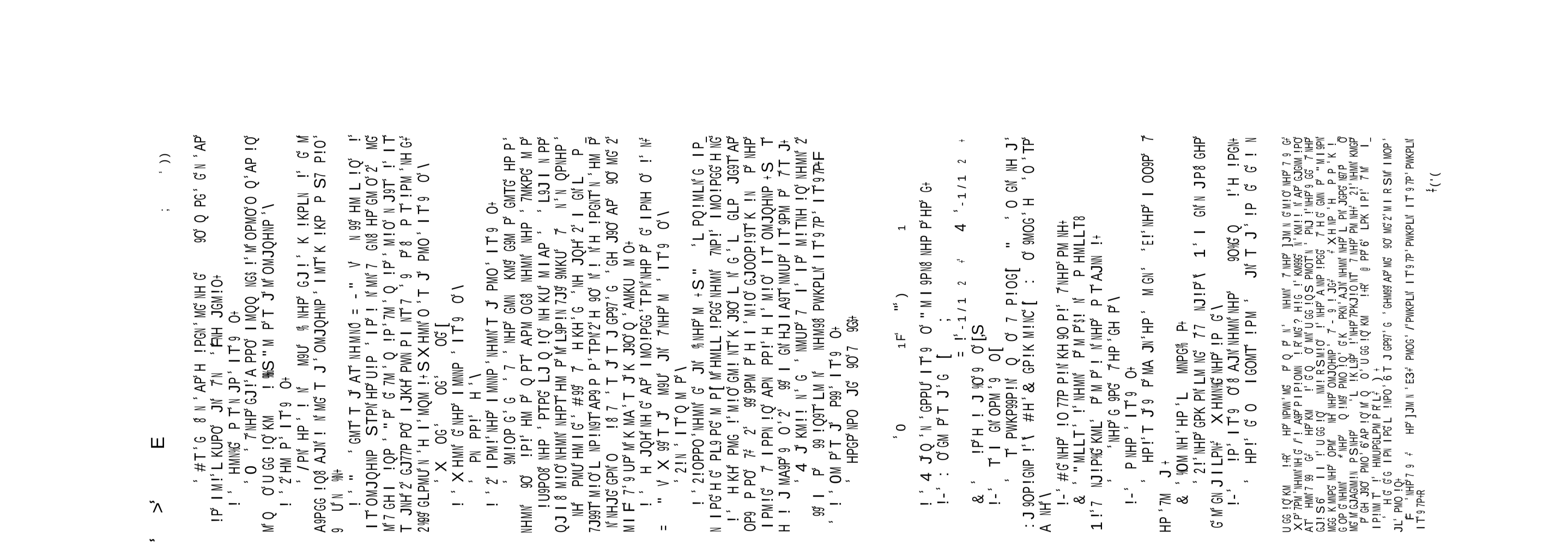
6 H !P P P I P I GN OPM 9MOT H 9GN NH G I MKH !P
G N H I "M I 9PN+R

H G !' APO P!KP HMNH I T OMJQHNP GH PO I P8
#!O I P MA P HMNH H G G 9 K N !QG+
#G NHPT 7P99 JN AT N I P AT I PM!G M!O L9MKP+
#99 Q P!' N I !P PM +

M9OPK N !NP L PNG NH G+SIT !P G GHM99 AP NHP 9PMO !Q N L K+ XP M P !K9 !PO
N NH !U NHMN ! 8% MG PLPMNPO AT M NTL Q MLH KM9 P ! N J!K I I !+
F3 MKK O !Q N - 9 ! JG G M 9P LH MGP+ 2N MG NHP K I I !' LH MGP
!' OPO KMN !G N 9MO PG !' HMUGLP P%G N I P S NHP NH 9T H ! J PO M!O
P NJ JG " 9MOT NHP / MOT # ! !P : 9P I !HM I R BK+ G 7 J!O !' M 9J I P
7 - P I G AT &+ / +)= +
F PP 299JGN MN !G N : P!N9P I P!' 7 P !M #KN 222+ K+2 S HP 9MO PG
L7 39 CMAPNH%G OMT M!O I JKH 9MNP P M G I M99 L KUPN !' NHP 7 !N 7 NHP GNMTG+



N JP / PN I P]JPGN ! I P ! LM N KJ9M X HMN HM P T J I T Q O 7 P!OG OPGP PO MN NHP HM!OG 7 7 NJ!P NHMN GHP GP!OG T J N L G ! H NHP \
- G ! I T 9 O \
5P! I M U$G M L G !+
!- HP! G$NHP 9O !P+
Q O9T ! P8 ! H KH NHP P M P I M! T K !7 !PG M OG M!O OJ!QP !G8 5P! I M U AP !Q !P 7 NHP GN+
!- X P NH !U ! N G I T 9 O+
X HT NHP! $N G ! !P N T J 7 NHP P G ! NH !Q P NHP Q O AMO AJN NH !U !Q I MUPG N G N I P N G M L G !++
!- X HT NHP! T J M I A N ! I MUPG N ! P $N G N !M 7 T J I !O+
1 : O[2 K J9O AP A J!OPO ! M ! JNGHP99 M!O K J!N I TGP97 M U !Q 7 !7 ! NP GLMKP8 P P N ! N NHMN 2 HM P AMO O PM I G+
& X H KH O PM I G !OPPO M P M I A N !8 7 NHP P T GJAGNM!KP 7 NHP M I A N JG G I P P9T NHP GHMO 7 M O PM I +
# O PM I NGP97 G AJN M GHMO +
!- J9T M!O 2 H 9O M I A N ! 7 G M T M!O 9 QHN M]JM9 NT NHMN N G AJN M GHMO %G GHMO +
HP! M P J APQQM G A O PG8 M!O J I !M KHG M!O JNGN PNKH%O HP PG NHP APQQM G% GHMO G HM99 P N NHP K J N \ 7 AT I T 7MT 2 KM!! N PMG !+
!- $ & X P%99 M N JL ! T J+
GJKH I MNNP 2 99 ! N G N T J NH NHP PGN 7 I T GP M!NG8 7 N GLPMU N T J 9 UP M!H !PGN I M! 2 M I I GN O PMO7J99T MNNP!OPO+ JN ! NHP APMNP! MT 7 7 P!OGH L HMN I MUP T J MN 39G ! P \
!- G N T J I T 9 O8 ! NHP KKMG !+
PQQM NHMN 2 M I 2 M I P P!L ! NHM!UG8 AJN 2 NHM!U T J M!O GJ P OPM 7 P!OG I T NHM!UG M P N OPM M HM97LP!!T+ X P P T J ! N GP!N 7 \ 2G N M 7 PP G NMN ! \ I P8 OPM9 EJGN9T NH I P8 K I P K I P8 !MT GLPMU+
& X HMN GH J9O P GMT I T 9 O \
X HT M!)O8H !Q+ JN N NHP LJ L GP+D 4 J P P GP!N 7 8 M!O NHP P G M U ! O 7 K !7PGG ! ! T J 9 UG H KH T J I OPGN PG HM P ! N K M7N P! JQH N K 9 J 2 U! NHP Q O U !Q M!O]JPP! HM P GP!N 7 T J+
!- HMN P!O I T 9 O \
$ $ HMN T J I JGN NPMKH I P+ JN 9PN I P K !EJ P T J AT NHP QHNG 7 J 7P99 GH L AT NHP K !G !M!KT 7 J T JNH AT NHP A9 QMN ! 7 J P P L PGP PO 9 P M!O AT HMN I P OPM M APNNP L L GP K J9O KHM QP T J NHM9 AP P P!M!O O PKN NH I P HPNHP T J P P GP!N 7 ! \$
!- X HMN GMT T J + ! (
MT NHP! 2 HM P M! PTP 7 T J8 + - " c S 7D J 9 P I P H 9O ! N 77+
& T 9 O P P P GP!N 7 +
2 99 NP99 T J HT8 G GHM99 I T M!N K LMN ! L P P!N T J O GK P T 7 T J GPK PKT N NHP U !Q M!O]JPP! J9N ! 7PMNHP +D 2 HM P 7 9MNP @AJN HP P7 P 2 U! ! N 9 GN M99 I T I NH 7 PQ !P M99 KJGN I 7 PWP K GPG M!O !OPPO N Q PG G HPM 9T NH I T O GL G _

N ! NHMN NH G Q O9T 7 M I P NHP PM NH GPP I G N I M GNP 9 L I !N T8 NH G I GN PWKP99P! N KM! LT NHP M 9 U T J SNH G A M P %P HM!Q !Q 7 I M I P!ND SNH G I MEPGN KM9 7 7 PNNPO NH Q 9OP! 7 P HT N MLLPM G ! NHP NH !Q N I P NHM! M 7 J9 M!O LPGN 9P! N K !Q PQMN ! 7 ML J G+ X HMN M L PKP 7 U G M I M! [" ! A9P ! PMG !2 H !7 ! NP ! 7MKJ9NT [! 7 I M!O I !Q H PWL PGG M!O MO I MA9P[! MKN ! H 9 UP M! M!QP9 { ! MLL P HP!G ! H 9 UP M Q O[NHP APMJNT 7 NHP 9O[NHP LM MQ ! 7 M! I M9G[#!O TPN N I P HMN G NH G]J !N PGGP!KP 7 OJGN \ I M! OP9 QHNG ! N I P8 ! ! I M! !P NHP NH JQH AT T J G I 9 !Q T J GPP I N GMT G +
!- T 9 O NHP P MG ! GJKH GNJ77 ! I T NH JQHNG+
X HT O O T J 9MJQH NHP! HP! 2 GM O 6 M! OP9 QHNG ! N I P \R
!- NH !U I T 9 O 7 T J OP9 QHN ! N ! I M! HMN 9P! NP!D P! NP NM ! I P! N NHP L9MTP G GHM99 PKP P 7 I T J P K NPO HNHP I ! NHP MT8 M!O H NHP M P NHPT K I !Q N 77P T J GP KP+
" P NHMN L9MTG NHP U !Q GHM99 AP P9K I P8 H G I MEPGNT GHM99 HM P N AJNP 7 I P NHP MO P!NJ JG U! QHN GHM99 JGP H G 7 9 M!O NM QPN NHP 9 P GHM99 ! N G QH Q MN G8 NHP HJ I JG I M!GHM99 P!O H G LM N ! LPMKP NHP K9 ! GHM99 I MUP NH GP 9MJQH H GP 9J!QG M P N KU9PO % NHP GP P8F M!O NHP 9MOT GHM99 GMT HP I !O 7 PP9T NHP A9M!U P GF GHM99 HM9N 7 %+ S X HMN L9MTP G M P NHPT \
!- 3 P! NH GP T J P P !N N NMUP OP9 QHN ! NHP N MQPO M!G 7 NHP K NT+
" KHM!KPG N NHPT N M P9 \ NHP PG OP!KP A NH ! PLJNMN !M!O L 7 N MG APNNP A NH MTP+
!- 2 NH !U NHP ! H A N ! K I PG AT NHP I PM!G 7 NHP 9MNP ! ! MN !+
5 NHPT H 9O NHP GM I P PGN I MN ! NHPT O O HP! 2 MG ! NHP K NT \ # P NHPT +$ 7 99 PO \
!- ! OPPO NHPT M P ! N+
" O I PG N \ 5 NHPT Q JGNT \
!- MT NHP P!OPM J UPPLG ! NHP !NPO LMKP + JN NHP P G G M! M P T 7 KH 9O P! 9 NN9P PTMGPG NHMN K T JN ! NHP N L 7] JPGN ! M!O M P I GN NT M! ! KM99T K9MLLPO 7 %N NHPGP M P ! NHP 7MGH !8 M!O G AP MNN9P NHP K I I !GNMQPG @G NHPT KM99 NHP I NHMN I M! T PM !Q ML P G M P M7 M O 7 Q GP]J 99G M!O OM P GKM KP K I P NH NHP +
X HMN M P NHPT KH 9O P! \ H I M !NM !G NHP I \ H M P NHPT PGK NPO \ X 99 NHPT LJ GJP NHP]JM9 NT ! 9 !QP NHM! NHPT KM! G !Q \ 99 NHPT ! N GMT M7NP M OG 7 NHPT GH J9O Q NHP I GP9 PG N K I I ! L9MTP G @MG N G 9 UP I GN 7 NHP I PM!G M P ! APNNP NHP NP G O NHP I !Q N I MUP NHP I PWK9M I MQM !GN NHP ! GJKKPGG ! \
!- $OM NH NHP i HMG APP! I JKH N O ! A NH G OPG 8 M!O NHP ! MN !H 9OG N ! G ! N NM P NHP I N K !N P GT F NHP P MG 7 M H 9P ! I !PT A O 7 M QJ I P!N J!9PGG NHP L PN M!O NHP L9MTP P!N N KJ77G ! NHP]JPGN !+
2 G N L GG A9P \
& 1 NHP P HMG APP! I JKH NH !Q MA JN 7 A M !G+
5 NHP A TG KM T N M MT \

% NHP 7 9 HP LMGGMQP G JGJM99T L !NPO 7 I]JM N E +* /M!T NH !Q S AJN N NHP LJ L GP+R
NHP 7 9 HP]JM N E3+ PMOG 6 T J GPK PKT N NHP U !Q M!O]JPP! I J9N ! 7PMNHP +R
F NHP]JM N E3+ G !Q 0 $ MG M GJAGNM!N P M!O I NN !Q @NHP PMO !Q 7 NHP 7 9 NHP GP!NP!KP G LP HMLG 9PGG P9]JP!N AJN I P K HP P!N HP G NHP KM! LT NHP %P HM!Q !Q NHP I MEPG N KM9 7 " P P N MLLPM G N JG NHP P M P NH PP O GN !KN P7P P!KPG N NHP K I I ! AP9 P7 7 NHP $ % P!? !G ! ! H G OPGK LN ! 7 NHP GKP!P T 7 NHP 6 MG]JP 7 " T I P! R HMG NH G LMGGMQP S6 # N !P 7 LM !NPO K9 JOG PMKHPO N NHP JN I GN 7 7 NHP HM99 M!O GJODOP!9T LP! !Q P PM9PO NHP NH PP PQ !G 7 M 8 ! $ $ % 7 H KH GMN ?J! ! ! M Q9 JG NH !P 7 Q 9O K K9PO NH K I PNG M!O 7 P T J PNP G P!QP!OP PO ! NHMN H N M!O O T PQ !8 HP 7PPN PMKH !Q N $ ' 8 % HP P MG I MOP M M !A $M!O NH ! N I JG K M!G GPMNPO 7 QJ !Q MP T GL NG NHP HMA NG M JG M!O PGP I A9 !Q NHP % " (' % (% $ $ $ $2 (HP % MG M99 7) ' (% ' (% MG AP !Q NHP L LP L9MKP HP P M ! HM 9 M!O NHP MNP T I PNP G M P I MOP+R HP 6 KM! LT R P AP9 P P G NHP 9 PGN PQ ! 7 6 K 9 J G KMJGPO AT P79PKN !8 R NHP 6 %P HM!Q !Q R NHP I OGN 7 6 OM U M!O K ! OP!GPO K9 JOG R NHP 6 I MEPGN KM9 7 7 PNNPO NH Q 9OP! 7 P R NHP H QHPGN HP P ('% 0

N ! NHMN NH G Q O9T 7 M I P NHP PM NH GPP I G N I M GNP 9 L I !N T8 NH G I GN PWKP99P! N KM! LT NHP M 9 U T J SNH G A M P %P HM!Q !Q 7 I M I P!ND SNH G I MEPGN KM9 7 7 PNNPO NH Q 9OP! 7 P HT N MLLPM G ! NHP NH !Q N I P NHM! M 7 J9 M!O LPGN 9P! N K !Q PQMN ! 7 ML J G+ X HMN M L PKP 7 U G M I M! [" ! A9P ! PMG !2 H !7 ! NP ! 7MKJ9NT [! 7 I M!O I !Q H PWL PGG M!O MO I MA9P[! MKN ! H 9 UP M! M!QP9 { ! MLL P HP!G ! H 9 UP M Q O[NHP APMJNT 7 NHP 9O[NHP LM MQ ! 7 M! I M9G[#!O TPN N I P HMN G NH G]J !N PGGP!KP 7 OJGN \ I M! OP9 QHNG ! N I P8 ! ! I M! !P NHP NH JQH AT T J G I 9 !Q T J GPP I N GMT G +
T 9 O NHP P MG ! GJKH GNJ77 ! I T NH JQHNG+
X HT O O T J 9MJQH NHP! HP! 2 GM O 6 M! OP9 QHNG ! N I P \R
!- NH !U I T 9 O 7 T J OP9 QHN ! N ! I M! HMN 9P! NP!D P! NP NM ! I P! N NHP L9MTP G GHM99 PKP P 7 I T J P K NPO HNHP I ! NHP MT8 M!O H NHP M P NHPT K I !Q N 77P T J GP KP+
" P NHMN L9MTG NHP U !Q GHM99 AP P9K I P8 H G I MEPGNT GHM99 HM P N AJNP 7 I P NHP MO P!NJ JG U! QHN GHM99 JGP H G 7 9 M!O NM QPN NHP 9 P GHM99 ! N G QH Q MN G8 NHP HJ I JG I M!GHM99 P!O H G LM N ! LPMKP NHP K9 ! GHM99 I MUP NH GP 9MJQH H GP 9J!QG M P N KU9PO % NHP GP P8F M!O NHP 9MOT GHM99 GMT HP I !O 7 PP9T NHP A9M!U P GF GHM99 HM9N 7 %+ S X HMN L9MTP G M P NHPT \
!- 3 P! NH GP T J P P !N N NMUP OP9 QHN ! NHP N MQPO M!G 7 NHP K NT+
" KHM!KPG N NHPT N M P9 \ NHP PG OP!KP A NH ! PLJNMN !M!O L 7 N MG APNNP A NH MTP+
!- 2 NH !U NHP ! H A N ! K I PG AT NHP I PM!G 7 NHP 9MNP ! ! MN !+
5 NHPT H 9O NHP GM I P PGN I MN ! NHPT O O HP! 2 MG ! NHP K NT \ # P NHPT +$ 7 99 PO \
!- ! OPPO NHPT M P ! N+
" O I PG N \ 5 NHPT Q JGNT \
!- MT NHP P!OPM J UPPLG ! NHP !NPO LMKP + JN NHP P G G M! M P T 7 KH 9O P! 9 NN9P PTMGPG NHMN K T JN ! NHP N L 7] JPGN ! M!O M P I GN NT M! ! KM99T K9MLLPO 7 %N NHPGP M P ! NHP 7MGH !8 M!O G AP MNN9P NHP K I I !GNMQPG @G NHPT KM99 NHP I NHMN I M! T PM !Q ML P G M P M7 M O 7 Q GP]J 99G M!O OM P GKM KP K I P NH NHP +
X HMN M P NHPT KH 9O P! \ H I M !NM !G NHP I \ H M P NHPT PGK NPO \ X 99 NHPT LJ GJP NHP]JM9 NT ! 9 !QP NHM! NHPT KM! G !Q \ 99 NHPT ! N GMT M7NP M OG 7 NHPT GH J9O Q NHP I GP9 PG N K I I ! L9MTP G @MG N G 9 UP I GN 7 NHP I PM!G M P ! APNNP NHP NP G O NHP I !Q N I MUP NHP I PWK9M I MQM !GN NHP ! GJKKPGG ! \
!- $OM NH NHP i HMG APP! I JKH N O ! A NH G OPG 8 M!O NHP ! MN !H 9OG N ! G ! N NM P NHP I N K !N P GT F NHP P MG 7 M H 9P ! I !PT A O 7 M QJ I P!N J!9PGG NHP L PN M!O NHP L9MTP P!N N KJ77G ! NHP]JPGN !+
2 G N L GG A9P \
& 1 NHP P HMG APP! I JKH NH !Q MA JN 7 A M !G+
5 NHP A TG KM T N M MT \

?J! GMN 6 K K9PO NH K I PNG M!O 7 P T I PNP G+R HP ! NG NH PP PQ !G % N " M I 9PN ! NHP NH !Q 6 NHM! M 7 J9 M!O LPGN 9P! N K !Q PQMN ! 7 ML J G+R 27 NH G !NP L PNMN ! AP K PKN NHP O H KH G MLL9 PO N NHP HPM P!G QP!P M99T I QHN HM P APP! PEPKNPO AT NHP L PN MG K ! PT !Q M! I MQP J!GJ NPO N NHMN OPM 7 M LM N H KH G K ! PTPO AT NHP GJA GNM!N P 0 $
GLM !Q 9 UP 7M P ! / P!N+
F S P N U P!NG OP AT GOPS7 I (
F HP]JM N 7 PMOG 6 NHMN M P N KU9PO ! NHP 9J!QG+R HP % G M O T M77PKN ! 7 NHP NH MN AT H KH NHP 9J!QG M P N KU9PO8 AJN NHP K9 ! L UPG 9MJQHNP P P!7 I NH GP H HMA NJM99T K JQH+
% %(SDLMO ?HP %(%$ SNHP K ! KMGN O ! S G NHP GHM P 7 M!T K I I ! KHM QP LM O AT M! !O OJM9+ HP O P!KH %(G N LMT NHP GK N+ " P!KP 6 GK N M!O 9 N+R $
2!G I P I PO N !G 6 N M P N9 P I B HP 7 9 HMG ! N 2!? H!@#KN2 + K+ 22+ P HM P S
6 / UP M O Q NHMN G K I LP99O N 7 QHN+
MNKH MN H G I MGNP NHMN O NH NM P H I !+R +
91 G N PWMGLP MNP 7 I NHP # !Q9 MW !

i-' #T'NHMN'NHPT'O ' IT'9 O8 "PKJ9PG'MIO'HG'9 MO'
N +
6 '2N' G i N' GN MIQP8D' 7 ' I IP'JIK9P' G U IQ' 7
5PIIM U8' MIO'NH GP' NHMN' J9O' IMUP' I PG.;MN'H I'
H9P' IT'7MNHP'9 PO';Q P' N piNT'7 NT' MI' HJIO PO'
OJKMNG'ML PKP'7 'HGL KNJ P' i'9 NNQP+' HP P' G G IPNH IQ'
i'NH G' I P'NHMI'iMNJ M9' 7'LH9 G LHT'K J9O'7 IO' N' JN+
=> i& -'i.' &, -'U2
& ' HP P'M P'NHP'L9MTP G+
' :piN9PIPI'T J'M P' P9K IP' N '3GG i P+' 4 J'
HMIOG+' IP'NHP'MLLJ NPIMIKP' 7 P9K IP' G 7MGH i'
MIO'KP pI iT'9PN' IP'K ILGT' NH'T J' i'NHP'QM A8 9PGN'
IT'PWNPIN'N 'NHP'L9MTP G' HKH'2'NP99'T J' IJGN'GH '
7M 9T' JN M O' GH J9O' I P' MLLPM'9 UP' piNP NM I IPIN'
NHMI'7 J G+ 4 J'M P' P9K IP' AJN' ITJiK9P 7MNHP 'MIO'
MJIN I NHP 'M P'OPKP PO+
& '2I' HMN'IT'OPM'9 O'\
') MI'AJN' IMO'I NH i NH PGN' HPI'NHP' IO'
G'G JNHP 9T'2'UI 'M'HM U'7 I'M'HMIOGM +

'-1/1 2V? +

>i 'XP99 AP' NH'T J';QPIN9P I PI[
'"M U'T J';J 9OPIGNP i SMIO'T J'N 8SMN'PMKH'
PM'M'HPM P 8 NHMN'Q PMN'AMAT'T J'GPP'NHP P'G i N'TPN' JN'
7H G'G MNH IQ'DK9 JNG+
i-';"MLL 9T'HP%G'NHP'GPK IO'N I P'K IP'N'NHPI 8 7 '
NHPT'GMT'MI' 9O'IMI'G'N KP'M'KH 9O+
';2' 99'L LHPGT+' "P'K I PG'N 'NP99'IP' 7'NHP'
L9MTP G8 IM U' N+S4 J'GMT'QHN'G '; % iOMT'I i_
IQ'8 %N MG'G ' iOPPO+
i ' T'9 O'2'HM P'ip G'N 'NP99'T J+
' T'9 O'2'HM P'ip G'N 'NP99'T J+' XHPi'& GK JG
MG'MI'MKN ' i'& IP FS
i ' HP'MKN G'M P'K IP'H NHP ' IT'9 O+

6'2N'KMI P'N 'LMGG+'#G I GN'9 UP' N' MG+R

HP'7 GN' ' 7'NHP'L JG'KHMiG i' 99'GH 'T J'I P'NF+
7 '9 U' HP P'IT'MA OQIPING'K IP+

D2i'JMN G' 2'GN MIQP+
D2i'JMN G' $%"' HP' 8 % 7'NHP'7 9 ' G I P' HMUGLP MI'MG i' HP'
PILPGN S
6' IPN IPG'9 UP'MLPG'NMNM' 'MIO'KHMNNP'MN'I P+R

'9 % 8SNHP'K JLN i'i'NH G'L P A M9' PWL PGG i' '7 $ %$ 8S$ H'
%$ 8*N'HP i+' 2i' LPiGP' P'HM PS

6'#G HPi'N'KMGN' 7'M9K IG I MOP'NHP '79 QHN'
$ #N'MI'HP IPGHM +R

'>i&'i'>1'-9MTP G+

4 J'M P' P9K IP'IMGNP G8 P9K IP'M99 S2'MI'Q9MO'N '
GPP'NHPP' P99 S P9K IP'Q O'7 PIOG+S1'IT'9O'7 PIO[
HT'7MKP' G M9 MIN'FG IKP'2'GM 'NHPP'9MGN8 1%N'NH J'N'
APM O'IP' i'5PIIM U'\SDXHM[IT'T JIQ'9MOT'MIO'I G
N PGG'[T%';9MOT'T J';9MOTGH L' G IPM P';HPM pi';NHMI'
HPi'2'GM 'T J'9MGN'AT'NHP'M9N NJOP'7'M'KH L IP+F' -MT'
: O'T J' KP';9 UP'M'L PKP'7'JiKJ piN'Q 9O'AP'i N
K MKUPO' NH i';NHP' iQ+DS MGNP G'T J'M P'M99' P9K IP+
XP%9Y'P%Pi'N %'9 UP'O piKH'7M9K IP G'79T'MN'MITNH iQ' P'
GPP' XP%9Y HM P'M'GLPPKH'GN M QHN' IP'Q P'JG'M'NMGNP'
7T J']JM9 NT8 K IP'M'LMGG iMN'P'GLPPK+
7' 5' XHMN'GLPPKH'IT'9 O'\
' 2'HPM O'NHPP'GLPMU'IP'M'GLPPKH' iKP SAJN' N' MG'
ip p'MKNPO8 '7' N' MG'i N'MA P' iKP8 7 'NHP'L9MT'2'
plPlAP'L9PMGPO'i N'NHP' I 99 i8 %N MG'KM M P'N 'NHP'
QPIP M9 F'AJN' N' MG+'@MG'2'PKP PO'N'MIO'NHP G' H GP'
EJOQ IPING'i'GJKH IMNNP G'K PO' i'NHP'N L' 7 I IP 'MI'
PWKP99PIN' L9MT8 P99 O QPGNPO' i'NHP'GKPIPG8 GPN' O i'
5 O'i NH iQ+
JN'MG P' 7NPi'GPP'MQM iGN'G IP'GN I
#'G 9PIKP' i'NHP'HPM PIG'NHP' MKU'GNMIO'GN
HP'A 9O' iOG'GLPPKH9PGG'MIO'NHP' A'AP9 '
#G'HJGH'MG OPMNH' Mi i'NHP'O PMO7J9'NHJIOP' +
5 NH' PIO'NHP' PQ i'' 'N7NP'-HJG%LMJGP'
#' JGPO' PIQPMIKP'GPNG'H I'IP 'N' U8
#iO'IP P'O O'NHP' TK9 LG%HMI I P G'7M99'
1I' M G%G'M I J'7 Q%O'7 'L 7'PNPI P+

'48 $ 'i'7 9'8 i']JM N G'%8 '
P HP'7 9 ' I NG 8 %
P' ' 'i'7 9 ' HKH' G' iNP L PNO' '2' HP']JM N 'HMG " ' (0
HKH' G'PWL9M IPO'6'7 iQPG' NH'M'APM O+R
3 '' %S AM9O T+
'5 ' %S PO' i'HP M9O K'L9i MGP+
F (0 SLM iNPO8 M9G'M O' i'HP M9O T+
' ' $ %' i'NHP'7 9 '8 i']JM N G'' '%' $
1/+ 22+

HP' JQQPO'-T HJG SHP' H GP'GMA9P'M IG+
9MKU'MG'H G'LJ L GP'O O'NHP'i QHN' PGP'IA9P'
X HPi'HP'9MT'K JKHPO' i'NHP' I i JG'H GP+
"MNH'i ',NH G'O PMO'MIO'A9MKU'K ILQPW i'G IPM %O'

HP' JQQPO'-T HJG $9 UP'NHP' "T KMI MI'APMGN S

%N G i N'G '8 N'APQ iG NH'-T HJG+

X NH 9PGG P I GP NHM! -T HJG% A9PPO !Q G O
7M99G !- M I +S
1JN JN NH J GN J I LPN 0 NJ!P [#99 T J Q OG+
2!QP!P MG GT! O NMUP M MT HP L P 8
PMU M99 NHP GL UPG M!O 7P99 PG 7 I HP HPP9+
#!O A G NHP J!O !M P O !NHP H 99 7HPM P!+
#G 9 MG N NHP 7 P!OG+

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; + : (- +* + : % 9-29%28(; +:1* '2 9%-20 A 2 + : %% (-1 *,' A %8(*2 -. < T *2 -+- % * 9- ; 021 *2 : % (%%B (A (-1 *,' @* % +* %@'9-

F' 2 JN H 1 H HMO GPP! NHP I A9PO]JPP!

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2 O9MT + &J! AM P7 N JL M!O O ! NH PMN%! !Q NHP 79M I P
2 X NH A GG ! HPJ I 8 M K9 JN MA JN NHMN HPMO+
X HP P 9MNP NHP O MOP I GN O 8 M!O 7 M AP+
#A JN HP 9M!U M!O M99 %P NPP I PO 9 !G
#A9M!UPN ! NHP M9M J I 7 7PM KMJQHN JL 8
X H NH G HMO GPP! NH N !QJP ! P! I GNPPL%O
%: M !GN 7 NJ!P%G GNMNP J9O N PMG !HM P L ! J!K%O
JN 7 NHP Q OG NHP I GP9 PG O O GPP HP NHP!+
X HP! GHP GM -T HJG I MUP I M9 K JG GL N
2! I !K !Q NH H G G O HP HJGAM!O%G 9 I AG+
HP !GNM! N AJ GN 7 K9M I J NHMN GHP I MOP
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) * ' O : -7% -O% @:' + : % 9 ' 2 , , < %1% (* : %-7% ,
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$ A SM 9JO K JG !NP 9JOP+
F "' H G G NHP PMO !Q 7]JM N G E + M!O E3+ 2 ! NHP 7 9 P HM P
"' # H KH G P HM P 9 NN9P O JAN M I GL !N 2 ! NHP 7 9 7 NHP
Q ! M9 PMO !Q MG PGN PO "' # > *"' # G HMGN 9T ' JL HP
I A9PO E 9JPP! HMG
6 # K9 JN MA JN NHMN HPMO
. X HP P 9MNP NHP O MOP I GN O+R
2! M!OTG%G 6 M P9GR P HM P 6 NHP HPMOG M!O 7MKPG ' ! 7 !P 9 !P!+R
"# G N O PGG KM P9PGG9T8 M "' G M K P !Q 7 NHP HPMO SM K9 GP
K P !Q MKK O !Q N G I P SM "' ' K P !Q I P L AMA9T+
F "% (! NHP ' ; M! NHP PMO !Q G "% (# MOEPKN P9T+
3 ! NHP 7 9 8 !]JM N G ($ APNNP +

0 " PKJAM[
, X HMN%G " PKJAM N H I HP N " PKJAM
HMN HP GH J9O PPL 7 HP) X HMN J9O HP O +
" MO HP NHP I N P M!O NHP KJP 7 LMGG !
HMN 2 HM P \ " P J9O O ! NHP GNMQP NH NPM G+
#!O K9PM P NHP QP!P MG PM NH H O GLPPKH8
MUP I MO NHP QJ 9NT M!O MLLMG NHP 7 PP %
!7 J!O NHP Q ! M! N8 M!O M I MCP ! OPPO
HP P T 7MKJ9N PG 7 PTPG M!O PM G+
4 PN
#OJ99 M!O I JOOT I PNN9PO MGKM9 LPMU+
/ UP ? H! M O PM I G F J!L PQ!M! N 7 I T KMJGP
#!O KM! GMT ! NH !Q 8 ! ! N 7 M U !Q+
L ! H GP L LP NT M!O I GN OPM 9 7P
#OM I !%O OP7PMN MG I MOP # I 2 M K M O \
X H KM99G I P 99M ! \ A PMUG I T LMNP MK GG \
-9JKUG 77 I T APM O M!O A9 G N ! I T 7MKP \
PMUG I P AT NHP ! GP \ Q PG I P NHP 9 P %NHP NH MN+
#G OPPL MG N NHP 9J!QG \ X H O PG I P NH G \
" M[
X HT 2 GH J9O NMUP N 7 N KM! ! N AP+
JN 2 M I L QP ! 9 P %O M!O 9MKU QM99
I MUP LL PGG ! A NNP 8 P P NH G
2 H J9O HM P MNNPO M99 NHP PQ ! U NPG
X NH NH G G9M P%G 77M9 9 OT AM OT 99M ! [
&P I GOPGG N PMKHP JG 9PKHP JG U !O9PGG 99M ! [
P!QPM!KP
X HMN M! MGG M I T GJ P NH G G I GN A M P
HMN 2 NHP G ! 7 NHP OPM I J NHP PO DF
- I LNPO N I T P P!QP AT HPM P! M!O HP99+
JGN 9 UP M H P J!LMKU I T HPM N NH OG+
#!O 7M99 M KJ G !Q 9 UP M P T O MA+
#GKJ99 ! 2
O P JL ! %N 2 7 A # A JN I T A M !G 2 2 HM P HPM O+
HMN B MC E ODG?CBDG CC H ?C ?K M?E
" M P AT NHP P T KJ ! ! !Q 7 NHP GKP!P
PP! GN JKU G N NHP G J9 NHMN L PGP!N9T
HPTRHM P L K9M I %O NHP I M9P7MKN !G8
O I J NHP NH JQH N HM P ! N !QJP 99 GLPMU
X NH I GN I MKJ9 JG QM! 2%99 HM P NHPGP L9MTP G
-9MT G I PNH !Q 9 UP NHP I J OP 7 I T 7MNHP +
P7 P I ! P J!K9P 2%99 AGP P H G 9 UG 8
2%99 NP! N H I N NHP] J KU 8 7 HP AJN A9P!KH
U! I T K J GP HP GL N NHMN 2 HM P GPP!
MT AP NHP OP 9 M!O NHP OP 9 HMNH L P
MGGJ I P M L9PMG !Q GHMLP 8 TPM M!O LP HMLG+
1JN 7 I T PMU!PGG M!O I T I P9M!KH 9T
@#G FG G PGDE KACGHC J CF BOF K D C
#AJGPG I P N OM I ! I P 2%99 HM P Q J!OG
P P9MN P NHM! NH G HP L9MT%G NHP NH !Q+
X HP P ! 2%99 KMNKH NHP K !GK P!KP 7 NHP U !Q + 4

3 3 B T ! ! - &E : 9 ((, " # + "' (
3 # !O KM! T J AT ! O 7N 7 K KJ I GNM!KP D[
: PN 7 I H I HT HP LJNG ! NH G K !7JG ! 8
) &$ ' ! 7 9 8 !]JM N G 8
F & G ! NHP]JM N G 8 NHP 7 9 8 G
% F S7 PP 7 I 7P!KP+
$ F2 $! ! % SM G A]JPN 7 M HPM T 9PNHM Q K 7P99 +
F NHP 7 9 HP]JM N G I NN !Q NHP GH N 9 !P 6 P!QPM!KP [R PMO S
6 X HT HMN M! MGG M I 2 [H G G I GN A M P+R
NHP 7 9 8 NHP]JM N G 6 M OPM 7MNHP I J OP %O+R HP PEPKN I AT G IP PO N G 7NHP APMJN7J9 PMO !O 7 6 NHP OPM I J NHP PO J9O AP J!MKK J!N MA9P 7 PO Q ! N GPP H LP N !MK JG9T NHPGP HM P N PMNPO NHP 7 9 7 MG 7 ! MJNH NT+
J (% (! 7 9 8 !]JM N G ((

: MN iQ'G 'HM GH9T'M99'H G'OMTG' 7]J PN'
X NH'NJ AJ9PIN'MiO'OMiQP JG'9JiMT'\
i-' "P'O PG'K i7PGG'HP'7PP9G'H 1GP97'O GN MKNPO8
JN'7 1' HMN'KMJGP'HP' 99'AT'i 'IPMiG'GLPMU+
&' 'O' P'7iO'H 1'7 MO'N'AP'G JiOPO8
JN D NH'M'K M7NT'IMOIPGG'UPPLG'M9 7
XHPi' P' J9O'A iQ'H 1' i'N'G 1P'K i7PGG i'
17H G N JP'GNMNP+
<& ' 5O'HP' PKP P'T J' P99\
i-' GN9 UP'M'QPiN9P1MI+
& ' JN' NH'1JKH'7 KiQ' 7HGO GL G N i+
i-' QQM O' 7]JPGN i8 AJN' 7 J'OP1MiOG+
GN'7 PP' i'H G' PL9T+
<& ' 5O'T J'MGGMT'H 1
'MiT'LMGN 1P'\
i-' MOM1 ' N'G '7P99' JN'NHMN'KP NM i'L9MTP G
X P' %P MJQHN' i'NHP' MT' 7NHPGP' P'N 9O'H 18
#iO'NHP P'O O'GPP1' i'H 1'M'U iO' 7E T'
'HPM' 7 N' HPT'M P'MA JN'NHP'K J N8
#iO'MG 2'NH iU'NHPT'HM P'M9 PMOT' OP'
H G i QHN'N 'L9MT'AP7 P'H 1+
i ' % G' 1 GN'N JP'
#iO'HP'APGPPKH%O' 1P'N 'piN PMN'T J'1MEPGN PG+
'HPM'MiO'GPP'NHP'1MNNP +
3' X NH'M99'1T'HPM N8 MiO' N'O NH'1JKH'K iNPiN'1P'
'HPM'H 1'G 'ik9 i%O+
: O'QPiN9P1pi'Q P'H 1'M'7J NHP'POQP+
#iO'O P'H G'LJ L GP' i'N 'NHPGP'OP9 QHNG+
i-' XP'GHM99'1T'9 O+
+ 4 & 'O i 1D' "' ' '
3' PPN' :P N JOP'9PM P'JG N '
O ' P'HM P'K9 GP9T'GPiN'7 '"M19PN'H NHP 8
HMN'HP'MG'%' P P'AT'MKK OPiN'1MT'HP P'
#77 iN'1LHP9 M+
"P'7MNHP 'MiO'1TGP97'@9M 7J9'PGL M9G

% G'N 'IJKH'L %O'NHMN' NH'OP N i%G GMQP+
#iO'L JG'MKN i' P'O 'GJQM' %P'
HP'OP 9'H 1GP97+
3' 1'%G'N 'N JP[
" 'G1M N'M'9MGH'NHMN'GLPPKH'O NH'Q P'1T'K iGK PiKP'
HP'HM 9 N%G'KHPPU'APMJN PO' NH'L9MGN% iQ'M N''
2G'G KU9 PO' %P' NH'NHP'LM9P'KMGN' 7NH JQHN8
#iO'piNP L GPG' 7Q PM'L NH'MiO'I lPiN+
X NH'NH G' PQM O'NHP 'KJ piNG'NJ i'M MT F
#iO'9 GP'NHP'iM1P% 7MKN i8S 7N'T J'i [
HP'7M '1LHP9M S TILH' i'NHT' G iG'
P'M99'1T'G iG'PlP1AP %O+
' O1T'9 O+
: .O PGT J'H i J'7 'NH G'IMi T'M'OMT'\
% 'O PGT J'H i J'7 'NH G'IMi T'M'OMT'\
'2'HJ1A9T'NHMiU'T J8 P99' P99' P99+DDD
' T'9 O'2'HM P'PlP1AMiKPG'7T J G+
HMN'2'HM P'9 iQPO'9 iQ'N' P OP9 P 8
'L MT'T J'i 'PKP P'NHP7i+
' 'i ‡ 2'ip p'QM P'T J'MJQHN+
' T'H i J %O'9 O'2'Ui ' QHN' P99'T J'O O8
#iO' NH'NHPl' OG'7G'G PPN'A PMNH'K IL G%O'
#G IMOP'NHP'NH iQG'I P' KH'NHP 'LP7JlP'9 GN+
MUP'NHPGP'MQM i'8 7 'N 'NHP'i A9P'I iO+

' i'NHP]JM N G‡ 2i'NHP7 ' P'HM P'6'NHP- ' 1Mi%G'K iNJ1P9T R5'
NHP'K iNJ1P9T' H'KH'NHP'L 'IMi'APM G‡ X P'PNM i' P'PMO iQ' 7NHP']JM N G'
7 'NHP'MiG N i'G'MA JLN'7 1'NHP' iQ' H'KH'NHP' LL PGG ' A'(%'N 'NHP'
K iNJ1P9T' H'KH'NHP'L 'IMi'% %' <
F %- D0'i'NHP'7 9 '8 i']JMTN G' %-%0
%'3) SM'G1M99'G O‡ GPGM' G GL Upi' 7' AT' 9K NP G' MG G9M i'AT
A OUiG+
D $%' i'7 9 'AJN'H N' i']JM N G‡ $
F5 ' 'NHP' Q iM9G‡' HP'LGMTP'G' i'NHP 'G]JPMI GHipGG'M9 MTG Q P
J AP P' N iTHJ GN'MiO' NHP' NP'JL i'JG‡ 5 'G JGPO' 7 '9 JO' 9MIpIN'AT'
J9O' KP'NM i9T' i79KN' - %- 'JL i'JG‡ 5 'G JGPO' 7 '9 JO' 9MIpIN'AT'
O PKN'7 1'NH#'#iQ9 MW i'
8 2'i'7 9 '8 i']JM N G' 8 2
H G'PLPN N i'6 'P99' P99' P99R'HMG'Appi' PEPKNPO'AT'NHP'PM 9 p'PO N G
2N'G i N'i'NH']JM N G‡ +

(`7

[›

& KH‹Q 7NG MW‚L ‚ H i'Q p G‚L p‚J1U i O+
HP p'‚I T'9 O+
O ‘ "M'HM[M p'T J'H ipGN'\
‚ ‘ T'9 O'\
‚ ‘ # p'T J'7M '\
‚ ‘ XHMN'IPMiG T J'9 OGH L'\ G
‚ HMN‘ 7 T J'AP'H ipGN'MiO'7M ‘T J'H ipGNTD'
GH J9O'MOI N'i'O GK J GP'N'T J'APMJNT+
‚ J9O'APMJNT'‚IT'9 O'HM p'APNNP'K I I p KP'NHMi'
NH'H ipGNT
‚ #T'N J9TB' 7 'NHP'L p'‚ 7 APMJNT 9G G ip'
N MiG7 ‚I'H ipGNT'7 ‚I' HMN'N G N'M'AM O'NHMi'NHP'7 KP'
HP'pWLPKNMiKT'MiO' GP'7NHP'7M 'GNMNP+
HP'Q9MGG'7'7MGH i'MiO'NHP'I J9O'7'7 I+
HP' AGP %O'7M99' AGP p G[ ]J NP'] J NP'O i'[
#iO'2' 7 9MO PG'I GN'OPEPKN'M O' PNKHPO+
HMN'GJKU%O'NHP'H ipT'7H G'I JG K' G+
‚ GPP'NHMN'i A9P'MiO'I GN'G p p Q i'PMG i+
/ UP'G ppN'AP99G'EMiQ9PO' JN'7NJip'MiO'HM GH'
HMN'JiI MNKH%O'7 I'MiO'7PMNJ P'7A9 i'T JNH+
9MGNPO' NH'PKGNMGT'1' P'G I P[
'HM P'GPPi' HMN'2'HM P'GPPi';GP'HMN'2'GPP[

3'/ P[H G'M77PKN iGO'i N'NHMN' MT'NPiO8

¨D I '$ %2'i'NHP'7 9 8 i'NHP']JM N G'2
‚ $'$ %2' H G'GNHP'PMO'iQ'7 N9P']JM N G+ HP'7 9 ' HMG ==2 '
9 ipGNT+%%
'9 ' $'i'NHP'7 9 '8 i'NHP']JM N G' '$ '$
' HP' PMO iQ' 7 NHP'7 9 ' G' 62' HM P HPM O' 7 T J'- ' %' NF ' P99
pi JQH+ : O' HMNH' Q pi'T J' ip- (*G= ((' HP K iNPW' i' G IP OPQ PP'
EJGN7PG'NHP'KHMiQP' 7'NDP'7 9 + 6'4 J€Q'MiO T J'MiA9P'R;ST J Q'N LL iQ9T
‚

MiO I ikiQ9T' i'T J'QM N @MG NHP'OMJQHNP G 7 i'M P'GM O' i'2GM MH'N ' K IP
i'N LL iQ'G'i KP9T' NH'NHP '7PPN'R SIMT P7P';N -(*MG'6'T J'9 GL'MiO' T J'
iKUIMIP : O%G K PWJ PG'R'IMT N'- ' %' p p NHP9PGG' P'NH iU' NH'
? HiG i'NHNW' HWUGLP P' NP'A NH'- %'MiO' ('7 GN'- ' %'MiO'- ('
9WNPGN' #G'M']JPGN i'7MGNP' P'L P7P';N ' PNM i'NHP'7 GN' PMO iQ+
FO iO'H I'i N'
$ ' i'7 9 8 i']JM N G'2
F9 ' i'7 9 8 i']JM N G'%

‚ LPMU'NHP'GLPPKH';2'L MT'T J';MG'2'L i JiKPO'N
N';T J'N LL iQ'T i'NHP'N iQJP8 AJN'7'T J I JNH'N';MG
IMI'7 7 T J'L9MTP G O ';2'HMO'MG'9 P7'NHP'N i K P';HMO'
GL UP'IT'9 IPG+' 'O'i N'GM 'NHP'M 'N 'IJKHST J'
HMiO'NHJG'AJN'JGP'M99'QPiN9T'7 ';i'NHP' P T'N piN'
NPILPGN';MiO'@MG 2'IMT'GMT';NHPD' H 9 iO' 7'LMGG i'
T J'IJGN'MK]J P'MiO'APQPN'N'NPILP MiKP';NHMN'IMT'Q P'
N'GI NHipGG+' 1';N'77piOG IP'N';NHP'G J9';N';GPPF=M'
AJGN JG'LP Q LMNPO'7P99 ';NPM';N'LMGG i';N ';NMNNP G'
N';P T'MQG'N';GL9 N'NHP'PM G'7NHP'Q JiO9 iQG8 H '7'
NHP'I GN'LM N'M P'KMLMA9P'7 i NH iQ'AJN'ipWL9 KMA9P'
OJIA'GH G'MiO'i GP';2'K J9O'HM P'GJKH'M7P99 ';H LLPO'
7 ';%P O iQ' p I MQMiN8 N' JN HP OG"'p O'L MT'T J'
M O'N+
2 5'2' M MiN'T J'H i J+
' P'i N' 'NM I'P IP NHP 'AJN'9PN'T J' i'O G
K PN i'AP'T J'NJN 8 GJ N'NHP'MKN i'N 'NHP' O'NHP
O'N 'NHP'MKN i8 NH'NH G'GLPK M9' AGP MiKP'NHMN'T J'
%P GNPL'i N'NHP I OPGNT'7iMNJ P8 7 'MiTNH iQ'G ' P
O ip'G 7 I'NHP'LJ L GP'7L9MT iQ' H GP'piO'A NH'MN'
NHP'7 GN'MiO'i ' MG'MiO'G'N'H 9O'MG'%W P P'NHP'
I 'JL'N 'iMNJ P8 N'GH ' NJP'HP ' i'7PMJ P'GK i'
HP' i'IMQP'MiO'NHP' P T'MQP'MiO'A OT'7NHP'N IP'H G'
7 I'MiO'L PGGJ P+' 'NH G' P O ip' 'K IP'NM OT'
77'NH JQH'N'IMUP'NHP'JiGU 97J9 9MJQH'KMii N'AJN'IMUP'
NHP'EJO K JG'Q P P8 NHP'KPiGJ P'7NHP'HKH'ip'IJGN'
i'T J'MiKP' %P P QH'M' H 9P'NHPMN P'7'NHP G+'
1'NHP P'AP'L9MTP G'NMN'2'HM P'GPPi'L9MT'MiO'HPM O'
NHP G L M GP'MiO'NHMN'H QH9T'i N'N'GLPMU'N L 7MIP9T'
9 PO'NHMN'2'HM P'NH JQHN'G IP'7 MNJ P%G'E J IPTIPI
MiO I ikiQ9T' i'T J'QM N'@MG NHP'OMJQHNP G 7 i'M P'GM O' i'2GM MH'N ' K IP
i'N LL iQ'G'i KP9T' NH'NHP '7PPN'R SIMT P7P';N -(*MG'6'T J'9 GL'MiO' T J
iKUIMIP : O%G K PWJ PG'R'IMT N'- ' %' p p NHP9PGG' P'NH iU' NH'
? HiG i'NHNW' HWUGLP P' NP'A NH'- %'MiO' ('7 GN'- ' %'MiO'- ('
9WNPGN' #G'M']JPGN i'7MGNP' P'L P7P';N ' PNM i'NHP'7 GN' PMO iQ+
FO iO'H I'i N'
$ ' i'7 9 8 i']JM N G'2
F9 ' i'7 9 8 i']JM N G'%

3'22 F ' ' '- ' ' M?EGD
+ ' 1 ' "' '
MOIPGG' i'Q PMN' IPG I JGN'i N'JI MNKH%O'Q ' = 4 &
2N'GHM99'AP'G '
3'
GO I'APGN'GHM99'NH iU+
4 J' 3'Q9MiO'GPiO'H I'' 'K i7 iP'H I ' HP P'
1'M99'NHP 'K i7P piKP'8 27'GHP'7 iO'H I'i N F
'3'iQ9MiO'GPiO'H I'' 'K i7 iP'H I ' HP P'
?iO'2%99'AP'L9MK%O'G 'L9PMGP'T J' i'NHP'PM'
'GH 'H G'Q P7G'8 9PN'HP'AP' JiO' NH'H I'8
/PN'H G']JPPi'I NHP'M99'M9 iP'PiN PMN'H I'
JN'7'T J'H 9O'N'7N'M7NP'NHP'L9MT+
4 J'IPPO'i N'NP99'JG' HMN'9 O'"MI 9PN'GM O'8
XP'HPM O'N'M99+S T'9 O'O'MG'T J'L9PMGP8
L JiQ'7 I'IPQ9PKNPO'9 P+S" 'i '1LHP9M
HP' Q i'MiO'K I IPiKPIPiN'7NH G'Q P7'
i '2N'GHM99'O ' P99B AJN'TPN'O'2'AP9 P P+
O I'7MGH i' 7H I GP97+' XHMN'NH iU'T J' i%'\
NHP'I GN'LM N'M P'KMLMA9P' 7 i NH iQ' AJN' ipWL9 KMA9P'
OJIA'GH G'MiO'i GP';2'K J9O'HM P'GJKH'M7P99 ';H LLPO'
7 ';%P O iQ' p I MQMiN8 N' JN HP OG"'p O'L MT'T J'
M O'N+
HJG'GPN N'O i';"P'GHM99' NH'GLPPO'N '3iQ9MiO
O 'NHP'OPIMiO' 7 J'ipQ9PKNPO'N AJNP
"ML9T'NHP'GPMG'MiO'K JiN PG'O 77P piN+
X NH' M MA9P' AEPKNG'GHM99' pWLP9
H G G IPNH iQ GPNN9PO'I MNNP ';i'H G HPM N8
XHP P i'H G'A M iG'GN 99' APMN iQ';LJNG'H I';NHJG'
O I'7MGH i' 7H I GP97+' XHMN'NH iU'T J' i%'\
NHP'I GN'LM N'M P'KMLMA9P' 7 i NH iQ' AJN' ipWL9 KMA9P'
OJIA'GH G'MiO'i GP';2'K J9O'HM P'GJKH'M7P99 ';H LLPO'
7 ';%P O iQ' p I MQMiN8 N' JN HP OG"'p O'L MT'T J'
M O'N+
2 5'2' M MiN'T J'H i J+
' P'i N' 'NM I'P IP NHP 'AJN' 9PN'T J' i'O G
K PN i'AP'T J'NJN 8 GJ N'NHP'MKN i'N 'NHP' O'NHP
O'N 'NHP'MKN i8 NH'NH G'GLPK M9' AGP MiKP'NHMN'T J'
%P GNPL'i N'NHP I OPGNT'7iMNJ P8 7 'MiTNH iQ'G ' P
O ip'G 7 I'NHP'LJ L GP'7L9MT iQ' H GP'piO'A NH'MN'
NHP'7 GN'MiO'i ' MG'MiO'G'N'H 9O'MG'%W P P'NHP'
I 'JL'N 'iMNJ P8 N'GH ' NJP'HP ' i'7PMJ P'GK i'
HP' i'IMQP'MiO'NHP' P T'MQP'MiO'A OT'7NHP'N IP'H G'
7 I'MiO'L PGGJ P+' 'NH G' P O ip' 'K IP'NM OT'
77'NH JQH'N'IMUP'NHP'JiGU 97J9 9MJQH'KMii N'AJN'IMUP'
NHP'EJO K JG'Q P P8 NHP'KPiGJ P'7NHP'HKH'ip'IJGN'
i'T J'MiKP' %P P QH'M' H 9P'NHPMN P'7'NHP G+'
1'NHP P'AP'L9MTP G'NMN'2'HM P'GPPi'L9MT'MiO'HPM O'
NHP G L M GP'MiO'NHMN'H QH9T'i N'N'GLPMU'N L 7MIP9T'
9 PO'NHMN'2'HM P'NH JQHN'G IP'7 MNJ P%G'E J IPTIPI
MiO I ikiQ9T' i'T J'QM N'@MG NHP'OMJQHNP G 7 i'M P'GM O' i'2GM MH'N ' K IP
i'N LL iQ'G'i KP9T' NH'NHP '7PPN'R SIMT P7P';N -(*MG'6'T J'9 GL'MiO' T J
iKUIMIP : O%G K PWJ PG'R'IMT N'- ' %' p p NHP9PGG' P'NH iU' NH'
? HiG i'NHNW' HWUGLP P' NP'A NH'- %'MiO' ('7 GN'- ' %'MiO'- ('
9WNPGN' #G'M']JPGN i'7MGNP' P'L P7P';N ' PNM i'NHP'7 GN' PMO iQ+
FO iO'H I'i N'
$ ' i'7 9 8 i']JM N G'2
F9 ' i'7 9 8 i']JM N G'%

HMO I MOP I P! M!O ! N I MOP NHP I P99 NHPT I NMNPO HJ I M! NT G MA I !MA9T+
2 5 2 H LP P HM P P7 I PO NHMN !O 77P P!N9T D NH JG G +
1 P7 I N M9N QPNHP # !O 9PN NH GP NHMN L9MT T J K9 !G GLPMU ! I P NHM! G GPN O !7 NHP I 7 NHP P AP 7 NHP I NHMN 99 NHP I GP9 PG 9MJQH N GPN ! G I P]JM!N NT 7 AM P!' GLPKNMN G N 9MJQH N # NH JQH ! NHP I PM!N I P G I P !PKPGGM T]JPGN ! 7 NHP L9MT AP NHP! N AP K !G OP PO NHMN%G 99M ! JG8 M!O GH G M I GN L N 7J9 M I A N ! ! NHP 7 9 NHMN JGPG N+ : I MUP T J PMOT+ 9 4 & -9MTP G+

- /1 JG O ! 1D ; ") 1

" ! I T 9 O \ 99 NHP U !Q HPM NH G L PKP 7 U \
! # !O NHP]JPP! N M!O NHMN L PGP!N9T+
O NHP L9MTP G I MUP HMGNP+ 9 4 -1/1 2 +
X 99 T J N HP9L N HMGNP! NHP I \
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X HMN H 8 " MN [

+ 1

! " P P G PPN 9 O MN T J GP KP+
" MN NH J M N P%P! MG EJGN M I M!
#G P%P I T K ! P GMN ! K1L%O NHM9+
! 1 I T OPM 9 O S
MT O ! N NH !U 2 79MNNP
O HMN MO M!KP I P!N I MT 2 H LP 7 I NHPP+
HMN ! P P!JP HMGN AJN NHT Q O GL NG+
7PPO M!O K9 NHP NHPP\ X HT GH J9O NHP L AP
79MNNP %O \
9PN NHP KM!O PO N !QJP 9 KU MAGJ O L I L8
#!O K U NHP L PQ!M!N H !QPG 7 NHP U!PP+
X HP P NH 7N I MT 7 99 7M ! !Q 5 GN NH J HPM \
!KP I T OPM G J9 MG I GN PGG 7 I T KH KP
#!O K J9O 7 I P!O GN !QJ GH HP P9PKN !
" MNH GPM9%O NHPP 7 HP GP978D 7 NH J HMGN APP!
#G !P ! GJ77P !Q M99 NHMN GJ77P G ! NH !Q8
I M! NHMN 7 NJ!P%G AJ77PNG M!O P M OG
" MG NM%P! NH P]JM9 NHM!UG M!O A9PGG%O M P NH GP+
X H GP A9 O M!O EJOQ I P!N M P G P99 K I !Q9PO+
HMN NHPT M P ! N M L LP 7 7 NJ!P%G 7 !QP
G J!O HMN GN L GHP L9PMGP : P I P NHMN I M!
HMN G ! N LMGG !%G G9M P M!O 2 99 PM H I
2! I T HPM N%G K P MT ! ! I T HPM N 7 HPM N+
#G 2 O NHPP+ S I PNH !Q N I JKH 7 NH G+ S
HP P G M L9MT N ! QHN AP7 P NHP U !Q8
1!P GKP!P 7 N K I PG !PM NHP K KJ I GNM!KP
X H KH 2 HM P N 9O NHPP 7 I T 7MNHP %G OPMNH+
2 L NHPP HP! NH J GPPGN NHMN MKN M 7 N+
3 P! NH NHP P T K I I P!N 7 ITF G J9
1AGP P I !P J!K9P H G KKJ9NPO QJ 9N
5 ! N NGP97 J!UP! !P9 ! !P GLPPKH+
2N G M OM I !PO QH GN NHMN P HM P GPP!8
#!O I T I MQ !MN !G M P MG 7 J9
#G J9KM!%G GN NHP#D : P H I HPPO7J9 ! NP
O 2 I !P PTPG 99 PN N H G 7MKP 8
#!O M7NP P 99 A NH J EJOQ I P!NG E !
KP!GJ P 7 H G GPP I !Q+
! X P99 I T 9 O

'2SN 9P MA9T P99+
HP O !M T PMO !Q H KH G NHMN 7 NHP]JM N G G S
6 !KP I T OPM G J9 MG I GN PGG 7 $ KH KP+
#!O K J9O 7 I P!O GN !QJ GH HP P9PKN !+
HP HMNH GPM9%O NHPP 7 HP GP97+R
J P9T NHP PMO !Q 7 NHP 7 9 NHMN 7 J NPWN G 7M I P P9PQM!N+
" P P MQM ! G M P T I L NM!N KHM!QP 7 J!O ! NHP NPWN 7 NHP 7 9 H KH HMG APP! PEPKNPO AT NHP I OP ! PO N G HP O !M T PMO !Q @NHMN 7 NHP]JM N G G S
6 3 P! NH NHP P T K I I P!N 7 $2 G J9+R

27 HP GNPM9 MJQHN NHP H 9GN NH G L9MT G L9MT !Q+
#!O GKMLP OPNPKN !Q 2 99 LMT NHP NHP7N+
HPT M P K I !Q N NHP L9MT 8 2 I JGN AP O9P
: PN T J M L9MKP+

4 - , 0 ! 1D
) 1 " ! / OG " $ 1. -
: JM O 5 3 ! - - 7!& "
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3 " 7M PG J K JG !" M I 9PN \
3WKP99P!N % 7M NH 8 7 NHP KHM I P9P !%G O GH 2 PMN NHP M L I GP K M I I PO 4 J KM!! N 7PPO KML !G G +
3 2 HM P ! NH !Q NH NH G M!G P " M I 9PN8 NHPGP OG M P ! N I !P+
! I !P ! T 9 O ST J L9MTPO !KP !NHP J! P G NT T J GMT \ + !-1/1 2 +
! HMN 2 O O I T 9 O8 M!O MG MKK J!NPO M Q O MKN +
!O HMN O O T J P!MKN \
! 2 O O P!MKN ?J9 JG MPGM 2 MG U 99PO %NHP ML N 9 JNJG U 99PO I P+
2N MG M A JNP LM N 7H I N U 99 G KML NM9 M KM97 NHP P+S P NHP L9MTP G PMOT \
!- #T I T 9 O8 NHPT GNMT JL !T J LMN P!KP+
<& I P H NHP I T Q O " M I 9PN G N AT I P+
Q O I NHP HP P%G I PNM9 I P MNN MKN P+
! 1 FA[NA EAB @?D(CF?CW + !
/MOTE GHM99 2 9 P !T J 9ML \ +
+?5 3"!2 , ?.
, I T 9 O+
2 @G?H @E FG?N BKAH EABD M?K \
, #T I T 9 O+
5 T J NH !U 2 I PM!N K J!N T I MNNP G \
, 2 NH !U ! NH !Q I T 9 O+
HMN%G M 7M NH JQHN N 9 P APN PP! I M OG%9PQG+
, X HMN G I T 9 O \
NH !Q+
, 4 J M P I P T I T 9 O+
X H 2 \
, #T I T 9 O+
: O[T J !9T E Q I MUP X HMN GH J9O M I M! O AJN AP I P T \ 7 9 U T J H KHPP 7J99T 1 I NHP 9 UG M!O I T 7MNHP O PO NH !NHPGP N H J G+
, MT %N G N KP N I !NHG I T 9 O+
9 !Q \ MT NHP! 9PN NHP OP 9 PM A9MKU 7 2%99 HM P M GJ N 7 GMA9PG+1 HPM P!G[O P N I !NHG MQ M!O ! N 7 Q NNP!' TPN \ HP! NHP P%G H LP M Q PMN I M!%G I P I T I MT JN9 P H G 9 7P HM97 M TPM J N AT %
9MOT HP I JGN AJ 9O KHJ KHPG NHP!8 P9GP GHM99 HP GJ77P ! N NH !U !Q ! F NH NHP H AAT H GP 8 H GP PL NMLH G >! K.! K ! (5B ! - -.! 3! ;

9 " 2%-' 2 $ "'%$ 8 %0=
! >JPP!' 2'' '2;' $ >JPP!' " ('$ 4$
) '4) %$ 8 - % ' 9) %$ - ' ('
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%' -*' %$ $ (%* ' '' 8*) %' $ %' (8 *') %% %' *'
- %'- % $ %* J $ $: %;' ' %' $!Q
*) %'- %% ($ $ - % *' 8 $'% 8 ' $ %2
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-$ X HMN I PM!G NH G I T 9 O \
M T NH G G I KH !Q I M99PKH 8F% N I PM!G I GKH P7+

JN " M I 9PN HM !Q N 9O " MN NHP 6 K # I GNM!KPG R 7 H G 7MNHP %G OPMNH M!O I LM NPO H G GJGL K !G 7H G J!K9P P!N PMNG H G 7 P!O N AGP P H G J!K9P 6 NH NHP P T K I I P!N 7 2 G J9R S " M I 9PN%G G J9 MGU " MN N AGP P H I , NH NHP K I I P!N 7 H G !G J9 @" MN %G G M I P P 7PPA9P PWL9PN P+
4 $ SM O GGT99MA9P S % $2
F " P GHM99 GJ77P AP !Q 7 Q NNP!+
F PP 299JGN MN ! 7 / P%G / MA J %G / GN # K N 222+ K+ 2+
D ($ '' ($ ($ G N 7 9KH8 '' ($ G % 7 I NHP LM! GH HP %) ') (L !NPO JN ! NHP OJ I A GH G ! !P GP!GP 7 " M I 9PN%G 9O LH MGP ($ '' ($; H G ! GPK PN LJ L GP 7 I 9 KH I GKH P7 P!GJP G ($ '' ($ ' M! NHP GP!GP8 ! P NHP KMGP 6 N I PM!G I GKH P7+R
1/ 22 : 9.

, ' P9 UP NH G GH I L NG NHP M QJ I P! 7 NHP L9MT ;

- 9 QJP+

? X P GHM99 U! AT NH G 7P99 NHP L9MTP G KM! ! UPPL K J! GP98 NHPT%99 NP99 M99+

, X 99 HP NP99 JG HMN NH G GH I PM! \

#T M! T GH NHMN T J%99 GH H I P ! T J MGHM I PO N GH HP%99 ! GHM I P N NP99 T J HMN I PM! G+

, 4 J M P ! MJQHN T J M P ! MJQHN8 2%99 I M U NHP L9MT+

O JG M! O 7 J N MQPOT
" P P GN L !Q N T J K9P I P! KT
X P APQ T J HPM !Q LMN P! N9T+

2G NH G NHP L 9 QJP NHP L PGT Đ 7 M !Q \

, % G A P7 I T 9 O+
#G I M! %G 9 P+

! Q %> JPP! +

7 OJ99 NH NT N NN PG HMNH - H PAJG% KM N Q ! P J! O
PLNJ! P%G GM9N MGH M! O P99JG% APO Q J! O8
#! O NH NT O CP! I ! G NH A %O GHPP!
#A JN NHP 9O HM P N I PG N P9 P NH N PG APP! 8
! KP 9 P J HPM NG M! O " T I P! O O J HM! OG+
! NP K I I JNJM9 !' I GN GMK PO AM 9OG+
: MUP JG MQM !' K J! N %P 9 P AP O ! P[
JN P G I P T J M P G G KU 7 9MNP+
7M 7 I KHPP M! O 7 I T J 7 I P GNMNP+
HMN 2 O GN JGN T J 4PN NH JQH 2 O GN JGN+
5 GK I 7 N T J I T 9 O N ! NH ! Q I JGN
;O I P! %G 7PM M! O 9 P H 9OG] JM! N NT8
2! ! P NHP MJQHN ! ! PWN P I NT+
HMN I T 9 P G L 7 HMNH I MOP T J U! 8
#! O MG I T 9 P G G C%O I T 7PM G G +
^X HP P 9 P G Q PMN NHP 9 NW9PGN O JANG M P 7PM R
X HP P 9 NW9P 7PM G Q Q PMN Q PMN 9 P Q G NHP P+" F
7 %OM NH 2 I JGN 9PM P NHPP 9 P M! O GH N9T N 8
T LP M! N L P G I T H7J! KN ! G 9PM P N O

! O NH J GHM9N 9 P ! NH G 7M 9O APH ! O+
" ! J %O AP9 %O 8 M! O HML9T ! P MG U ! O
O HJGAM! O GHM9N NH J
: 1 K !7 J! O NHP PGN[
JKH 9 P I JGN ! PPOG AP N PMG ! ! I T A PMGN
2! GPK ! O HJGAM! O 9PN I P AP MKKJ GN[
! P PO NHP GPK ! O AJN H 9J99%O NHP 7 GN+

X I O I O+

F : HP ! GNM! KPG FNHMN GPK ! O I M MQP I P
P AMGP PGLPKNG 7 NH 7N A7N ! ! P 79 P8
#GPK ! O N I P 2 U 99 I T HJGAM! O OPMO+
X HP ! GPK ! O HJGAM! O U GGPG I P ! APO+
7 2 O AP9 P P T J NH ! U HMN ! T J GLPMU+
JN HMN P O OPNP I ! P 7N P A PMU+
2H! L GP G AJN NHP G9M P N I P I T8
17 9P! N A NH AJN L M9 O NT 8
X H KH ! 9 UP 7 ! N J! LP GN KUG ! NHP N PP8
JN 7M99 J! GHMUP! HP! NHPT I P99 AP+
GN ! PKPGGM T %N G NHMN P 7 QPN
LMT J GP9 PG HMN N J GP9 PG G OPAN
X HMN N J GP9 PG ! LMGG ! P L L GP+
HP LMGG ! P! O ! Q O NH NHP LJ L GP 9 GP+
HP 9P! KP 7P NHP Q P7 E T
HP ! P! MKNJ PG NH NHP I GP9 PG OPGN T 8
X HP P E T I GN P P9G Q P7 O NH I GN 9M I P! N
: P7E TG E T Q P PG ! G9P! OP MKK OP! N+
H G 9O G ! N 7 MTPY8 ! %N G ! N GN M! QP+
HMN P P! I 9 PG GH J9O NH J 7 NJ! PG KHM! QP8
O %N G M] JPGN ! 9P7N JG TPN N L P+
X HPNHP 9 P 9PMO 7 NJ! P P9GP 7 NJ! P 9 P+

HP Q PMN I M! O ! T J I M U H G 7M J NP 79 PG8
HP L MO M! K%O I MUPG 7 P! OG 7P! P I PG+
#! O H NHP N O NH 9 P ! 7 NJ! P NP! O 8
O H ! N ! PPOG GHM99 ! P P 9MKU M 7 P! O8
#! O H ! ! M! N M H 99 7 P! O O NH N T $
5 PKN9T GPMG ! G H I H G P! P I T+
JN OP 9T N P! O HP P 2 APQJ! S
1J 99G M! O 7MNPG O G K ! N M T J!+
HMN J OP KPG GN M P P NH !8
1J NH JQHNG M P J G NHP P! OG ! ! P 7 J !8
NH ! U NH J 9N ! GPK ! O HJGAM! O PO;
JN O P NHT NH JQHNG HP! NHT 7 GN 9 O G OPMO+
: PM NH N Q P I P 7 O ! HPM P! 9 QHN[
L N M! O PL GP 9 KU 7 I P OMT M! O ! QHN[
^F OPGLP MN ! NJ ! I T N JGN M! O H LP[
#! M! KH %G% KHPP ! ! L G ! AP I T GK LP['
3MKH LL G NP NHMN A9M! UG NHP 7MKP 7E T+
PPN HMN 2 J9O HM P P99 M! O N OPGN T[
NH HP P M! O HP! KP LJ GJP I P 9MGN ! Q GN 7P+
27 ! KP M O P P 2 AP 7P[

27 GHP GH J9O A PMU N ! 9 ! , '

7 % G OPPL9T G !- PPN 9PM P I P HP P M H 9P8
T GL NG Q OJ99 M! O 7M ! 2 J9O APQJ 9P
HP NPO JG OMT NH G9PPL- E4' -%
: 9PPL KU NHT A M !+
#! O ! P P K I P I GKHM! KP APN PP! JG N M !' [E J

MOM I H 9 UP T J NH G L9MT \
<& HP 9MOT L NPGNG N I JKH I PNH ! UG+
1 AJN GHP%99 UPPL HP O+
3 " M P T J HPM O NHP M QJ I P! N\ 2G NHP P ! 77P! KP ! %N \
! ! NHPT O AJN EPGN L G ! ! EPGN8 ! 77P! KP % NHP 9O+
3 X HMN O T J KM99 NHP L9MT \
HP I JGP N ML- M T H \ L KM99T+F H G L9MT G NHP I MQP 7 M I J OP O ! P ! P! ! M 8 : !CMQ G NHP OJUP%G ! M I P8 H G 7P MLN GNM T J GHM99 GPP M! !8 %N G M U! M GH L PKP 7 U8 JN HMN 7 NHMN \ T J I MEPGNT M! O P NHMN HM P 7 PP G J9G N N JKHPG JG ! N / PN NHP QM99PO EMOP !KP J NHP G M P J! J! Q+

/ 2# +

H G G !P / JK M! JG ! PLHP N NHP U ! Q+
, 4 J M P M Q O KH JG F I T 9 O+
2 K J9O ! NP L PN APN PP! T J M! O T J 9 P 7 2 K J9O GPP NHP LJLLPNG OM99T ! Q+DF
, 4 J M P UPP! I T 9 O T J M P UPP! +
2N J9O K GN T J M Q M! ! Q N NMUP 77 I T POQP
, N 99 APNNP M! O GP+
T J I JGN NMUP HJGAM%! OG+S PQ ! I J OP P 8
9PM P NHT OM I ! MA9P 7MKPG M! O APQ ! I P8
S S HP K MU ! Q M P! 5 NH AP99 7 P P! QP+

H JQHNG A9MKU HM! OG MLN O JQG 7 N M! O N I P MQ PP ! Q8
!7POP MNP GPMG ! P9GP ! K PMNJ P GPP ! Q8
H J I WNJ P M! U 7 I O! QHN PPOG K 99PKNPO $
X NH " PKMNP%G AM! NH KP A9MGNPO NH KP !7PKNPO+
HT ! MNJ M9 I MQ K M! O O P L LP NT+
1 ! H 9PG I P 9 7P JGJ L I I PO MNP9T E %' $ - % $ %

" P L G !G H I % NHP QM OP! 7 H G PGNMNP " G ! M I P%G : !CMQ 8 NHP GN T G PWNM! N M! O N ! KH KP

$ %2 2! NHP] JM N G NH G G GLP9N 'M! O 2! NHP 7 9 A NH HP P M! O P9GP HP P N G GLP9N - % %2 G KP NM !9T NHP GM I P MG - %2 AJN MG 7 I P 9T MG ! J! OP GN O N I PM! M GH N GP! NP! KP I NN HJG ! HP P KHM! N 7 P! KP S

6 # LM9N T !Q
HMN GHP O O Q P I P8 H GP - %2 MG
O M NHP 9O 9 UP KJN9P %G L PN T
L ! M U! 7PS / P I P M! O 9PM P I P ! N+R

2! " M99%G H ! K9P P HM P 6 # ! O NHP NP! N MG PL9P! GHPO M! O OPKUPO NH NH GD CP S #7NP AJGT 9MA K I PNH KN JG PGN+R

2! NHP] JM N P 7 ! O M 9 ! P 7 99 ! Q NH G H KH G I NNPO ! NHP 7 9 8 N HMG ! K PGL ! O ! Q 9 ! P ! HT I P 8S

6 O I P! 7PM N I JKH P P! MG NHPT 9 P+R

HP Q PMN I M! O ! T J I M U H G 7M J NP 79 PG8
HP L MO M! K%O I MUPG 7 P! OG 7P! P I PG+
#! O H NHP N O NH 9 P ! 7 NJ! P NP! O 8
O H ! N ! PPOG GHM99 ! P P 9MKU M 7 P! O8
#! O H ! ! M! N M H 99 7 P! O O NH N T $
5 PKN9T GPMG ! G H I H G P! P I T+
JN OP 9T N P! O HP P 2 APQJ! S
1J 99G M! O 7MNPG O G K ! N M T J!+
HMN J OP KPG GN M P P NH !8
1J NH JQHNG M P J G NHP P! OG ! ! P 7 J !8
NH ! U NH J 9N ! GPK ! O HJGAM! O PO;
JN O P NHT NH JQHNG HP! NHT 7 GN 9 O G OPMO+
: PM NH N Q P I P 7 O ! HPM P! 9 QHN[
L N M! O PL GP 9 KU 7 I P OMT M! O ! QHN[
^F OPGLP MN ! NJ ! I T N JGN M! O H LP[
#! M! KH %G% KHPP ! L G ! AP I T GK LP['
3MKH LL G NP NHMN A9M! UG NHP 7MKP 7E T+
PPN HMN 2 J9O HM P P99 M! O N OPGN T[
NH HP P M! O HP! KP LJ GJP I P 9MGN ! Q GN 7P+
27 ! KP M O P P 2 AP 7P[

27 GHP GH J9O A PMU N ! 9 ! , '

7 % G OPPL9T G !- PPN 9PM P I P HP P M H 9P8
T GL NG Q OJ99 M! O 7M ! 2 J9O APQJ 9P
HP NPO JG OMT NH G9PPL- E4' -%
: 9PPL KU NHT A M !+
#! O ! P P K I P I GKHM! KP APN PP! JG N M !' [E J

MOM I H 9 UP T J NH G L9MT \
<& HP 9MOT L NPGNG N I JKH I PNH ! UG+
1 AJN GHP%99 UPPL HP O+
3 " M P T J HPM O NHP M QJ I P! N\ 2G NHP P ! 77P! KP ! %N \
! ! NHPT O AJN EPGN L G ! ! EPGN8 ! 77P! KP % NHP 9O+
3 X HMN O T J KM99 NHP L9MT \
HP I JGP N ML- M T H \ L KM99T+F H G L9MT G NHP I MQP 7 M I J OP O ! P ! P! ! M 8 : !CMQ G NHP OJUP%G ! M I P8 H G 7P MLN GNM T J GHM99 GPP M! !8 %N G M U! M GH L PKP 7 U8 JN HMN 7 NHMN \ T J I MEPGNT M! O P NHMN HM P 7 PP G J9G N JKHPG JG ! N / PN NHP QM99PO EMOP !KP J NHP G M P J! J! Q+

/ 2# +

H G G !P / JK M! JG ! PLHP N NHP U ! Q+
, 4 J M P M Q O KH JG F I T 9 O+
2 K J9O ! NP L PN APN PP! T J M! O T J 9 P 7 2 K J9O GPP NHP LJLLPNG OM99T ! Q+DF
, 4 J M P UPP! I T 9 O T J M P UPP! +
2N J9O K GN T J M Q M! ! Q N NMUP 77 I T POQP
, N 99 APNNP M! O GP+
T J I JGN NMUP HJGAM%! OG+S PQ ! I J OP P 8
9PM P NHT OM I ! MA9P 7MKPG M! O APQ ! P8
S S HP K MU ! Q M P!
5 NH AP99 7 P P! QP+

H JQHNG A9MKU HM! OG MLN O JQG 7 N M! O N I P MQ PP ! Q8
!7POP MNP GPMG ! P9GP ! K PMNJ P GPP ! Q8
H J I WNJ P M! U 7 I O! QHN PPOG K 99PKNPO $
X NH " PKMNP%G AM! NH KP A9MGNPO NH KP !7PKNPO+
HT ! MNJ M9 I MQ K M! O O P L LP NT+
1 ! H 9PG I P 9 7P JGJ L I I PO MNP9T E %' $ - % $ %

" P L G !G H I % NHP QM OP! 7 H G PGNMNP " G ! M I P%G : !CMQ 8 NHP GN T G PWNM! N M! O N ! KH KP

HP P KM! AP ! O JAN NHMN NHP 9 !P JQHN N AP GN JKU 1JN N AP !Q GJLP GPOPO ATS

6 O I P! %G 7PM M! O 9 P H 9OG] JM! N NT+R
HPGP N 9 !PG M P ! N ! NHP 7 9 +
2 ! 7 9 8 $!] JM N G+
% (%SG 9 K NMN !G ! OJKP I P! NG+
F H G K JL9PN G 7 J! O !9T ! NHP] JM N G+
($ 0%' ($ S KH PN%G 7M P H G MAA P MN ! 7 ($ G P T M! K P! N+
- (''2 S7 QJ MN P9T+
F NHP 7 9 8 NHP] JM N G 6 Q O M KH JG+R
6 2! LJLLPN GH G H KH P P KM99PO I N !G M! !NP L PNP PWL9M !PO NHP MKN ! N NHP MJO P! KP PP : P! N9P I P! 7 P !M # KN 22 K 2+
%) H G G NHP PMO !Q 7 NHP] JM N 7 ? H! G ! H HMO ! N GPP! NHMN PO N ! GJQQPGNPO %) NNG M K PKN ! 7 NHP K I I ! NPWN %) %) MT H P P AP JGPO ! NHP GP! GP 7) !8 '2

D. MACLISE, R. A. PAINTER.

ROLLS, ENGRAVER.

HAMLET.

LONDON, VIRTUE & Co.

& ' +AAN' @E' MADN' PAB0F ?>G' @G' ?' JADN' J□CF' EAB
' ' M' H 9P' H GN T+
' ' HP' U IQ' G S
' #T' G ' HMN' 7H I'\
" ' 2G' i'H G PN PIPIN' IM P99 JG O GNP7ILP PO+
' X NH' O iU' G \
' " ' IT' 9 O' MNHP' NH' KH 9P +
' 4 J' GO I' GH J9O' GH 'NGP97' I P' KHP 'N '
G QI 77' NH G' N ' H G' O KN 8 7 ' 7 ' IP' N 'LJN' H I' N ' H G
LJ QMN i' J9O'LP HMLG'L9JIQP' H I' iN '7M' I P'KH 9P +
& ' : O' IT'9 O'LJN' T J'O GK J GP' iN 'G IP'7 MIP'
MIO' GNM N' i N' G ' 9O9T'7 I' IT' M77M +
' 2' M1' NM1P'G 'L i JikP+
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G IP' MiG P '2' 99 O ' T J' I NHP %G K I IMIO'IPIN' 7

2NM9 M1' 4 J' GHM99' GPP' MI i'H ' NHP' I J NHP P ' QPNG' NHP'
9 P' 7' : iCMQ %G 7P+
, '#FG' (□H 'D□ G
' X HMN[7 QHNPO' NH'7M9GP'7 P[
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i ' : P' $P'NHP'L9MT+
3' : P' I'P'G I P'9 QHN SM MT[
" +' / QHNG'9 QHNG'9 QHNG';
= 4 & ' & '+ 1' "' " #
' XHT' 9PN' NHP' GN JKUPI'OPP'Q ' PPL
+' HP'HM N' J1QM99PO'L9MT
O 'G I P' I JGN' MNKH' H 9P'G I P' I JGN' G9PPL8
' J1G'NHP' 9O'M MT+S
X J9O'i N'NH G'G 'MiO'M'7 PGN' 7 7PMNHP G'@ 7'NHP' PGN' 7
I'T' 7 NJIPG'NJ i' J UD' NH' IP ' NH' N ' - ikMg
GPG' i' I'T' MCPO'DGH PG'QPN' I P' M' 7P99 GH L' i'M'K T' 7
L9MTP G'G '\
i ' "M97'M'GHM P+$
' #' H 9P' IP' 2+
O 'NH J'O GN'Ui ' 1' "MI i'OPM +
H G' PM9I'O G IMiN9PO' MG
1'7? P'H I GP978 MiO'i ' P QIG'HP P'
K #' P T' P TS-M KUP+D
i '4 J' I QHN'HM P' HTIPO+
' 1'Q O' " MN '299 NMUP' NHP'QH GN%G O' 7 ' M'
NH JGMiO'L Jioŧ 5 OGN'LP KP P'\
i ' P T' P99'IT'9 O+
' L i'NHP'NM9U' 7'NHP'L G i iQ S
i '2'O O' P T' P99 i NP'H I+
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PGPIA9PO'NHP'APMU' 7'N' O8 HPIK'P'79JNPG'7 / UP'2N'#KN22ŧ' Kŧ2+
', " ' HP' PK OP' MG 7N' i'N ip' MiO' MI' KNM P' H QHP ' NHMI' NHP' 79JNP+
9N i'GLPMUG'@6'-M+'/ GN R' ŧ)) ' 7
6'NHP'5 MI'I O'
1'779JNPG'MiO'% ' (% .
2N' J9O'MLLPM'7 I' MK i%6' T9 M T9 M J1 R'KPiN'ŧ ' NHMN' NH G iGN J
IPiN' MG 9N QP' i'NHP' 9 P' NHMI' i' NHP' JLLP LM N8' MiO'N' OKJN' 7+NHP
79QP 9PN$ i' P GPiIP%G'6"M I i P' i P GP99 R'9PMOG N ' NHP' GM1P K iKJG i+
1i'NHP' PNTI 9 QT' 7'NHP' O' IJKH' iQPiJ NT' PGJ9N+' HMG' GM1P' APPi' APGN PO' AJN' NH JN
MiT' GMN G7MKN T' PGJ9N+' $
F& GPiK MINC' MiO' :J9OPiGNP1'HM P'iN IMNPO'AT' G IP' G QiM9' NHMN' NHPT
GH'N 'GLPMU' NH "MI 9PN' i'L NNP+
$' HP'7 9 ' I NG %-) ' HP'L P[' IMT'HM P' IPMiN' N ' GNT'TPN' KMii N T J',
IMUP'NH G IJG K'NH G'PWKP99piN' KP8 7 ' :J 9OPiGNP1'I QHN'HM P' IMOP'7PP'L LP
%-)ŧAJN' HP' K J9O'i N K IIMiO' N N ' MiT' JNP MiKP' 7 HM I iTŧ XP'i '
L P7P'N 'K iG OP';NHP'7 9 'p ip JG+
HP' IJG KM9 M99JG i'G K iN iJPO+ HP %' 7M99 iGN JIpiNG' 7NHP'9JNP '
QJ NM'U iO'M P'NH KU' PG 7 WPO' MN' KP NM i' O GNMiKPG' MK GG' NHP'7 iQP A M O' i'
H KH' NHP'GN iQG M P' % -- ŧ' L PGGPO' AT' NHP' 7 iQP Gŧ' M PG' NH 7 iUG NHMN' NHP'
O G OP PO'7 I' ;'AJN'NHP'O piKH' P A' 'GPPI G' NHP' I P'9 UP9T'
G J KP+

' 2' ' i " A
1'NHP' PK OP '9PN' IP' GPP+SD ' NHO M ' NH' T J'FS'
XHT'O'T J'Q'MA JN'N ' PK P'NHP' iO' 7 IP'MG' 7 T J'
J9O'O P IP' iN 'M'N 9'\
& ' 1'T'9 O' 7' IT'OJNT'AP'N 'A 9O'IT'9 P' G'N '
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JL i'NH G'L LP'\

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: A9PGG T J G [
! T 9 O NHP]JPP! J9O GLPMU NH T J M!O
L PGP!N9T+
5 T J GPP NHMN K9 JO NHMN%G M9 I GN !GHMLP 9 UP
M KM I P9 \
! T NHP I MGG M!O %N G 9 UP M KM I P9 !OPPO+
PNH !UG N G 9 UP M PMGP9+
! 2N G AMKUPO 9 UP M PMGP9+
1 9 UP M HM9P 9
! P T 9 UP M HM9P+
HP!' 99 2 K I P N I T I NHP AT M!O AT+S HPT
7 9 I P N NHP N L 7 I T AP!N+S2 99 K I P AT M!O AT+
! 2 99 GMT G + 4 *
T M!O AT G PMG 9T GM O+S / PM P I P 7 P!OG+
+ 4 & * (' '
% G ! NHP P T NKH !Q N I P 7 ! QHN8
X HP!'KHJ KHTM OG TM ! M!O HP99 NGP97 A PMNHPG JN
!NMQ !N NH G 9O K J9O2 O !U H N A9 O+
#!O O GJKH A NNP AJG !PGG MG NHP OMT
X J9O]JMUP N 9 U !+ 7N8 ! N I T I NHP +S
1 HPM N 9 GP ! N NHT !MNJ P 8 9PN ! N P P
HP G J9 7 P P!NP NH G 7 I A G I 8
/PN I P AP K JP9 ! N J!!MNJ M9
2 99GLPMU OMQQP G N HP AJN JGP ! !P 8
T N !QJP M!O G J9 !NH G AP HTL K NPG
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7 # +' "' (

3 2 9 UP H I ! N8 ! GNM!OG N GM7P NH JG+
9PN H G I MO!PGG M!QP+ HP P7 P L PLM P T J8
2 T J K I I GG ! 99 7 NH NH OPGLMNKH+
#!O HP N 3!Q9M!O GHM99 M9 !Q NH T J
HP NP I G 7 J PGNMNP I MT ! N P!OJ P
" MCM O G OM!QP JG D MG O NH H J 9T Q
1 JN 7 H G 9J!MK PG+D
X P 99 J GP9 PG L OP
GN H 9T M!O P9 Q JG 7PM N G+
UPPL NH GP I M!T I M!T A O PG GM7P+
HMN 9 P M!O 7PPO JL ! T J I MEPGNT+
!- HP G !QJ9M M!O LPKJ9 M 9 7P G A J!O+
X NH M99 NHP GN P!QNH M!O M I J 7 NHP I !O+
UPPL NGP97 7 I $! TM!KP8 AJN I JKH I P
HMN GL N JL ! H GP GL N FOPLP!O M!O PGN
HP 9 PG 7 I M!T+ HP KPMGP 7 I MEPGNT
5 PG+! N M9 !P8 AJN 9 UP M QJ97 O NH O M
X HMN%G !PM N NH N N G M I MGGT HPP9+
0 W%O !NHP GJ I I N 7 NHP H QHPGN I J!N+
H GP HJQP GL UPG NP! NH JGM!O 9PGGP NH !QG
P I N G%O M!O MOE !%O 8 H KH HP! N 7M99G+
3MKH G I M99 M!!PW I P!N LPNNT K !GP]JP!KP+
#NNP!OG NHP A GN% JG J !+ P P M9 !P
5 O NHP U !QdG QH AJN NH M QP!P M9 Q M!+
3 # I T J 2 L MT T J N NH G GLPPOT TMQP8
0 P 99 7PNNP G LJN JL !NH G 7PM +
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! T 9 O HP%G Q !Q N H G I NHP %G K9 GPN
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4$ S PAJUPO8 L AMA9T HP P $
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HPM NHP L KPGG 8 2%99 M M!N GHP%99 NMW H I H I P+ $
#!O MG T J GM O M!O GP9T MG N GM O
% G I PPN NHMN G I P I P MJO P!KP NHM!' M I NHP +
!KP !MNJ P I MUPG NHP I LM N M9 GH J9O %P HPM
HP GLPPKH 7 M!NMQP+ OM P T J P99 I T 9 PQP
2%99 KM99 JL !T J P P T J Q N APO+
#!O NP99 T J HMN 2 U! +
3 HM!UG OPM I T 9 O+
+ 4 -1/1 2 +
I T 77P!KP G M!U N G I P99G N HPM P!8
2N HMNH NHP L I M9 P9OPGN KJ GP JL !%N b
#A NHP %G I J NHP [S- MT KM!' 2 ! N+
H JQH !K9 !MN !' AP MG GHM L MG 998
T GN !QP QJ 9N OP7PMNG I T GN !Q !NP!N#
#!O 9 UP M I M!' N O JA9P AJG !PGG A J!O
2 GNM!O !' LMJGP HP P 2 GHM99 7 GN APQ !+
#!O A NH !PQ9PKN+ X HMN 7 NH G KJ GPO HM!O
X P P NH KUP NHM!' NGP97 NH A NHP %G A9 O \
2G NHP P ! N M !' P! JQH !' NHP G PPN HPM P!G+
MGH N H NP MG G! \ X HP PN GP PG I P KT+
JN N K !7 !N NHP GMQP 7 77P!KP \
#!O HMN%G !' L MTP AJN NH G N 7 9O7 KP S
AP 7 PGNM99PO P P P K I P N 7M99+
1 LM O !%O AP !Q O !' \ HP!'2%99 9 U JL' #
T 7MJ9N G LMGN+. JN 1 HMN 7 I 7 L MTP
M!' GP P I T NJ !' \ O Q P I P I T 7 J9 I J NHP [S
HMN KM!! N AP 8 G !KP 2 M I GN 99 L GGPGG$O
17 NH GP P77PKNG 7 H KH 2 O O NHP I J NHP +
T K !' I !P !' M I A N !' M!O I T]JPP!+
MT !P AP LM O !%O M!O PNM !' NHP 77P!KP \
2!' NHP K JLNPO KJ P!NG 7 NH G 9O+
177P!KP%G Q 9OPO HM!O I MT GH P AT EJGN KP 8
#!O 7N %N G GPP!' NHP KUPO L CP NGP97
JTG JN NHP 9M ' ' JN %N G ! N G MA P 8
HP P G ! GHJ779 !Q NHP P NHP MKN !' 9 PG
2!' H G N JP ! MNJ P 8 M!O P J GP9 PG K I LP99%O
3 P!' N NHP NPPNH M!O 7 PHPMO 7 J 7MJ9NG+
Q P !' P OP!KP+ X HMN NHP!' \ HMN PGNG \
T HMN PLP!NM!KP KM! X HMN KM!' N ! N \
4PN HMN KM!' N HP!' !P KM!' ! N PLP!N \
1 PNKHPO GNMNP ' 1 A G I A9MKU MG OPMNH [
1 9 I PO G J98 NHMN GN JQQ9 !Q N AP 7 PP+
N I P P!QMQ%O " P9L M!QP9G I MUP MGGMT '
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I QHN 2 O N LMN ! HP G L MT !Q J
#!O ! 2%99 O %N 8SM!O G HP Q PG N HPM P!'
#!O G M I 2 P P!Q%O \ HMN J9O AP GKM!! %O
#' 99M !U 99G I T 7MNHP 8 M!O 7 NHMN
H G G 9P G !' O NH G GM I P 99M !' GP!O
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1 NH G G H P M!O GM9M T ! N P PHQP+
" P N U I T 7MNHP Q GG9T 7J99 7 A PMO 8 F
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JN ! J K KJ I GNM!KP M!O K J GP 7 NH JQHN
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G F '' ' " HMUGLP P 7 J!O NH G P I M UMA9P PWL PGG !' !' NHP A9P8S
6 PH 9O NH G MG NHP !]J NT 7 NHT G GNP ' AO I 8 L OP ' %%' '" M!O
MAJ!OM!KP 7 O9P!PGG MG !' HP ' M!O !' HP ' OMJQHNP G+R @3CPU+W + =+
% '$ ' G N GP CP ' 6 U! NH J M I P H O $ 'R G HM P M I P H O
Q MGL+

HMN HMG ! P9 GH 7GM9 MN ! ! $N
HP! L'H I NHMN H G HPP9G I MT U KU MN HPM P!8
#!O'NHMN H G G J9 I MT AP MG OM I !%O' M!O' A9MKU+
#G HP99 HP PN Q PG T I NHP 'GNMTG
H G LHTG K AJN L 9 !QG NHT G KU9T OMTG 9 4

3 T OG 79T JL I T NH JQHNG P I M !' AP9
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HMN HMG ! P9 GH 7GM9 MN ! ! $N
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F $%% ' 2I\ %PM NH PI!'M!O'PM NH MPNGHM I PO' 7T J MKN+
' $' J G HP P JGPO MG !' 1WHP99 S6'#!' J'M!O' AGKJ P = N
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' HP9 !PG !'A MKUPNG M P7 J!O' !' JJM N @ AJN M P ! N !' NHP 7 9 P
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1/ 22+ & & (+(
!P9PQM!N+

JGPG NHP GM I P O !' MO LN !O M G I 9N K !KPM9 I P!N
H G KM99 7 " M I 9PN G ! N ! NHP] !M N G
D ! ' 7 9 8 ! JM N G 8 () HP M!N NHPG G N JG G !
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M!'PL NHP7 ' " M I 9PN M 'MLGT N 'H G I NHP S !K !G GIP!N' NH HM 79 M PGLPKN
H KH HP ! P P H 99T MAM!O !G
4 % ! NHP JCM N 9 # 8 !7 9) % HP PLPN ! ! 7) % G KP M !9T
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HMN HMG ! P9 GH 7GM9 MN ! ! $N
HP! L'H I NHMN H G HPP9G I MT U KU MN HPM P!8
#!O'NHMN H G G J9 I MT AP MG OM I !%O' M!O' A9MKU+
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#!O I M GHM9 IP N U!M P T /PN U+
O %N G NHP GL N N HM P NHP P!Q !PP
" GN NH H G !L$PNM ÐM!O N GHM99Q HM O+
JN2 99 OP9 P !P TM O AP9 NHP I !PG+
#!O A9 NHP I MN NHP I ! 1 $N G I GN G PPN
X HD ! !P9 !P N K M7NG O PKN9T IPPN+DE
H G I M!GHM99 GPN IP LMKU !Q+
2%99 9JQ NHP QJNG !N NHP !P QHA J I 8S
NHP Q O ! QHN+S2!OPPO NH G K J!GP99
2G ! I GN GN 99 I GN GPK PN M!O+I GN Q M P+
XH MG !9 7P M7 9 GH L MN !Q U!M P+
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9 4 - 1 58 % " 33 3 (!"5
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3 3 2 F -

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3 HP P+%G IMNNP ! NHPGP G QHG8 NHPGP L 7 J!O
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4 J I JGN N M!G9MNP %N G7N P J!OP GNM!O NHP I
XHP P G T J G !\
< #H IT Q O9 O HMN HM P2 GPP! N ! QHN
3 XHMN :P N JOP " O PG "MI9PN\
<& MO MG NHP GPMG M7 O !O HP! A NH K !NP!O
XH KH G NHP I QHN P 2!H G 9M 9PGG7N+
PH !O NHP M MG HPM !Q G IPNH !Q GN +
"P H LG H G ML P J N M!O K PG W
#!O !H G A M ! GH MLL PHP!G ! U 99G$
HP J!GPP! Q O 9O IM!+
3 1 HPM T OPPO[
2N HMO APP! G NH JG HMO P APP! NHP P8
" G 9 AP NT G 7J99 7NH PMNG N M998
T J T J GP97 N JG N P P T !P+
#9MG[H GHM99 NH G A9 OT OPPO AP M!G P %O\
2N 99 AP 9M O N JG H GP L OP!KP
H J9O HM P UPLN GH N PGN M !%O M!O JN 7HMJ!N+
H G IMO T J!Q IM!AJN G IJKH MG J 9 P
XP J9O ! N J!OP GNM!O HMN MG I GN7N8
JN 9 UP NHP !P 7M7 J9 O GPMGP+
UPPL N7 I O J9Q !Q 9PN N7PPO
3 P! !NHP L NH 79 7P XHP P G HP Q !P\
<& O M MLM N NHP A OT HP HMNH U 99%O
1%P H I H G P T IMO!PGG 9 UP G IP P+
#I !Q M I !P M9D 7 IPNM9G AMGP+
H G NGP97LJ P8 HP PPLG7 HMN G O !P+
3 1 :P N JOP K IP M MT[
HP GJ! ! G !P GHM99 NHP I J!NM !G N JKH+
JN P 99 GH L H I HP!KP M!O NH G 9P OPPO
XP IJGN NH M99 J I MEPGNT M!O GU 99+
NH J!NP!M!KP M!O PWKJGP+S" [:J 9OP!GNP ![

+" "5 (

O P!OG A NH Q E !T J NH G NP7J NHP M O
"MI9PN !I MO!PGG HMNH - 9 ! JG G9M !+
#!O 7 I H G I NHP %G K9 GPN HMNH HP O MQQ%O H I

$9 %8 $$%8 - SDA9 !JL NH H G !P!Q !P+
D HPGP9 !PG !A MKUPNG M P ! N !NHP7 9 +
2!NHP]JM N G & GP!K M!NC M!O :J 9OP!GNP !P!NP NH NHP U !Q M!O]JPP!
M!O M P GP!N M MT 7 MGH NGLMKP AT NH G 9 !P 7NHP]JPP! S

6 PGN NH G L9MKP !JG M 9 NN9P H 9P+R

2!NHP7 9 NH G9 !P G I NNPO M!O & GP!K M!NC M!O :J 9OP!GNP !K IP ! HP!
:J 9OP!GNP ! G KM99PO AT NHP U !Q+

: GPPU H I JN8 GLPMU 7M M!O A !Q NHP A OT
2!N NHP KHMLP9+ 2 L MT T J HMGNP !NH G+
9: 4 & & G+ ": J /+
IP : P N JOP P%99 KM99 JL J GPGN7 P!OG8
#!O 9PN NHP I U! A NH HMN P I PM!N O +
#!O HMN%G J!N I P9T O !P ^G HML9T G9M!OP +
XH GP H GLP %P NHP 9O%G O M I PNP +
#G 9P P9 MG NHP KM!! ! N H G A9M!U+
M!GL NG H G L G !%O GH N I MT I GG J !M I P+
#!O H N NHP J!O9PGG M +F" 1 K IP M MT[
T G J9 G 7J99 7O GK O M!O O G I MT+ 9: 4 & .

3 3 J F ! !! -

%

M7P9T GN PO S
X $2 "MI9PN N 9 O "MI9PN['
X HMN ! GP \ H KM99G !" MI9PN \ 1 HP P NHPT
K IP+

+" "5 (

!- XHMN HM P T J O !P IT 9 O NH NHP OPMO A OE\
$ IL J!OPO N NH OJGN HP PN %N G U !+
!- P99 JG HP P %N G8 NHMN P I MT NMUP N NHP!KP+
#!O APM N N NHP KHMLP9+
5 ! N AP9 P P N+
!- P9 P P HMN\
HMN2 KM!UPPL T J K J!GP9 M!O ! N I !P !+
PG OPG N AP OP IM!OPO 7 M GL !QP [S HMN PL9 KMN !
GH J9O AP IMOP AT NHP G ! 7M U !Q\
!- MUP T J IP7 M GL !QP IT9 O\
#T G 8 NHMN G MUG JL ZNHP U !Q%G K J!NP!M!KP
H G P M OG H G MJNH N PG+ JN GJKH 77 KP G O NHP U !Q
APGN GP KP !NHP P!O " PUPPLG NHP I 9 UP M!MLP !NHP
K !P 7H G EM 8 7 GN I JNHPO N AP 9MGN G M99 PO
XHP!HP !PPOG HMN T J HM P Q9PM!PO N G AJN G]JPPC !Q
T J M!O GL !QP T J GHM99 AP O T MQM !+
!- 2 J!OP GNM!O T J ! N IT9 O+
M I Q9MO 7 N #U!M GH GLPPKH G9PPLG !M
7 9 GH PM +
!- T9 O T J IJGN NP99 JG HP P NHP A OT G M!O
Q NH JG N NHP U !Q+ F
HP A OT G NH NHP U !Q AJN NHP U !Q G ! N NH
NHP A OT+ HP U !Q G M NH !QS
& #NH !Q IT9 O\
17 ! NH !Q A !Q IP N H I+ " OP7 W M!O M99
M7NP +F 9 4 &

3 3 "2 F ! !! -

7 " "

3 2 HM P GP!N N GPPU H I M!O N 7 !O NHP A OT+
" OM!QP JG G N NHMN NH G IM!Q PG9 GP
4PN IJGN ! N P LJN NHP GN !Q 9M !H I
"P%G9 %O 7NHP O GN MKNPO IJ9N NJOP+
XH 9 UP ! N !NHP EJOQ IP!N AJN NHP PTPG8
#!O HP P %N G G NHP 77P!OP %G GK J QP G P QH%O+
JN !P P NHP 77P!KP+ APM M99 G I NH M!O P P!+
H G GJOOP!GP!O !Q H I M MT IJGN GPP I
5P9 AP MNP LMJGP 5 GPMGPG OPGLP MNP Q !+
T OPGLP MNP MLL9 M!KP M P P9 P %O+

2!NHP]JM N GS
6 XH LG JN H G ML P K PG #MN[M MN[R
F 'S I !P M K IL J!O IMGG 7 IPNM9G?
F HP9 !PG !NHP A MKUPNG M P ! N !NHP7 9 + 2!NHP]JM N G NHP GP!GP G
ILP 7PKN M!O HP AM9O !GP NPO 6 G HML9T G9M!OP +R
D SOP IM!OPO AT+
HP !M IP 7M A T GH GL NS6 #99 H O+R

D)

' 2 +' E? $ ' > ' E ; ')

' # +

1 ' ! N' MN' M99+ S " ' ! ' \ MN' HMNH' AP7M99P !' \
!-' X HP P' NHP' OPMO' A OT' G' APGN %O' I T' 9 O+
X P' KM ! ! N' QPN' 7 I ' H I +
3 ' JN' HP P' G' HP' \
!-' X NH JN' I T' 9 O8 QJM OPO ' N ' U! ' T J ' L9PM_
GJ P+
3 ' !Q' H I ' AP7 P' JG+
!-' " ' : J 9OP ! GNP !' [A !Q' !' I T' 9 O+

' % ' "' : J / 53 3& +

3 ' ' " M I 9PN ' HP P%G' - 9 ! JG' \
' ' GJLLP +
3 ' # N' GJLLP ' \ X HP P' \
' N' HP P' HP' PMNG ' AJN' HP P' HP' G' PMNP ! ' M' KP _
NM !' K ! KMN !' 7' L 9 N K' D I G' M P' P%P !' MN' H I +' 4 J '
I ' G' T J ' !9T ' P I LP ' 7 ' O PN ' P' 7MN' M99' K PMNJ PG'
P9GP' N ' 7MN' J G8 M ! O' P' 7MN' J GP9 PG' 7 ' I MQQ NG' ' 4 J ' 7MN'
U !Q ' M ! O' T J ' 9PM !' APQQM ' G' AJN' M MA9P' GP KP8 N '
O GHPG ' AJN' N ' !P' NMA9P8 NHMN%G' NHP' P ! O+
9 3 ' # 9MG ' M9MG [
' #' I M !' I MT' 7 GH' NH' NHP' I ' NHMN' HMNH' PMN' 7' M'
U !Q' 8 M ! O' PMN' 7' NHP' 7 GH' NHMN' HMNH' 7PO' 7' NHMN' I + "
3 ' X HMN' O GN' NH J' I PM !' AT' NH G' \ d
' NH !Q' AJN' N ' GH ' T J' H ' M' U !Q' I MT' Q ' M'
L Q PGG' NH JQH' NHP' QJNG' 7' M' APQQM +
3 ' X HP P' G' - 9 ! JG' \ ' +
' 2 !' HPM P ! ' GP ! O' NH NHP ' N ' GPP ' 7' T J ' I PGGP ! QP '
7 !O' H I ' ! N' NHP P ' GPPU' H I ' %NHP' NHP ' L9MKP' T J GP97+'
JN ' !OPPO ' 7' T J' 7 ! O' H I ' ! N' NH G' I !NH ' T J' GHM99' ! GP'
H I ' MG' T J' Q ' JL' NHP' GNM G' !N ' NHP' 9 AAT+
3 ' : ' GPPU' H I ' NHP P+' 9 !'-! ' # NNP ! OM ! NG+
' " P' 99' GNMT' N 99' T J' K I P+' 9 4 & ' # NNP ! OM ! NG+'
3 ' " M I 9PN ' NH G' OPPO' 7' NH ! P ' 7 ' NH ! P' PGLPK M9'
GM7PNT ' '
X H KH' P' O ' NP ! OP ' MG' P' OPM 9T' Q P P'
0 ' NHMN' H KH' NH J' HMGN' O ! P ' I JGN' GP ! O' NHPP' HP ! KP'
X NH' 7 P T'] J KU ! PGG' 8 HP P7 P ' L PLM P' NHTGP978
HP' AM U' G' PMOT ' M ! O' NHP' ! O' MN' HP9L+
HP' MGG K MNPG' NP ! O ' M ! O' P P TNH !Q' G' AP ! N'
0 ' 3 ! Q9M ! O++
' 0 ' 3 ! Q9M ! O \
3 ' 5$ " M I 9PN+
' # : O+
3 ' ' G' N ' 7' NH J' U ! P %GN' J ' LJ L GPG+
' 2' GPP' M' KHP JA ' NHMN' GPPG' H I+FS JN ' K I P8 7 '
3 ! Q9M ! O[SOM P P99 ' OPM ' I NHP +
3 ' HT' 9 !Q' 7MNHP ' " M I 9PN+
' T' I NHP ' OMNHP ' M ! O' I NHP ' G' I M !' M ! O' 7P8
I M !' M ! O' 7P' G' !P' 79PGH# ' M ! O' G ' I T' I NHP +' I P ' 7 '
3 ! Q9M ! O+' = 4
3 ' 0 99 ' H I ' MN' 7 N8 ' NP I LN' H I ' NH' GLPPO'
MA M O8
5 P9MT' N' ! N ' 2%99' HM P' H I ' HP ! QP' N ! QHN'
MT' 8 7 ' P P TNH !Q' G' GPM9%O' M ! O' O !P
HMN' P9GP' 9PM ! G' !' NHP' M77M ' - MT' T J ' I MUP' HMGNP+
= 4 & ' & G+' "' : J / +'
,0 ' ,< - ,0 ' ' 1' *7%' + : * '' : * 08(?' -+' - '< : +
@#G' I T' Q PMN' L P ' NHP P 7' I MT' Q P' NHPP' GP ! GP8
!KP' TPN' NHT' K KMN KP' 9 UG' M ' M ! O' PO'
#7NP ' NHP' 5M ! GH' G O ' M ! O' NHT' 7 PP' M P
- MTG' H I MQP' N ' JG ' NH J' I MT%GN' ! N' K 9O9T' GPN

1J ' G P P Q !' L KPGG' 8 H KH' I L NG' MN' 7J99+
T' 9PNNP G' K !EJ !Q' N ' NHMN' P77PKN' +
HP' L PGP ! N' OPMNH' 7' " M I 9PN+' 5 ' N ' 3 ! Q9M ! O8
0 ' 9 UP' NHP' HPKN K' !' I T' A9 O' HP' MQPG+
! O' NH J' I JGN' KJ P' I P' ' 99' 2' U ! ' %N G' O !P+
" P%P ' I T' HMLG ' I T' E TG' P P' ! P%P ' APQJ ! +D' = 4

3 3' 2 F ' ' 5P ! I M U+
' 4 $ ' "' 0 KPG' 3
>! ' : ' KMLNM ! ' 7 I ' I P' Q PPN' NHP' 5M ! GH' U ! Q8
P99' H I ' NHMN ' AT' H G KP ! KP ' 0 N ! A MG'
9M I G' FNHP' K ! PTM ! KP' 7' M' L I G%O' I M KH'
1 P ' H G' U ! QO I 8' 4 J' U ! ' NHP' P ! OPC JG+
27' NHMN' H G' I MEPGNT' J9O' MJQHN' NH' JG+
X P' GHM99' PWL PGG' J ' OJNT' !' H G' PTP+
! O' 9PN' H I ' U ! ' G +
,' 2' 99' O %N ' I T' 9 O+
>! ' : ' GM7P9TF' !+' = 4 & " ' $! %&'

=V ' % ' # G ' (' S
' : O' G ' H GP' L P G' M P' NHPGP' \
,' HPT' M P' 7' MT ' G +
' " ' L L GPO F' G
2' L MT' T J' \ '
,' # QM ! GN' G I P' LM N' 7' - 9M ! O+D
' X H
I I M ! OG' NHP I ' G ' \
,' HP' ! PLHP ' N ' 9O' MT ' O N ! A MG+
' : PG' N' MQM ! GN' NHP' I M !' 7' - 9M ! O ' G +
1 ' 7 ' G I P' 7 ! N P ' \
,' J9T' N ' GLPMU ' M ! O' NH' ! ' MOO N !+
X P' Q ' N ' QM !' M' 9 NN9P' LMNKH' 7' Q J ! O+
HMN' HMNH' !' N' ! ' L 7 N' AJN' NHP' ! M I P+
' LMT' 7 P' OJKMNG ' 7 P' 2' J9O' ! N' 7M I ' N 8
' 99' N' T P9O' N ' MT ' ' NHP' - 9P
#' M ! UP ' MNP ' GH J9O' N' AP' G 9O' !' 7PP+
' GX HT ' NHP !' NHP' - 9MKU' ! P P ' 99' OP7P ! O' N+
,' 4PG ' %N G' M9 PMOT' QM G ! %O+
' ' NH JGM ! O' G J9G ' M ! O' N P ! NT' NH JGM ! O' OJKMNG+'
X 99' ! N' OPAMNP' NHP'] JPGN !' 7' NH G' GN M
H G' G' NHP' I L GNHJ I P' 7' I JKH' PM9NH' M ! O' LPMKP8
HMN' ! M O' A PMUG ' M ! O' GH G' ! ' KMJGP' # NH JN'
X HT' NHP' I M !' O PG S2' HJ I A9T' NHM ! U' T J ' G +
,' : O' AP' %T J ' G +' = 4 ' MLNM !+
!-' X 99%N' L9PMGP' T J' Q ' I T' 9 O' \
' 2' 99' AP' NH' T J' GN M QHN+' : ' M' 9 NN9P' AP7 P+
= 4 & ' & G+' "' : J / +'
" ' M99' KKMG !G' O ' !7 I ' MQM ! GN' I P+
! O' GLJ ' I T' OJ99' P P ! QP' ' X HMN' G' M' I M !+
27' H G' KH P7' Q O' M ! O' I M UPN' 7' H G' N I P+
P' AJN' N ' G9PPL' M ! O' 7PPO' \ M' APMGN ' ! ' I P+
J P ' HP ' NHMN' I MOP' JG' NH' GJKH' 9M QP' O GK J GP F
/ U !Q' AP7 P' M ! O' M7NP ' QM P' JG' H N' Z
HMN' KMLMA 9 NT' M ! O' Q O9 UP' PMG !'
' 7JGNDF' !' JG' J ! JG%O+' ' HPNHP ' N' AP'
PGN M9' A9 !' ' G I P' K M P !' GK JL9P'
17' NH !U !Q' N ' L PK GP9T' !' NHP' P P ! N S
#' NH JQHN' ' H KH'] JM NP %O' HMNH' AJN' !P' LM N' GO I +'
! O' P P ' NH PP' LM NG' K M O S2' O ' ! N' U ! '
X HT' TPN' 2' 9 P' N ' GMT+' -' 3G-' !' " ! #
NH' 2' HM P' KMJGP ' M ! O' 99 ' M ! O' GN P ! QNH ' M ! O' I PM ! G+
' O %N+' 3WM I L9PG ' Q GG' MG' PM NH ' PWH N' I P

Y ' HP' PKN ' 7' NHP' 7 9 ' 7' ' GJAGN NJNPG' '- ' (' +' 99 P
GMTG' NH P' PWL PGG !' G' LPKJ9 M 9T' HMUGLP M ! ' M ! O' 6' 7' NHP' NPWN' HMO' M9 MTG
GN O' 0- ' ' I G % M ! O' N' HMO' APP !' L L GPO' N ' KHM ! QP' N' N ' P- ' (' I G %
7P ' PMOP G' J9O' 7 ' M ! ' ! GNM ! N' HM P' K ! GP ! NPO+R' HP' M QJ I P ! N' G' M' N POQPO'
! P8 N' I MUPG' JG' HPG NMNP' MA JN' O GNJ A ! Q' M ! ' PGNMA9 GHPO' NPWN+' 27' - ' ' AP' M'
HMUGLP M !' O' - ' (' G' M' HMUGLP M !' NH JQHN ' M ! O' G' I M ! 7PGN9T' K ! ! PKNPO'
NH' NHP' OPM' 7' 6' K ! KMN !+R
=' HP' 9 ! PG' !' A MKUPNG' M P' ! N' !' NHP' 7 9 +
' 9 ' !' NHP' 7 9 8 !' NHP'] JM N G' $
' ' !' NHP' 7 9 8 !' NHP'] JM N G' 6' P% ' ! P%P ' APQ !+R
(+'

) ' %' !' NHP' 7 9 ' 8 !' NHP'] JM N G' (%
F4 '2' !' NHP' 7 9 8 !' NHP'] JM N G' % '2
% HP' H 9P' 7' NH G' GKP ! P' !' H KH' M' OJP9G' G ' APMJN 7J99T' 7J ! GHPO' N ' NHP' !
OPK G !' 7' " M I 9PN' G' M ! N ! Q' !' NHP' 7 9 +' 2N' MG' LP HMLG' I NNPO' !' MKK J ! N'
7' NHP' PWN P I P' 9P ! QNH' 7' NHP' L9MT' M ! O' MG' ! N' HP9L !Q' !' NHP' MKN !+
F - % SLJ L GPO+' NPP P ! G' GJAGN NJNPO' NHP' O' - - % *' M ! O' PKP ! N'
PO N G' 7 99 ' H I +
F PP' ! NP' !' 6 O GK J GP' 7' PMG ! R' # KN' 2+' K+' 22+
' % SN ' APK I P' I J9OT+

X N!PGG NH G M I T 7GJKH I MGG M!O KHM QP+
/PO AT M OP9 KMNP M!O NP!OP L !KP8
X H GP GL N NH O !P M I A N !LJ77%O+
MUPG I JNHG MN NHP ! G A9P P P!N8
3WL G !Q HMN G I NM9 M!O J!GJ P+
M99 NHMN 7 NJ!P OPMNH M!O OM!QP OM P+
3 P!7 M!PQQ GHP99+ & QHN9T N APQ PMN+
2G ! N N GN NH JN Q PMN M QJ I P!N+
JN Q PMN9T N 7 !O]JM PG !M GN M ;
X HP!H ! J %G MN NHP GNMUP+ " GNM!O 2 NHP!+
HMN HM P M 7MNHP U 99%O M I NHP GNM !%O+
3WK NP I P!NG 7 I T PMG ! M!O I T A9 O
#!O 9PN M99 G9PPL\ H 9P N I T GHM I P 2 GPP
HP I I !P!N OPMNH 7N P!NT NH JGM!O I P!;
HMN 7 M 7M!NMGT M!O N KU 7 7M I P;
: N NHP Q M PG 9 UP APOG8 7 QHN 7 M L9 N
X HP P !NHP !J I AP G KM!! N N T NHP KMJGP+
X H KH G ! N N I A P! JQH M!O K !N !P!N+
H OP NHP G9M !\S 1 7 I NH G N I P 7 NH+
T NH JQHNG AP A9 OT AP ! NH !Q NH['

3 3 +S39G ! P+ ! !! 9 (

<& 2 99 ! N GLPMU NH HP +;
! HP G I L NJ!MNP8 !OPPO O GN MKN8
"P I O 99 !PPOG AP L N PO+
< X HMN J9O GHP HM P\
! HP GLPMUG I JKH 7HP 7MNHP 8 GMTG GHP HPM G
HP P%G N KUG %NHP 9O# M!O HP I G M!O APMNG HP HPM N8
LJ !G P! JG9T MN GN M G8 GLPMUG NH !QG !O JAN+
HMN KM T AJN HM97 GP!GP HP GLPPKH G ! NH !Q+
4PN NHP J!GHMLPO JGP 7 N O NH I P+
, HP HPM P G N K 99PKN !8 NHPT M I MN N+
#!O A NKH NHP OG JL 7 N N NHP !NH JQHNG 8
X H KH MG HP $!UG M!O ! OG M!O QPGNJ PG T P9O NHP I +
2!OPPO J9O I MUP !P NH !U NHP P J9O AP NH JQHN+
H JQH ! NH !Q GJ P TPN I JKH J!HMLL 9T+
, <& % P P Q O GHP P P GL UP!
GN P
5M!QP JG K !EPKNJ PG !99 A PPO !Q I !OG
%+ :%2@* %
1(@C (' -((,8(+2'%, -+'2%(
3MKH N T GPP I G L 9 QJP N G I P Q PMN M I GG
7J99 7M N9PGG EPM9 JGT G QJ 9N+
2N GL 99G NGP97 !7PM !Q N AP GL 9N+

B * 2 ,"

, X HP P G NHP APMJNP JG I MEPGNT 75P! I M U\
<& " ! 1LHP9 M\

-$ "GH J9O2 T J N JP9 P U!
O I M! NHP !P
T H G K KU9P HMN M!O GNM77
#!O H G GM!OM9 GH !+6

<& #9MG G PPN 9MOT HMN I L NG NH G G !Q\
, MT T J\ !MT L MT T J I M U+

"P G OPMO M!O Q !P 9MOT
"P G OPMO M!O Q !P8
#N H G HPMO M Q MGG Q PP!NJ 7
#N H G HPP9G M GN !P+

<& MT AJN 1LHP9 M
, W - MT T J I M U+

X H NP H G GH JO MG NHP I J!NM !G! +

SG M99 NHP 9O K L PG S6 K PKNPO AT +- LP R GMTG NPP P!G+
1LHP9 MG G !Q HMO P7P P!KP N HP 7MNHP + "P MG ! N M T JNH SHP MG ! N
AM PLN NH 6 !' GH P G+R
5 'G ' 2 [S : O P]J NP T J[
--G -G N -M G N G N
=2!NHP]JM N G P 7 !O M7NP NH G 6#!O ! APH 9O+R HP OG M P
PEPKNPO !NHP 7 9 +

7

<& #9MG 9 U HP P I T 9 O+
!, /M OPO NH G PPN 79 P GJ
XH KH AP PLN N NHP Q M P O O ! N Q +
X NH N JP 9 P GH P G+$$

3 " O T J L PNNT 9MOT \
, X P99 : O %P9O T J [HD HPT GMT NHP g MG M
AMUP %G OMJQHNP + / O P U! HMN P M P AJN U!
! N HMN P I MT AP+ : O AP MN T J NMA9P[
3 O!KP N JL !HP 7MNHP +
, - MT T J 9PN JG HM P ! OG 7 NH G 8 AJN HP!
NHPT MGU T J HMN N I PM!G GMT T J NH G

I G M !N M9P!N !P%G OMT
#99 !NHP I ! !Q APN I P+
#!O 2 M I M O MN T J !O
AP T J M9P!N !P
HP!JL HP GP M!O O !!%O H G K9 NHPG+
#!O OJLL%O NHP KHM I AP O 8
/PN !NHP I M O NHMN JN M I M O
P P OPLM NPO I P+

3 - PNNT 1LHP9 M[
; 2!OPPO 9M NH JN M!' MNH+2%99 I MUP M!' P!O !%N 8

T : G M!O AT M !N HM NT
#9MKU M!O 7P 7 GHM I P[
;4 J!Q I P!' 99 O %N 7NHPT K I P N %N 8
T K KU NHPT M P N A9M I P+
>J NH GHP AP7 P T !NJ I A9PO I P+
4 J L I G%O I P N PO
J9O 2 HM%O !P AT T !OP GJ!' ,
#!NH J HMOGN ! N K I P N I T APO+

3 " 9 !Q HMG GHP APP!NH G\
, 2 H LP M99 99 AP P99+ X P I JGN AP LMN P!N8 AJN
2 KM!! N KH GP AJN PPL N NH !U NHPT GH J9O 9MT H I %
NHP KL9O Q J!O T A NHP GHM99 U! 7 N M!O G 2
NHM!U T J7 +T J Q O K J!GP9+ , I P I T K MKH[: O
! QHN 9MO PG8 Q O ! QHN G PPN 9MO PG8 Q O ! QHN Q O
! QHN+ = 4

3 O 99 HP K9 GP8 Q P HP Q O MNKH 2 L MT
T J+ = 4 %
1H[NH G G NHP L G ! 7OPPL Q P78 N GL !QG
#99 7 I HP 7MNHP %G OPMNH 1 : P N JOP : P N JOP
X HP!G G K I P NHPT K I P ! N G !Q9P GL PG+
JN ,9-++- *,(? O GN :%2 -+:%2 -,J
PWN T J G !Q !P8, M!O HP I GN 9P!N MJNH
17H G !EJGN P I P HP LP L9P I JOO PO+
H KU M!O J! H 9PG I P !NHP NH JQHNG M!O H GLP G+
O Q O - 9 ! JG%OPMNH8 M!O P HM P O !P AJN Q PP!9T F
2!HJQQP I JQQP F N !NP H I - 1LHP9 M
7 O%O 2* :%2(% - , O :%2 - 2 .'O< %,+J
X NH JN NHP H KH P M P L KNJ PG I P P APMGNG+
/MGN M!O MG I JKH K !NM ! !Q MG M99 NHPGP+
%2'92*+:%2 (,(%@2%+ @* % 2* 2-,@%
OPPOG !H G !OP UPPLG H I GP97 !K9 JOG+
#!O M!NG ! N AJCCP G N !7PKN H G PM
X NH LPGN 9P!N GLPPKHPG 7H G 7MNHP %G OPMNH8
X HP P !!PKPGG NT 7 I MNNP APQQM %O+
X 99 ! NH !Q GN KU J LP G !G N M M Q!
2!PM M!O PM + 1 I T OPM :P N JOP NH G+
/ UP N M I J OP !Q L PKP ! I M!T L9MKPG
: PG I P GJLP 79J JG OPMNH+$ = ! -2
<& #9MKU[HMN ! GP G NH G\

: P!N9P I M!+

3 X HP P M P I T NCP G\ /PN NHP I QJM O NHP
O
X HMN G NHP I MNNP \

F5 '2SJ! GP9T 9 UP ! KPG+
F9 HP PNT I 9 QT 7NH G M!K P!N O G P T J!KP NM !+ HP
K NKH HM P $! H KH ?M I PG !NP L PNG 6 !M K !7JGPO GNMNP
O G OP 9T+R 2! NH%G -9JNM KH NHP O G MLL9 PO N NHP AJ M9 7 NPGM 8S
6#!N ! JG NH !U !Q O H G NPGNM I P!N GH J9O AP PMO LP!9T M!O M9G NHMN H G
A OT GH J9O AP H ! J MA9T AJ PO M!O ! N !$! B
$ -(SM KM!! !' MG G KM99PO+ Y
, 1/+22+ jNGG

M P T J GP97 I T 9 O 8
HP KPM! P LPP!!Q 7 H G 9 GN
3MNG ! NHP 7 MNG NH I P I L N JG D HMGNP+
HM! T J!Q / MP NPG ! M N JG HPMO
1%P APM G T J 77 KP G+ HP MAA9P KM99 H I 9 O8
#!O MG NHP 9O P P! AJN N APQ !+
#!N]J NT7 Q N KJGN I ! NU! !
HP MN 7 P G M!O L LG 7P P T O
HPT K T 6 H GP P8 / MP NPG GHM99 AP U !Q [R
MLG HM!OG M!O N !QJPG MLL9MJO N N NHP K9 JOG
6 / MP NPG GHM99 AP U !Q / MP NPG U !Q9Y
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1 NH G G K J!NP T J 7M9GP 5M! GH O QG+
3 HP O G M P A UP+ 9 ! - 2

"; 5M!PG.! ! 3

? X HP P G NH G U !Q \S G GNM!O T J M99 NH JN+
9PN%G K I P !+
? 2 L MT T J Q P I P 9PM P+
X P 99 P 99+ 9 5 2 !& " !!
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: P I P I T 7MNHP +
< M9 I 9T Q O / MP NPG+
? HMN O L 7 A9 O NHMN%G KM9 I L K9M I G I P
AMGNM O8
PG KJKU 9O N I T 7MNHP 8 A M!OG NHP HM 9 N
3 P!HP P APN PP! NHP KHMGNP J!G I KHPO A
17 I T N JP I NHP +
23 X HMN G NHP KMJGP / MP NPG
HMN NHT PAP99 ! 9 UG G Q M!N 9 UP \
/ PN H I Q : P N JO I 8 O ! N 7PM J LP G ! 8
HP P%G GJKH O ! NT O NH HPOQP M U !Q+
HMN N PMG ! KM! AJN LPPL N HMN N J9O+
#KNG 9 NN9P 7H G 99+ P99 I P / MP NP
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LPMU I M!+
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HP99 M99PQ M!KP[G jN NHP A9MKUPGN OP 9[
!GK P!KP M!O Q MKP N NHP L 7 J!OPGN L N[
2 OM P OM I !MN ! NH G L !N 2 GNM!O S
HMN A NH NHP 9OG 2 Q P N !PQ9 QP!KP+
/ PN K I P HMN K I PG 8 !9T 2%99 AP P P!QPO
GN NH JQH9T 7 I T 7MNHP +
3 X H GHM99 GNMT T JO
? U T 99 ! N M99 NHP 9O
#!O 7 I T I PM!G+ 2%99 HJGAM!O NHP I G P99+
HPT GHM99 Q 7M NH 9 NN9P+
$ 3 : O / MP NPG
27T J OPG P N U! NHP KP NM !NT
17T J OPM 7MNHP %G OPMNH G %N N !T J P P!QP+
HMN G PPLGNMUP T J 99 O M A NH 7 P!O M!O 7 P+
X !!P M!O 9 GP \
? !P AJN H G P!P I PG+
3 X 99 T J U! NHP I NHP!\
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&PLMGN NHP I NH I T A9 O+
3 X HT ! T J GLPMU
/ UP M Q O KH 9O M!O M N7JP QP!N9P I M!+
HMN 2 M I QJ 9N9PGG 7T J 7MNHP %G OPMNH
#!D M I I GN GP!G A9T !Q P77 N+

% - %SD!!L NT !Q HP 7 9 7 Q PG JG %
(I NHP 7 9 8 ! NHP]JM N 0
H G 2 PWL9M !PO 6 " P99 G NH G O NNT MOMLNPO N NHP HPP9 R SN AP GJ!Q
HT NHP GL !!P G MN NHP HPP9+ HP AJ OP! 7 M G !Q GJKH MG 8 ! ! 8 +8 %
MKK O !Q N NPP P!G KM99PO NHP HPP9+
54

2N GHM99 MG 9P P9 N T J EJOQ I P!N L P KP D
#G OMT O PG N T J PTP+
- ^ 8 9 / PN HP K I P !+
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T HPM P! NHT I MO!PGG GHM99 AP LM O AT P QHN+
99 J GKM9P NJ !G NHP APM I + 1 GP 7 MT [
5PM I M O U !O G GNP G PPN 1LHP9 M[S
1 HPM P!G[G%N L GG A9P M T J!Q I M O%G NG
H J9O AP MG I NM9 MG M! 9O I M!%G 9 7P \
MNJ P G 7 !P ! 9 P M!O HP P %N G 7 !P+
2N GP!OG G I P L PK JG !GNM!KP 7 NGP97
#7NP NHP NH !Q N 9 PG+

$ + 9 GT N P AM P7MK%O !NHP A P 8
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OM P T J P99 I T O P[
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2N K J9O ! N I P NHJG+
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GNP M O NHMN GN 9P H G I MGNP %G OMJQHNP +
? H G ! NH !Q%G I P NHM!I MNNP +
, HP P%G GP I M T NHMN%G 7 P I P I A M!KP8 L MT
9 P P I P I AP M!O NHP P G LM!G PG NHMN%G 7 NH JQHNG+
? #O KJ I P!N ! I MO!PGG8 NH JQHNG M!O P I P I _
A M!KP 7 NNPO+
, HP P%G 7P!!P9 7 T J M!O K 9J I A !PG SNHP P%G
JP 7 T J8 M!O HP P%G G I P 7 8 I P S P I MT KM99 N
HP A Q MKP % J!OMTG S H T J I JGN PM T J JP NH
M O 77P P!KP+S HP P%G M OM GT S2 J9O Q P T J G I P
9PNG8 AJN NHPT NHP PO M99 HP!I T 7MNHP O PO S
HPT GMT HP I MOP M Q O P!O

$ O A !!T G PPN & A !' G M99 I T E T S,

? H JQHN M!O M779 KN ! LMGG ! HP99 NGP97+
HP NJ !G N 7M J M!O N L PNN !PGG+

$ #!O 99 HP ! N K I P MQM !' \
#!O 99 HP ! N K I P MQM !' \
! HP G OPMO+
: N NHT OPMNH APO
"P !P P 99 K I P MQM !+

" G APM O G H NP MG G! +
#99 79MWP! MG H G L 99
"P G Q !P HP G Q !P $
#!O P KMGN M %MT I M!8
: M I I P KT !' H G G J9[

#!O 7M99 H GN M!' G J9G[2 L MT : O : O AP %T J[
+ 4 ,"
? 5 T J GPP NH G 1 : O
3 / MP NPG 2 I JGN K I I ! F NH T J Q P7
1 T J OP!T I P QHN+ : AJN MLM N+
MUP KH KP 7 H I T J GPGN 7 P!OG T J 99+
#!O NHPT GHM99 HPM M!O EJOQP %N WN T J M!O I P
27 AT O PKN AT K 99MNP M9 HM!O
HPT 7 !O JG N JKH%O P 99 J U !QO I Q P
1J K ! AJ 9 7P M!O M99 NHMN P KM99 J G+
T J ! GMN G7MKN !8 AJN 7 ! N+
P T J K !NP!N N 9P!O T J LMN P!KP N JG+
#!O P GHM99 E !N9T 9MA J NH T J G J9
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" G I PM!G 7OPMNH H G AGKJ P AJ M9 S

c % 2 MG K !G OP PO N HM P NHP L P 7GN P!QNHP! !Q NHP I P I T+
=R MG I PM!N PWL PGG $SG + O NHP GM I P PMG ! N MG KM99PO
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M L MNP 7 P T M 9 UP MLL !N IP!N QM P J KHMGP 8 O !O !Q J GP9 PG N G9
7GMO P LJN !M K I LP99PO M9 J 8 !NHP Q MLL9P 2 A M OPO NHP I !NHP
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N I P NH MG I JKH HMGNP MG NH J J9OGN 79T OPMNH+ 2 HM P OG N GLPMU !
NH !P PM 99 I MUP NHPP OJ I A8 TPN M P NHPT I JKH N 9 QHN 7 NHP A P 7NHP
I MNNP + HPGP Q O 7P99 G 99 A !Q NHPP HP P 2 M I + % (D M!O
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A. HUGHES, PINXT.

C. COUSEN, SCULPT.

OPHELIA.

(HAMLET)

LONDON, VIRTUE & Co

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" 9 !Q 99 M I M!' 9 P % NHP PM NH P P HP N [
! %OM NH 7 HP AP ! N NNP!' AP7 P HP O P @MG P HM P I M! T L KUT K GPG ! M OMTG NHMN 99 GKM KP H 9O NHP 9MT !Q ! HP 99 9MGN T J G I P P QHN TPM ! !P TPM 8 M NM!!P 99 9MGN T J ! !P TPM +
X HT HP I P NHM!' M! NHP \
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X H GP MG N \
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! #' LPGN 9P!KP !' H I 7 M I MO QJP[%M L J PO M 79MQ !' 7 &HP! GH !' I T HPMO !KP# H G GM I P GUJ99 G 8 NH G GM I P GUJ99 G MG 4 KU%G GUJ99 NHP U !Q%G EPGNP +
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$ (S6 NHP GPM I MM%G KM O R 7 MKAPNH# #' GPM KHM N !' HM9 GLP P%G 9 I P MG KM99PO M (JN ENHP O M Q 7 NHP L !NG 7 NHP K I LMGG G M9G KM99PO NHP (NPP PJG M!O M9 !P O 77P MG N HPNHP M K I LMGG KM O M KHM N G HP P I PM!N+
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2 NH JQH NHT A OP APO N HM P OPKU%O G PPN I M O
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? 1 N PA9P P
OM99 NP! N I PG N PA9P !NHMN KJ GPO HPMO+
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17A9JP 19T I LJG+
' + "1 3 V XHMN G HP ' H GP Q P7
PM G GJKH M!' P I LHMG G \ H GP LH MGP 7 G '
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/ UP !OP J!OPO HPM P G \ NH G G 2
"M I 9PN NHP 5M!P +? ,-' !' '3 1
; ' HP OP 9 NMUP NHT G J9
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' H J L MT%GN ! N P99+
2 L NHPP 'NMUP NHT 7 !QP G 7 I ' I T NH MN8
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4PN HM P 2 G I PNH !Q !' I PD OM!QP JG+
XH KH 9PN NHT GP!PGGD 7PM ' # MTD NHT HM!O+
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3 ' 1 'HP G I MO / MP NPG+
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' IP 'GH ' IP HMN NH J%N O '
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NHTGP97 \
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2%99 O %N+S5 GN NH J K I P HP P N ' H !P \
' JN7MKP I P NH 9PML !Q !'HP 'Q M P \
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#!O 7 NH J L MNP 7 I J!NM !G '9PN NHP I 'NH '
99 !G 7 MK PG !' JG 8 N 99 J 'Q J!O+
!QP !Q H G LMNP MQM !GN NHP AJ ! !Q C !P+
MUP 1GGM 9 UP M M N' MT 'M!'NH J$9N I JNH+
2%99 M!N MG P99 MG NH J+
;< ' H G G I P P I MO!PGG
#!O NHJG M H 9P NHP 7 N 99 U !'H I 8
#! !' MG LMN P!N JG NHP 7P I M9P O P
',XHP!'NHMN HP 'Q 9OP!' K JL9PNG M P O GK9 G%O+
" G G 9P!KP 99 G N O L !Q+D
' " PM 'T J 'G 8
XHMN G NHP PMG !'NHMN T J JGP I P NHJG \
2 9 %O T J P P ' JN N G H ' I MNNP #
/PN " P KJ9PG H I GP97 O ' HMN HP I MT
HP KMN 99 I P 'M!O O Q 99 HM P H G OMT + 4
3 ' 2 L MT T J 'Q O " MN ' M N JL !'H I +S
+ 4 '%
N P!QNHP!'T J 'LMN P!KP !' J '9MGN ! QHN%G GLPPKH8
+ !'
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: O : P N JOP 'GPN G I P MNKH P 'T J 'G !+S
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HMN J9O ! N 9PN I P G9PPL' ' I PNH JQHN ' 2' 9MT
X GP NHM!' NHP I JN !PGF !' NHP A 9A PG+F &MGH9T
#!O L M GP AP MGH!PGG 7 ' N S/PN JG U! +
1J ' !O GK PN !' G I PN I PG GP PG JG P99+
XHP!' J 'OPM F L9 NG O 'LM998 M!O NHMN GH J9O NPMKH JG+
HP P%G M O ! NT NHMN GHMLPG J 'P!OG+
& JQH HP 'NHP I 'H ' P 99+ D
! ' HMN G I GN KP NM !
' L'7 I ' I T KMA !+
T GPM Q !'GKM 7%O MA JN I P' !'NHP OM U
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0 !QP %O NHP 'LMKUPN8 M!O' !'7 !P' NHO P '
' I !P !' I MQM !' I MU !Q G 'A 9O+
T 7PM G 7 QPNN !Q I M!!P G 'N 'J!GPM9
HP 'Q M!O K I I GG !8 HP P 2 7 J!O' " MN
' TM9 U!M P T 'M!'PWMKN K I I M!O+
/M OPO NH I M!T GP P M9 G NG 7 PMG !+
2 I L N !Q 5P! I M U%G HPM9NH 'M!O 3!Q9M!O%G N
X NH 'H '[GJKH AJQG M!O Q A9 !G !' I T 9 7P+
HMN' !'NHP GJLP GP' ! '9P GJ P AMNPO+
' ! N 'GNMT NHP Q !O !Q 7 K N KG NH NHP LMGGMQP O PG ! N L P NHMN N G
K JLN+R
4$! SN I P 7%$ * 'K !7PGG !+

JAGK A%O N8 QM P%N'NHP I L PGG !'8 L9MK%O N GM7P9T+
HP KHM!QP9 !Q !P P 'U! !' ' NHP !PWN OMT
X MG J 'GPM 7 QHN' M!O HMN N 'NH G MG GP]JP!N
H J'U! % N M9 PMOT+
! ' ' : J 9OP!GNP !' M!O& GP!K M!NC Q ' N %N+
' XHT' IM!' NHPT' O O' IMUP 9 P N ' NH G P IL9 T_
IP!N8
HPT M P' ! N' !PM ' IT' K !GK P!KP8 NHP 'OP7PMN
5 PG AT'NHP ' !' !G !JMN !'Q
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! ' XHT' HMN' M' U !Q' G'NH G[
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" P' NHMN' HMNH' U 99%O' IT' U !Q ' M!O' H %O' IT' I NHP 8
- LL%O' !' APN PP!' NHP' P9PKN !' M!O' IT' H LPG'8
H !' JN' H G' M!Q9P' 7 ' IT' L LP '9 7P+
#!O' NH' GJKH' K CP!MQP8 G%N' ! N' LP 7PKN' K !GK P!KP+
']JN' H I' NH' NH G' M I'\M!O' G%N' ! N' N 'AP' OM I !%O+
'9PN' NH G' KM!UP ' 7' J '!MNJ P' K IP'
2!'7J NHP 'P 9'\
! ' 2N' I JGN' AP' GH N9T' U! !'N 'H I'7 I' 3!Q9M!O '
X HMN' G' NHP' GGJP' 7' NHP' AJG !PGG' NHP P+
' 2N' 99' AP' GH N8 NHP' !NP I' G' I !P8
#!O' M' I M!%G 9 7P%G ! ' I NP' NHM!'N 'GMT' !P+
JN' 2' M I' P T' G T' Q O' " MN
HMN' N ' /MP NPG' 2' 7 Q N' I TGP978
O 'AT' NHP' I MQP' 7' I T' KMJGP' 2' GPP
HP' L N M NJ P' 7' H G' ' 2%99' K J!N' H G' 7M J G
JN' GJ P' NHP' A M P T' 7' H G' Q P7' O O' LJN' I P'
2!N 'M' N P !Q' LMGG !+
! ' -PMKP' 8 H ' K IPG' HP P' \

' 1 &2 +

- ' 4 J '9 OGH L' G' QHN' P9K IP' AMKU' N ' 5P! I M U+
' 2' HJ I A9T' NHM!U' T J' G +S5 GN' U! 'NH G' MNP '
79T' \
! ' ' IT' Q O' 9 O+
' HT' GNMNP' G' NHP' I P' Q MK JG8 7 '%N G' M' KP' N '
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% G' M.'KH JQH8 AJN' MG' 2' GMT' GLMK JG' !' NHP' L GGPGG !' 7'
O N+' 2
- ' PPN' 9 O' 7' T J' 7 P!OGH LD' P P' MN' 9P GJ P' 2'
GH J9O' I LM N' M' NH !Q' N 'T J' 7 I' H G' I MEPGNT+
' 2' 99' PKP P' N' NH' M99' O 9 QP!KP' 7' GL N' -JN'
T J 'A !!PN' N 'H G' QHN' JGP8 %N G' 7 'NHP' HPMO+
- ' 2' NHM!U' T J '9 OGH L' %N G' P T' H N+
' ' AP9 P P' IP' %N G' P T' K 9O8 NHP' !O' G'
! NHP 9T+
- ' 2N' G' !O 77P P!N' K 9O' IT' 9 O' !OPPO+
' PNH !UG' N' G' P T' GJ9N T' M!O' H N' 7 ' IT' K I_
L9PW !+
- ' 3WKPPO !Q9T' IT' 9 O8 N' G' P T' GJ9N T SMG' %N P P'
S2' KM!! N' NP99' H +S JN' IT' 9 O' H G' I MEPGNT' AMOP' IP'
G Q! 7T' N 'T J 'NHMN' HP' HMG' 9M O' M' Q PMN' MQP ' !'T J 'HPMO'
'NH G' G' NHP' I MNNP +
' 2' APGPPKH' T J' P I P I AP S
;% ' !1 -' ' !',&'! ' -'
- ' MT' !' Q O' 7M NH8' 7 ' I !P' PMGP' !' Q O' 7M NH+
^ 'HP P' G !P 9T' K IP' N ' K J N' /MP NPG' ' AP9 P P' IP' M!'
MAG 9JNP' QP!N9P I M!' 7J99' 7' I GN' PWKP99P!N' O 77P P!KPG' 7'
P T' G 7N' G K PNT' M!O' Q PMN' GH !Q' 2!OPPO' N ' GLPMU'
7PP9 !Q9T' 7' H I 'HP' G' NHP' KM O' ' KM9P!OM ' 7' QP!N T' 7 '
T J' GHM99' 7 !O' !' H I' NHP' K !N !P!N' 7' HMN' LM N' M' QP!N9P_
I M!\' J9O' GPP+

' !'NHP']JM N G8 !'NHP' 7 9 ' "
6 F %$ -' !'NHP' 7 9 '8 !']JM N G' ' %$ -' ' +' 99 P 'KM99G' %$ -' M'
K JLN !+' X P' HM P' PNM !PO' NHP' 6'K JLN ! R' AP9 P !Q' !'NHP' L L PNT' 7' NHP'
K PKN !' !'NHP' 7 9 +' 1G K' G' NHP' PL PGP!NMN P' 7' PJLHJ G I S NHP' M77PKNPO'
LH MGP 9 QT' 7' HMUGLP P%G MQP S M!O' NH G' G' !P' 7' NHP' 7 IG' 7' NHP' M77PKNMN !'
H KH' J!G' NH JQH' M G' NHMN' 1G K' GMTG+
' LHP' 9 !Q' LMGGMQP' !' A MKUPNG' G' ! N' Q P!' !' NHP' 7 9 ' AJN' G' 7 J!O' !']JM N '

' ' H G' OP7 !P I P!N' GJ77P G' ! ' LP O N !' !' T J8S',
NH JQH' 2' U! ' N ' O OP' H I' ! P!N M99T' J9O' O CCT'
NHP' M NH I PN K' 7' I P I T8 M!O' TPN' AJN' M ' !P NHP ' !'
PGLPKN' 7' H G']J KU' GM 9+' JN' !' NHP' P NT' 7' PWN 9 I P!N'
2' NMUP' H I' N ' AP' M' G1J9' 7' Q PMN' M N K9P8 M!O' H G' !7JG !' 7'
GJKH' OPM NH' M!O' M P!PGG' MG' N ' I MUP' N JP' O KN !' 7' H I'
H G' GP I A9MA9P' G' H G' I '8 M!O' H ' P9GP' J9O' N MKP' H I'
H G' J I A MQP' ! NH !Q' I P+
- ' 4 J '9 OGH L' GLPMUG' I GN' !7M99 A9T' 7' H I+
' HP' K !KP !M!KT' G '\ HT' O ' P' ML' NHP' QP!N9P_
I M!' !' J' I P' M P' A PMNH'
- ' \
! ' 2G%N' ! N' L GG A9P' N ' J!OP GNM!O' !' M! NHP' N !QJP' \
4 J' 99' O %N' G ' PM99T+$
' XHMN' I L NG' NHP' ! I !MN !' 7' NH G' QP!N9P I M!' \
- ' 17' /MP NPG' \
! ' " G' LJ GP' G' P I LNT' M9 PMOT8 M99' H G' Q 9OP!' OG'
M P' GLP!N+
' 17' H I' G +
- ' 2' U! 'T J' M P' ! N' Q! M!N S
' ' J9O' T J' O O' G 8 TPN' !' 7M NH' 7' T J' O O' N'
J9O' ! N' I JKH' MLL P' I P+S X P99' G +F'
- ' 4 J' M P' ! N' Q! M!N' 7' HMN' PWKP99P!KP' /MP NPG' G'
MN' H G' PML !+
= ' 2' OM P' ! N' K !7PGG' NHMN' 9PGN' 2' GH J9O' K I LM P'
NH' H I' !' PWKP99P!KP8' AJN' N 'U! 'M' I M!' P99' P P' N'
U! 'H I GP97+
- ' 2' I PM!' G '7 'H G' PML !8 AJN' !' NHP' I LJNMN !'
9M O' !' H I' AT' NHP I ' !' H G' I PPO' HP%G' J!7P99 PO+'
' XHMN%G' H G' PML !'\
- ' &ML P 'M!O' OMQQP +
' HMN%G' N ' 7' H G' PML !G' AJN' P99+
- ' HP' U !Q' G 'HMNH' MQPO' ' NH' H I' G W' M AM T'
H GPG' ' MQM !GN' NHP' H KH' HP' HMG' I L !PO F' MG' 2' NMUP' N'
G W' O P!KH' ML P G' M!O' L ! M OG' NH' NHP ' MGG Q!G' MG'
Q O9P' HM!QP G' ' G ' H PP' 7' NHP' KM MQPG' !' 7M NH' M P'
P T' OPM' N ' 7M!KT' P T' PGL !G P' N ' NHP' H 9NG' I GN' OP9 _
KMNP' KM MQPG' M!O' 7' P T' 9 AP MG' K !KP N+
' XHMN' KM99' T J' NHP' KM MQPG' \
= ! ' 2' U!P 'T J' I JGN' AP' PO 7 PO' AT' NHP' I M QP!N' P P'
T J' HMO' O !P+'
- ' HP' KM MQPG' G ' M P' NHP' HM!QP G+
' HP' LH MGP' J9O' AP' I P' QP I M!' N ' NHP' I MNNP '
7' P' K J9O' KM T' KM!! !' AT' J' G OPG' ' 2' J9O' N' I QHN' AP'
HM!QP G' N 99' NHP!+' JN' ! ' W' M AM T' H GPG' MQM !GN'
G W' O P!KH' G OG' NHP 'MGG Q!G' M!O' NH PP' 9 AP MG' K !KP NPO'
KM MQPG8 NHMN%G' NHP' O P!KH' AP N' MQM !GN' NHP' 5M! GH' + XHT'
G' NH G' I L !PO' MG' T J' KM99' N' \
- ' HP' U !Q' G ' HMNH' 9M O' NHMN' !' M' O CP!' LMGGPG'
APN PP!' T J' M!O' H I' HP' GHM99' ! N' PWKPPO' T J' NH PP' H NG' 8
HP' HMNH' 9M O' !' N P9 P' 7 ' ! !P8 M!O' NHMN' J9O' K IP' N '
I I PO MNP' N M9' 7' T J' 9 OGH L' J9O' JKHGM7P' NHP'
M!G P +
' " ' 7' 2' M!G P' ! ' \
- ' 2' I PM!' IT' 9 O' NHP' LL G N !' 7' T J' LP G !' !'
N M9+
' ' 2' 99' M9U' HP P' !' NHP' HM99+' 27' N' L9PMGP' H G'
I MEPGNT' N' G' NHP' A PMNH !Q' N I P' 7' OMT' NH' I P' 9PN' NHP'
7 9G' AP' A JQHN' NHP' QP!N9P I M!' 99 !Q' M!O' NHP' U !Q' H 9O'
H G' LJ L GP' 2' 99' !'7 'H I' 7' 2' KM!'8 7' ! N' 2' 99' QM !'
! NH !Q' AJN' IT' GHM I P' M!O' NHP' OO' H NG+
- ' HM99' 2' P OP9 P 'T J' P%P!' G' \
' 'NH G' P77PKN' G 8 M7NP' HMN' 79 J GH' T J' !MNJ P'
99+
- ' 2' K I I P!O' IT' OJNT' N 'T J '9 OGH L+' = 4
' 4 J G 'T J G+' " P' O PG' P99' N 'K I I P!O' N' H I GP978'
NHP P' M P' ! 'N !QJPG' P9GP' 7 %G' NJ !+

@& +' H JQH' N' O GL9MTG' NHP' N' M!O' PMO !P7P' 7' " M I 9PN' N ' Q PMN' MO M!NMQP ' N'
MG' LP HMLG' NH JQHN' NHMN' N' L 9 !QPO' NHP' I M !' AJG !PGG' G I P HMN' N ' I JKH+'
P P MG' NHP ' LMGGMQPG' !' NH G' GKP!P' H KH' P' 7 !O' !' NHP']JM N ' M P' I NNPO'
!' NHP' 7 9 8 M!O' NHPGP' P' HM P' L9MKPO' !' A MKUPNG+
' & ' !' NHP' 7 9 '8 !' NHP']JM N G' 8
F - ' !' NHP' 7 9 '8 !' NHP']JM N G' - 8 0

! ' H G 9ML !Q J!G M MT NH NHP GHP99 !' H G HPMO+
' " P O O K I L9TD NH H G OJQ ' AP7 P HP GJKUPO N+
HJG HMG HP @M!O I M!T I P 7 NHP GM I P AP T ' NHMN ' 2
U! ' NHP O GGT MQP O NPG ! ' !9T Q N NHP NJ!P 7 NHP
N I P ' M!O JN M O HMA N 7 P!K J!NP 8 M U !O 7 TPGNT K 9_
9PKN !' H KH KM PG NHP I ' NH JQH M!O NH JQH NHP I GN
7 !O M!O !! PO L ! !G8 M!O O ' AJN A9 ' NHP I ' N '
NHP ' N M9G ' NHP AJAA9PG M P JN+

= ' ' / O+

?! " ' T 9 O ' H G I MEPGNT K I I P!OPO H I ' N ' T J AT
T J!Q 1G K H ' A !QG AMKU N ' H I ' NHMN T J MNNP!O H I '
!' NHP HM99 ' " P GP!OG N ' U! ' 7 T J ' L9PMGJ P H 9OG N '
L9MT NH / MP NPG ' ' NHMN T J 99 NMUP 9 !QP ' N I P+
' 2 M I ' K !GNM!N N ' I T LJ L GPG ' NHPT 7 99 ' NHP
U !Q%G L9PMGJ P ' 7 H G 7 N!PGG GLPMUG ' I !P G PMOT8 ! '
' HP!G P P ' L OPO 2 AP G ' MA9P MG ! +
?! " ' HP U !Q ' M!O]JPP! ' D!O M99 M P K I !Q O !+
' 2!' HMLLT N I P+
?! " ' HP]JPP!' OPG PG T J N ' JGP G I P QP!N9P P!NP _
NM ! I P!N N ' / MP NPG $ AP7 P T J Q ' N ' L9MT+
' HP P99 !GN JKNG I P = 4 ' / O+'
! ' 4 J 99 9 GP NH G MQP ' I T 9 O+
' 2 O ' ! N NH !U G 8 G !KP HP P!N ' O M!KP ' 2
HM P APP!' !' K !N ! JM9 L MKN KP8 2 GHM99 !' MN NHP OOG
JN NH J J9OGN ! N NH !U ' H ' 99 M99%G HP P MA JN I T
HPM N ' AJN N G ! ' I MNNP +
! ' MT ' Q O I T 9 O S
' 2N G AJN 7 9P T8 AJN N G GJKH M U !O 7 QM !_
Q !Q ' MG J9O ' LP HMLG ' N JA9P M I M!+
! ' 27 T J ' I !O O G9 UP M!TNH !Q ' APT ' 2 99 7 PGNM99
NHP ' PLM ' H NHP ' M!O GMT ' T J M P ! N 7 N+
' N M H N ' P OP7T MJQJ T8 NHP P%G M GLPK M9 L
OP!KP !' NHP 7M99 7 M GLM = 27 N AP ! ' %N G ! N N '
K I P8 7 N AP ! N+ N ' K I P ' N 99 AP ! 8 7 N AP ! N
! ' TPN N 99 K I P ' NHP PMO !PGG G M99 ' !KP ! ' I M!'
HMG MJQHN 7 HMN HP 9PM PG ' HMN G%N N ' 9PM P APN I PG

' ' 4 ' 1 ' $ADN ' , ! ' "'
CCGHN?HC ' 2 '.! -$ X

3 ' I P ' " M I 9PN ' K I P ' M!O NMUP NH G HM!O 7 I ' I P+
= ' Z '. -' ' "' 1 ' !' '!.'
+ 1
' : P I P T J 'LM O ! ' G ' 2 HM P O !Q T J !Q8
JN LM O !%N ' MG T J M P M QP!N9P I M!+
H G L PGP!KP U! G ' M!O T J I JGN !PPOG HM P HPM O+
" ' 2 M I ' LJ! GH%O NH M G P O GN MKN !+
',X HMN 2 HM P O !P+
HMN I QHN T J ' !MNJ P ' H ! J ' M!O PWKPLN !+
& JQH9T M MUP ' 2 HP P L K9M I ' MG I MO!PGG+
X MG%N " M I 9PN !Q%O / MP NPG \ P P ' " M I 9PN
27 " M I 9PN 7 I ' H I GP97 AP NM%P!' M MT+
O ' HP!' HP%G ! N H I GP97 ' O PG !Q / MP NPG
HP!' " M I 9PN O PG N ! N ' " M I 9PN OP! PG N+
XH ' O PG N NHP!' \ N G I MO!PGG ' 27%N AP G
" M I 9PN □ ' A>' NHP >?OC□AH' NHMN □ ' DAH 8N
" G I MO!PGG G L ' " M I 9PN%G P!P I T+
' !' NH G MJO P!KP+
/ PN I T O GK9M I !Q 7 I ' M LJ L G%O P 9
O PP I P G ' 7M ' !' T J ' I GN QP!P JG NH JQHNG
HMN 2 HM P GH N I !P M ' %P ' NHP H JGP+
!O HJ N I T A NHP +
? ' 2 M I ' GMN G7 PO !' !MNJ P+
XH GP I N P ' !' NH G KMGP ' GH J9O GN ' I P I GN
' I T P P!QP 8 AJN !' I T NP I G 7H ! J

' -'2S MG K I L9M GM!N 2!' OJ9 P G 6 # NP 7O9MNNP P R @) = ' P HM P
NHP GM I P OPM S6 HP P T GJKU !Q AMAPG HMNH M U !O 7MOJ9MN !' N M OG NHP '
!J GPG 7 ' NHP OJQ+R
' NHP 7 9 HP PMO !Q 7 NHP]JM N G G 6 !KP ! ' I M! ' 7 MJQHN HP
9PM PG ' U! G ' HMN G%N N ' 9PM P APN I PG \ / PN AP R

2 GNM!O M9 78 M!O 99 ! ' PK !K 9P I P!N+
99 AT G I P P9OP ' I MGNP G ' 7 U! !' H ! J
2 HM P M KP M!O L PKPOP!N 7 LPMKP
' UPPL ' I T !M I P J!Q %O ' JN N 99 NHMN N I P
2 O ' PKP P T J ' 77P %O 9 P 9 UP 9 P+
#!O 99 ! N !Q N+
' 2 P I A MKP N 7 PP9T8
#!O 99 NH G A NHP %G MQP ' 7 M!U9T L9MT+
: P JG NHP 7 9G 8 K I P !+
? ' I P ' !P 7 ' I P+
' 2%99 AP T J ' 7 9 ' / MP NPG8 !' I !P Q! M!KP
4 J ' GU 99 GHM99 ' 9 UP M GNM ' %NHP OM UPGN ! QHN+
N KU 7 P T 77 !OPPO+
? ' 4 J I KU I P ' G +
' ' AT NH G HM!O+
3 ' : P NHP I ' NHP 7 9G ' T J!Q 1G K JG !' " M I 9PN '
4 J U! ' NHP MQP ' \
' P T P99 ' I T 9 O 8
4 J ' Q MKP AMNH 9M O NHP OOG %NHP PMUP ' G OP+
3 ' 2 O ' ! N 7PM ' N ' 2 HM P GPP!' T J A NH+
JN G !KP HP%G APNNP %O ' P HM P NHP P7 P OOG+
? ' H G G N ' HPM T ' 9PN I P GPP M! NHP +
' H G 9 UPG I P P99 ' HPGP 7 9G HM P M99 M 9P!QNH \
= 5 , , ' !', 5
- ' #T ' I T Q O 9 O+
3 ' PN I P NHP GN JLG 7 !P JL !' NHMN NMA9P
27 " M I 9PN Q P NHP 7 GN ' GPK !O H N+
1 ']J N !' M!G P ' 7 NHP NH O PWKHM!QP+
/ PN M99 NHP AMNN9P I P!NG NHP ' O!M!KP 7 P8
HP U !Q GHM99 O !U N ' " M I 9PN%G APNNP ' A PMNH8
#!O !' NHP KJL M!' J! !F GHM99 HP NH +
& KHP ' NHM!' NHMN H KH 7 J ' GJKKPGG P U !QG
2!' 5P! I M U%G K !' HM P !+ : P I P NHP KJLG 8
#!O 9PN NHP UPNN9P N ' NHP N J I LPN GLPMU+
HP N J I LPN N ' NHP KM!! !G N ' NHP HPM P!G +NHP HPM P!' N ' PM NH+
' NHP U !Q O !UG N ' " M I 9PN+ S I P APQ !' 8 S
#!O T J ' NHP EJOQPG ' APM ' M M T PTP+
' I P !' G +
? ' I P !' G + = 5 , 5
' 1 !P+
? ' + +
' ?JOQ I P!N+
- ' #' H N ' M P T LM9LMA9P H N+
? ' X P99 SMQM !+
3 ' NMT ' Q P I P O !U ' " M I 9PN ' NH G LPM 9 G NH !P8
" P P%G N ' NHT HPM9NH+ : P H I ' NHP KJL+
= & , -' -!& "# "' ! ' - !' !..'2 '
' 2%99 L9MT NH G A JN 7 GN ' GPN N AT M H 9P+
I P+ S#! NHP ' H N8 X HMN GMT T J\ = 5 , 5
? ' #' N JKH ' M N JKH ' 2 O ' K !7PGG+
3 ' 1J ' G !' GHM99 !+
<& ' ' " P%G 7MN ' M!O GKM!N 7 A PMNH+
" P P ' " M I 9PN ' NMUP I T !MLU !' JA NHT A G
HP]JPP!' KM JGPG N ' NHT 7 NJ!P ' " M I 9PN+
' : O ' I MOM I +
3 ' : P N JOP ' O ' ! N O !U+
<& ' 2 99 ' I T 9 O8S2' L MT T J ' LM O !' I P+
3 ' 2N G NHP L G !%O KJL ' ' N G N ' 9MNP+ = - " '
' 2 OM P ! N O !U TPN ' I MOM I 8 AT M!O AT+
<& ' ! $ ' I P LP NHT 7MKP+
? ' T 9 O+ 2%99 H N H I ' ! +
3 ' 2 O ' ! N NH !U N+
? ' #!O TPN N G M9 I GN MQM !GN I T K !GK P!KP+
= - "
' I P ' 7 ' NHP NH O ' / MP NPG ' 4 J AJN OM99T
2 L MT T J ' LMGG NH T J ' APGN 9P!KP8 I
2 M I ' M7PM O T J I MUP M M!N !' 7 I P+
? ' MT T J G ' \ K I P !+ = 5 , 5

F 6 SM P T KH LPM 9+ HP]JM N G PMO 2J
H ' NHP]JM N G 8 !' NHP 7 9 ' NHP H!P GNM!OG S
6 " P P%G M !MLU !' JA NHT A G+R
1 / + 22+ ' (*)

' ' ! ' ' ' !

' 2+

g' ' $ R ,'%$' D.' $ ' ' $' ' ' $' 2' YO

' O?H' LG' HA' NABLC' JG' CF□H(' CF?C' CF□' >□HG' NG OD□KC□AH' □' >ABHNGN' BKAH' A@G' □@□M?D' NG OD□KC□AH' □H' CFG' $?C□H' M?H B? G' #FG' KGOBM□?D' GH G' A>'CFG' JADN' 8 3 .' .' .' KA□HC' CA' BOF' ?' ABDOG' #FG' >□D C' FE@H' A>' DBNGHC□B' F?' A@G' □@□M?D□CE' LBC' %ABOG' F?' ?M A' >ABHN' □H' CFG' ?M□ LBDE' OAMMGOC□AH' A>' E@H' KD□HCGN' LE' EH AH' ?' K? ? G' >DA@' ?' FE@H' ?CCD□LBCGN' CA' C' @LDA G' □H' JF□OF' CFG' □@? G' @?E' LG' @ADG' N□ C□HOCME' CD?OGN

6 - PK 'O PN'EM I 'G !MN+
PN G' L 7J!O I 'LP Q 98
KNJ I M' 9JW' M!N AJG
#'! KNP'! KNP I 'GPQ PQM!G+
" K' PWK NMNJG' / JK 7P
9 N' L 9J I 'KM9 Q !P8
" K' I ! G' P J I 'KH JG'
M I '! KP!O 'OPGP N+
: M99 'KM!P!NP' GLPG' PO N R' BK+

' R ='L .' D.' $' .2'

?MNGOACC' □H' F□' GN□C□AH' A>' ?@MGC' A@GC□@G' >?MM' □HCA' CF?C' >?BMC >□HN□H' CAHG' LE' JF□OF' A@G' F?(KGD□?H' OD□C□O' ? GDC' CFG□D' AOO? □AH?M' BKGD□AD□CE' APGD' CFG□D' ?BCFAD' R '='#FG' ?M@A C' @A@GHC?DE' ?KKG?D?HOG' A>'CFG' FA C' ?HN' CFG' FADC' OAHPGD ?C□AH' KDGOGN□H' ?HN' BL GQBGHC' CA' □C' OABMN' HAC' F?PG' >□MMGN' BK' CFG' MAH' □HCGDP?M' A>' ?' J□HCGD8' H□ FC' □H' %GH@?D(' >DA@' CJGMPG' C□MM' @ADH□H I' BOF' □' & D' ?MNGOACC8' ALSGOC□AH' CA' CF□' OGHG' . BC' FA J' NAG' FG' (HAJ' CF?C' □C' J? '?' 0 'H□ FC'W' D?HO□ OA' □HNGGN' ?E' ='8C□' L□CCGD' OAMN' 'I' LBC' GPGH' □H' CFG' H□ FC' A>' $' ' A>'CFG' HADCF' A>' !BDAKG' NBD□H' CFG' FADC' □HCGDP?M' LGCJGGH' CJ□M□ FC' ?HN' BHD□ G' = CFG' ?□D' L□CG' FDGJNME I' #F?C' CF□' J? ' CFG' G? AH' □HCGHNGN' LE' (?(KGDG' □' □HN□O?CGN' LE' KFGM□?8' >MAJGD' GD' K?H □G' FGD' OAMB@L□HG' ?HN' FGD' N?□ □G' LGMAH' HAC' CA' CFG' J□HCGD' ?HN' FGD' ,'OADAHGC' JGGN 'I' JGDG' CFG' >□GMN' >MAJGD' A>' CFG' M?CCGD' KD□H' FBH' BKAH' CFG' J□MMAJ' □H' >BMM' >AM□? GR' :

6 HMN' GH G' H G' H M' 9PM PG' !'NHP' Q9MGGT' GN PM I +R

' ' R ,' ' $ ' $' '
' $ ' ' ' 0'7

#F□' D?@@?C□O?M' □@KDAKD□GCE' ?' JG' HAJ' O?MM' □C' ?' ?' OA@@AH' M□OGH G' A>' CFG' LG C' ?BCFAD' A>' F?(KGDG8' ? G' #FG' B G' A>' CFG' KMBD?M' PGDL' J□CF' CFG' HA@□H?C□PG' □H BM?D' ?' KMBD?M' GH□C□PG' □HCGD-PGH□H' O?H' O?DOGME' LG' NGCGOCGN' ?' ?H' GDDAD' GPGH' LE' CFA G' JFA' OAH □NGD' CFG' KGOBM□?D' KFD? GAMA E' A>' CFG' C□@G' A>' !M□T?LGCF' ?' ?' L?DL?D□ @' ?HN' ?DG' ?KC' CA' O?MM' ABC' BKAH' F?(KGDG' ?' ?' @AH CDAB' P□AM?CAD' A>' D?@@?D' #FG' CDBCF' □' CF?C' □C' □' AHME' J□CF□H' CFG' M? C' F?M> OGHCBDE' CF?C' CFG' OAH CDBOC□AH' A>' ABD' M?H B? G' F?' ?CC?□HGN' CF?C' BH□>AD@' KDGO□ □AH' JF□OF' □' HAJ' DGQB□DGN' G' >□HN' □H' ?MM' CFG' AMN' ND?@?C□ C' @?HE' BOF' M□HG' ?' CF□' □H' &?DMAJG' R

6' HP' % ' 7'HP 'QM I P!NG' 8 ' 7'9M !+R

HN' CAA' @?HE' BOF' M□HG' F?PG' LGGH' OADDGOCGN' LE' CFG' GN□CAD' A>' F?(KGDG' JFA' F?PG' CFB' ALM□CGD?CGN' CFG' CD?OG' A>' ABD' CAH BG8' F□-CADE' C' □' DG@?D(?LMG' CF?C' CFG' PGDE' OA@@GHC?CAD' JFA' JGDG' ?MJ?E' DG?NE' CA' >□' CFG' OF?D G' A>' □ HAD?HOG' A>' CFG' DBN□@GHC' A>' D?@@?D' BKAH' F?(KGDG' F?PG' ?N@□CCGN' CFG' >AMMAJ□H' K? ? G' □H' ?' HACG' CA' GHDE') ' ?DC' LE' CF?C' GMG ?HC' @ANGDH' OFAM?D' # ' ?DCAH' R = .G?B@AHC' ?HN' MGCOFGD8' KM?E' OAHC?□H' @?HE' ' D ' ? ?□H C' GEJAAN8' OA@GNE' $' A>'JF□OF'?D WGHC□DGME' MA C' CA' CFA G' JFA' F?PG' HAC' GGH' CF?C' OA@GNE I

=' ' R =' ' ' ' 2

)?DLBDCAH' ?E' =' .E' CFG' ?CED□' @G?HC' ?H' ?' LE' EKGD□AH' KAMMA' ?H' ?HN' KAMMA' JGDG' LDACFGD' ?HN' CFG' ?MMB □AH' □' CA' CFG' OAHCGHC□AH' LGCJGGH' CFA G' AN' >AD' CFG' KDG>GDGHOG' □H' @B □O I' CGGPGH' AH' CFG' ACFGD' F?HN' LGM□GPG' CF?C' F?(KGDG' =' F?' HA' ?MMB □AH' □H' CFG' KDG GHC' □H C?HOG' G OGKC' CA' CFG' LG?BCE' A>' KAMMA' ?HN' □C' □@@GN□?CG' AKKA □CG' CFG' NG>AD@□CE' A>' ?' ?CED I' ?D@GD' □

O?DG>BM' CA' KA□HC' ABC' CFG' GDDAD' □H' QB?HC□CE' □H' F?(KGDG8' EKGD□AH' LBC' FG' O?HN□NME' ?N@□C' CF?C' KGH GD' F?' OA@@□CCGN' CFG' ?@G' GDDAD' +D?E' JFA G' OFAM?D F□K' JABMN' F?PG' OA@@?HNGN' ?D@GD8' ?KKDAL?C□AH' □>'FG' OABMN' HAC' ?KKDGO□?CG' F□' KAGCDE' F?' CF□' M□HG R

6 "TLP !%G' I M KH' M!O' QHNNP !Q' GHM7NG' 7' M +R

#FG' OA@@GHC?CAD' F?PG' AHME' >ABHN' AHG' AM□C?DE' □H C?HOG' A>' EKGD□AH' ?@AH C' CFG' KAGC' A>'CFG' GPGHCGGHCF' OGHCBDE

' ') R ='%$'D ' $'0 D' J $.2'N

#F□' K? ? G' NG OD□KC□PG' A>'%?H□ F' □HCG@KGD?HOG' AOOBD' J□CFABC' ?MCGD?C□AH' □H' CFG' QB?DCA' A>' 473' H' CFG' ?B @GHCGN' GN□C□AH' A>' 47/' JG' >□HN' ?NNGN' CFG' CJGHCE CJA' M□HG' LG □HH□H R

6' H G' HPM T HPMOPO' P P9' PMGN' M!O' PGN
MUPG' JG' N MOJK%O' M!O' NMW%O' 7' NHP' !MN !G+R

#FG' NDBH(GHHG ' CFB' ?CCD□LBCGN' CA' CFG' %?HG' □H' CFG' AD□ □H?M' K? - ? G' □' QB?M□>□GN' □H' CFG' ?NN□C□AH?M' M□HG' C' C?(G' >DA@' ='?OF□GPG-@GHC' 'I' □C' □' CFG' ='AHG' NG>GOC88R ='CFG' ND?@' A>' □MM I' #F□' O□DOB@-C?HOG' JF□OF' JG' F?PG' HAC' GGH' HAC□OGN' □' CA' ABD' @□HN' □H BM?DME' □HN□O?C□PG' A>' F?(KGDG8' OF?D?OCGD' O?@G' ' O?@G' CA' CFG' !H M□ F' CFDAHG' □H' 473' F□' QBGGH' J?' HHG' A>' %GH@?D(' #FG' □HCG@-KGD?HOG' A>'CFG' %?H□ F' OABDC' J?' JGMM' (HAJH' CA' ?MM' !BDAKG' AJGMMZ' JFA' P□ □CGN' %GH@?D(' ?C' CFG' LG □HH□H' A>' CFG' GPGHCGGHCF' OGHCBDE' CFB' NG OD□LG' CFG' =DAB GI' ?HN' CFG' =J? GM I' □H' F□' $GCCGD R' =' @?NG' ?' $?C□H' KGGOF' CA' CFG' (□H' A>' %GH@?D('I' V FD□ C□?H') ' BHOMG' A>' HHG' QBGGH' A>' O?@G' =AH' CFG' G@L? E' A>' @E' MADN' A>' $G□OG CGD' JFA' ?CCGHNGN' F□@' ?C' "FGEH LBD' □H' AM CG□HM?HN' #FG' (□H' >G? CGN' @E' MADN' AHOG' ?HN' □C' M? CGN' >DA@' GMGPGH' A>' CFG' OMAO(' C□MM' CAJ?DN' CFG' GPGH□H' NBD□H' JF□OF' C□@G' CFG' (□H' LG ?H' CF□DCE' >□PG' FG?MCF' 'CFG' >□D C' CA' CFG' G@KGDAD' CFG' GOAHN' CA' F□' HGKFGJ' A>' !H M?HN' ?HN' A' JGHC' APGD' ?MM' CFG' (□H' ?HN' QBGGH' A>' FD□ CGH-NA@' LBC' FG' HGPGD' DG@G@LGDGN' CFG' D□HOG' ?M D?PG8' FG?MCF' AD' F□' H□GOG8' ?MM' CFG' JF□MG' %$'D '0 ' D ' 0 ' ' ' '$' $ 2' #F□' ?@G' (□H ME' MAPGD' A>' CFG' = FG?PE FG?NGN' DGPGM I' P□ □CGN' !H M?HN' AAH' ?>CGD' O?@G 8' ?OOG □AH' CA' CFG' CFDAHG' ?HN' CFG' G>>GOC' A>' CF□' P□ □C' BKAH' CFG' H?C□AH?M' @?HHGD' ?DG' CFB' NG-OD□LGN' □H' ?' MGCCGD' CA' □D' OAFH' ?DD□H CAH' 474 R = DA@' CFG' N?E' CFG' %?H□ F' (□H' O?@G' BHC□M' CF□' FABD' F?PG' LGGH' JGMM' H□ F APGDJFGM@GN' J□CF' O?DAB ?M' ?HN' SKDC' A>' ?MM' (□HN ' CF□H(' CFG' %?HG' F?CF' CD?H GME' JDAB FC' AH' ABD' AAN' !H M□ F' HALMG' >AD' CFA G' JFA@' ' HGPGD' OABMN' GC' CA' C? CG' AAN' M□QBAD' HAJ' >AMMAJ' CFG' >? F□AH' ?HN' J?MMAJ' □H' LG? CME' NGM□ FC ' #FG' M?N□G' ?L?HNAH' CFG□D' ALD□GCE' ?HN' ?DG' GGH' CA' DAMM' ?LABC' □H' □HCA □O?C□AH' ' NA' A>CGH' ?E' VLBC' HAC' ?MABN' CF?C' CFG' %?HG' F?PG' ? ?□H' OAH-QBGDGN' CFG' .D□C?□H' '>AD' ' GG' HA' @?H' AD' JA@?H' G□CFGD' CF?C' O?H' HAJ' OA@@?HN' F□@ GM>' AD' FGD GM>I' □D' OAFH' ?DD□H CAH' □C' GG@' N□N' HAC' PGHCBDG' CA' ?E' ' JF?C' FG' CFAB FC' A>' CFG G' F?L□C' ?HN' >AD' CFG' ?@G' DG? AH' F?(KGDG8' CDAH' NG OD□KC□AH' A>' CFG' OB CA@R

6 P'H ! J %O' !'NHP' A PMKH' NHM!'NHP' AGP M!KP'R S

@□ FC' F?PG' □PGH' A>>GHOG' CA' CFG' OABDC' A>' CFG' HGJ' @AH?DOF' .BC' FG' N□N' HAC' BKKDG' CFG' NG OD□KC□AH' G' @?NG' □C' AHME' MG' GPGDG' LE' ?' CAMGD?HC' G KA □C□AH' A>' CFG' @ANG' □H' JF□OF' AHG' □M' QB?M□CE' NG CDAE' CFG' MB CDG' A>' @?HE' AAN' AHG' C' □' DG@?D(?LMG' CF?C' CF□' ?NN□C□AH?M8K? ? G' J?' A@□CCGN' □H' CFG' >AM□A' A>' 423' KBLM□ FGN' ?>CGD' CFG' NG?CF' A>' HHG' A>'%GH@?D(

') S $' ' ' '$$ 7

%D' +DGE' CF□H(' CF?C' $" ' J?' ?' KAGC□O?M' @AN□>□O?C□AH' A>' $ " ' BD' □HN□ GHAB' FGHL?HG' U ' ' □' JGMM' (HAJH' □H' @GN□O□HG' >AD' □C' AACF□H' ?HN' H?DOAC□O' KDAKGDC□G' ?HN' ?' M?D G' NA G' HA' NABLC' JABMN' LG' KA□ AHAB' #F?C' □C' J?' OAH □NGDGN' ?' ?' KA□ AH' □H' F?(KGDG8' C□@G' JG' F?PG' B>>O□GHC' GP□NGHOG' H' D?E' CAH8' ='.?DAH 8' ?D 'I' JG' F?PGR

6' HP' L G ! !Q' $ # M!O' NHP' I M!O MUP' O PMO+%

C' J?' ?' LGM□G>' ?M A' GPGH' A>' CFG' @GN□O?M' KDA>G AD' A>' CF?C' N?E' CF?C' KA□ AH' @□ FC' LG' □HCDANBOGN' □HCA' CFG' E CG@' LE' LG□H' KABDGN

(*+

E? $ ' >' E

□HCA' CFG' G?D' @LDA G' ?DZ' CFG' OGMGLD?CGN' DGHOF' BD GAH' J? ' ' OF?D GN' J□CF' F?P□H ' ?N@□H□ CGDGN' KA□ AH' □H' CF□ ' J?E' CA' D?HO□ ' ' C' □ ' FAJGPGD' LE' HA' @G?H ' OMG?D' CF?C' LE' " ! ' F?(KGDG' @G?H ' (; ' &?DMAJG8 ' = 0GJ' A>' & ?MC?I' JG' F?PG' ?@AH C' ?H' GHB@GD?C□AH' A>' HA □AB ' CF□H ' ='CFG' SB□OG' A>' (! 'I' VGLAHE ' ?HN' @BOF' G?DM□GD' □H' +AJGD8 ' =' AH>G □A' @?HC□ I' JG' >□HN' CFG' 0AB0F' A>' CFG' AN' A>' MGGK' @?NG' A>'CFG' LA?DN

6' 1'9 " %* N9 MN' G9PPL P' B

5 ' . R ='A ' ' 0 /

?DLBDCAH' F? ' AL GDPGN' CF?C' FGDG' = CFG' KAGC' F? ' KDG GDPGN' CFG' @?HHGD' A>' CFG' ?HO□GHC' %?HG ' J□CF' JFA@' □C' J? ' 'CA' JG?D' BKAH' CFG□D' JADN 'I' ?HN' >AD' CFG' BKKADC' A>' F□ ' AK□H□AH' FG' DG>GD ' CA' .?DCFAM□HB ' = %G' ?B □ ' AHCG@KC ' &ADC ' ?KBN' %?H I' *KCAH' ?E ' CF?C' 0ADN?HG ' □H' F□ ' +ACF□O' □ CADE ' @GHC□AH ' CF□ ' 0B CA@ ' ?HN' CF?C' @@□?HB ' &?DOGMM□HB ' DG(CG ' CFG' ?@G' OGDG@AHE' ?@AH ' CFG' BH ' ?D@GD' □ ' A>' OABD G' □HN□ H?HC' CF?C' F?(KGDG' FABMN' LG' BKKA GN' CA' (HAJ' ?HECF□H ' LGEAHN' JF?C' FG' >ABHN' □H' CFG' OA@@AH' M□CGD?CBDG' A>' F□ ' N?E ' ?HN' FG' O□CG ' CFG' >AMMAJ□H ' >DA@' CFG' KM?E' A>' =' □GDAHE@A' 'IR

6' PM ' !'NH G' K GG' NHMN' HMN' NH J' GMT%GN' G' N JP S
JN' 7'2' L P' NHPP' LP EJ %O' M!O' J!EJGN
H G' P T' G O ' HP P !'NH J' N U%GN' NH !P' MNH+
HM99' AP' NHP' UP ' 7'NHT' N MQPOT' [R

#FG' OA@@GHC?CAD ' ?MN' >AMMAJ' ?D@GD' □H' CFG' G KM?H?C□AH' CF?C' CA' JG?D' " ' $' 0 'J? 'CA' JG?D' " ' $' ' >AD@GN' LE' CFG' F□MC' A>' CFG' JADN ' LBC' CFGE' BKKDG '?' M□HG' JF□OF' * KCAH' F?N' QBACGN' >DA@' KGH GDR

$ 6' # !O' G PM !Q' 7M NH' N ' P NHP ' '$ %' "' B

G' F?PG' M□CCMG' NABLC' CF?C' F?(KGDG' J? ' ?J?DG' A>' CFG' KGOBM□?D' OB CA@' A>' CFG' +ACF□O' H?C□AH ' ?HN' N□N' HAC' @?(G' ?@MGC' KDAKA G' CFG' A?CF' @GDGME' ? ' ?' KD?OC□OG' A>' OF□P?MDE

K?C□GHOG' ?HN' OFGGD>BMHG ' ? ' FG' J? ' KDG GHC' ?C' CFG' ACFGD ' FG?D' CFG' ?□N' CD? GNE ' CA' CFG' DG?C' ADDAJ ' HAC' AHME' A>' CFG' KM?EGD ' LBC' A>' ?MM' CFG' JFAMG' * H□PGD □CE I

' R =' # ' ' $ ' ' ' ./ YO

#FGDG' □ ' ?H' AMN' L?MM?N ' JF□OF' J? ' '>□D C' KD□HCGN' □H' GDOE8 ' = " GM□QBG I' BHNGD' CFG' C□CMG' A>' ='OGKM□CF?F ' 0BN G' A>' D?GM I' ?HN' □ ' CFGDG' □PGH' ? ' □C' = J? ' DGCD□GPGN' >DA@' BCCGD' ALM□P□AH' LE' ?' M?NE' JFA' JDACG' □C' NAJH' >DA@' @G@ADE ' ? ' FG' F?N' >AD@GDME' FG?DN' □C' BH ' LE' FGD' >?CFGD I ' ' OAKE' A>' CFG' L?MM?N' F? ' □HOG' LGGH' DGOAPGDGN ' ?HN' □ ' DGKD□HCGN' □H' !P?H 8 ' AMMGOC□AH ' 6 7 ' #FG' >□D C' C?HT?' □ ' ? ' >AMMAJ R

6' 2' HM P' PMO' NHMN' I M!T' TPM G' MQ P
X HP!' ?PLHM ' EJOQP' 7'2G MP9
" MO' !P' 9M 'OMJQHNP ' M!O' ! ' I P+
X H I ' HP' 9 PO' LMGG !Q' P99+
#G' AT' 9 N ' : O' N+
2N' KM I P' N ' LMGGP' I GN' 9 UP' N' MG
: PMN' M 'NHP P' GH J9O' AP+
#!O' H ' GH J9O' AP' NHP' KH P7P ' AJN' HP ' AJN' HP+R

#FG' M□HG ' QBACGN' LE' ?@MGC' ?M@A C' G ?OCME' OADDG KAHN' J□CF' CF□ ' OAKE ' ?@MGC ' □H' CFG' CG C' A>' CFG' QB?DCA' A>' □4D□ ' O?MM ' CFG' KAG@' , 00 ' 7 ' !$ 4/' LBC' □H' CFG' QB?DCA' A>' X*YZ.' ?HN' CFG' >AM□A' A>' 423 ' □C' □ ' = CFG' 7 ' F?H AH I' AKG' ?E ' CF□ ' DG>GD ' CA' CFG' AMN' L?MM?N ' BH ' AH' LD□N G ' G' LGM□GPG' 7 ' □ ' ?' CEKA D?KF□O?M' GDDAD ' >AD' □H' CFG' OSB?DCA' A>' 473' JG' >□HN' ='CFG' >□D C' PGD G' A>' □FG' ' L?MMGC I

/ ')) HJ,'L ' $' ' ' ' $ 7

#FG' LG C' NG OD□KC□AH' A>'?' OFAK□HG' □ ' >ABHN' □H' ADE?C8 ' =' DBN□C□G ' I' V 4 R

= #FGDG' ' AHG' CF□H ' B GN' A>' CFG') GHGC□?H' JA@GH ' ?HN' A@G' ACFGD ' NJGMM□H ' □H' CFG' O□C□G ' ?HN' CAJH ' BLSGOC' CA' CFG' □ H□ADE' A>') GH□OG ' CF?C' □ ' HAC' CA' LG' AL GDPGN' V ' CF□H(' ?@AH C' ?HE' ACFGD' JA@GH' □H' FD□ CGHNA@ ' JF□OF' □ ' A' OA@@AH' □H') GH□OG 'CF?C' HA' JA@?H' JF?C-AGPGD' AGCF' J□CFABC' □C ' G□CFGD' □H' F'GD' FAB G' AD' ?LDA?N R ' $ ' ' ' 0 ' ' 3 '0 $' $ ' ' ' : '0 $'0$: ' : ' 0 ' ' ' '?' OF?K□HGE ' 0$ $' $ '0 ' ' $ ' $ ' & ?HE' A>' CFG@' ?DG' OBD□AB ME' K?□HCGN ' A@G' ?M A' A>' CFG@' ' F?PG' GGH' >?□DME' □MC ' A' BHOA@GME' ?' CF□H ' V□H' @E' AK□H□AH ' CF?C' □C' □ ' K□CE' CF□ ' >AAM□ F' OB CA@' □ ' HAC' OMG?H' L?H□ FGN' ?HN' G CGD@□H?CGN' ABC' A>' CFG' O□CE ' %$ ' ' ' ' $ ' $ ' ' ' ' $ $'. 3 '$ ' ' ' $ $'. JF□OF' @?(GCF' @?HE' A>' CFG□D' JA@GH' CF?C' ?DG' PGDE' FADC' GG@' @BOF' C?MMGD' CF?H' CFG' C?MMG C' JA@GH' JG' F?PG' □H' !H M?HN ' M A' ' F?PG' FG?DN' □C' AL GDPGN' ?@AH ' CFG@' ' CF?C' LE' FAJ' @BOF' CFG' HALMGD' ?' JA@?H' □ ' LE' A' @BOF' CFG' F□ FGD' ?DG' FGD' $ ' MM' CFG□D' GHCMGJA@GH ' ?HN' @A C' A>' CFG□D' J□PG ' ?HN' J□NAJ ' CF?C' ?DG' A>' ?HE' JG?MCF ' ?DG' ? □ CGN' ?HN' BKKADCGN' G□CFGD' LE' @GH' AD' JA@GH ' JFGH' CFGE' J?M(' ?LDA?N ' CA' CFG' GHN' CFGE' @?E' HAC' >?MM ' #FGE' ?DG' LADHG' BK' @A C' OA@@AHME' LE' CFG' MG>C' ?D@ ' ACFGDJ□ G' CFGE' @□ FC' QB□O(ME' C?(G' ?' >?MM I

Z ' R , C '3 .' D ' ' ' '0 0 ' .' " ' ' D ' 0 $ ' $ ' 2

?@MGC8 ' ?NNDG ' CA' ='@E' EABH ' M?NE' ?HN' @□ CDG ' I' □ ' KGD>GOCME' □HCGMM□ □LMG ' ?HN' F? ' HA' M?CGHC' @G?H□H ' #FG' K?DC ' A>' JA@GH' JGDG' KGD>AD@GN' LE' LAE ' #FG' LAE' CF?C' ?@MGC' DGOAMMGOCGN' □H' BOF' K?DC ' J? ' HAJ' ='HG?DGD' CA' FG?PGH' LE' CFG' ?MC□CBNG' A>'?' OFAK□HG 'I R FG' J? ' DAJ□H ' □HCA' ?' @?H□ ?@MGC' FAKG 'CFGDG>ADG ' CF?C' F□ ' ='PA□OG ' M□(G' ?' K□GOG' A>' BHOBSDGHC' AMN ' LG' HAC' OD?O(GN' J□CF□H' CFG' D□H C F ? C ' F□ ' PA□OG' LG' HAC' LDA(GH ' ? ' CFG' CGOFH□O?M' KFD? G' □ ' ?HN' FG' LG' CFGDG>ADG' BH>□CCGN' >AD' JA@GH8 ' K?DC R ZLG' HA' MAH GD' OBDDGHC' □H' CFA G' K?DC ' BD' DG?NGD ' JFA' F?PG' GGH' CFG' OA□H ' A>' CFG' □ CGGHCF' OGHCBDE' J□MM' F?PG' AL GDPGN' CF?C' CFG' FG?N' A>' CFG' APGDG□ H' □ ' □HP?D□?LME' OAHC?□HGN' J□CF□H' ?' O□DOMG ' LGCJGGH' JF□OF' ?HN' CFG' D□@' CFG' MG GHN' □ ' □PGH ' #FG' CG C' A>' OBDDGHOE' □H' ?' OA□H' J? ' CF?C' □C' FABMN' HAC' LG' OD?O(GN' J□CF□H' CFG' O□DOMG ' AD' D□H ' >' CFG' OD?O(' CA' JF□OF' CFG' CF□H' OA□H ' A>' CF?C' ? G' JGDG' K?DC□OBM?DME' M□?LMG ' G CGHNGN' LGEAHN' CFG' D□H ' CFG' @AHGE' J? ' HA' MAH GD' OAH □NGDGN' AAN ' G' MG?DH ' >DA@' CJA' CD?OC ' QBACGN' LE' %ABOG ' CF?C' □C' J? ' OB CA@?DE' >AD' B BDGD ' CA' LBE' BK' CFG' ='BHOBDDGHC' AMN I' ?C' ?' KD□OG' MAJGD' CF?H' CFG' HA@□H?M' P?MBG' A>' CFG' OA□H ' ?HN' CFGH' DGQB□DG' CFG' BHF?KKE' LADDAJGD ' CA' C?(G' CFG@' ?C' CFG□D' C?HN?DN' D?CG

' ' R , F%O ' 3 ' ' $ ' /

#F□ ' JADN' □ ' 3 ' □H' CFG' >AM□A ' >AMMAJ□H ' CFG' C?M□?H' 3

MADA'□H F□' = GJ' ADMN A>' ADN I'F?'=' i 3 ;'? (□HN A>' ?MC L□?0(' @G?C ?NG A>'DAG ,A>'□ FG '@BOF B GN□H' C?ME C' H' □D'0AFH' ?DDH CAH8 'F?LGDN? FGD'JADG'□C' =' ABMN'EAB'HAC'M?B F' CA'@GGC'?' DG?C 0ABH GMADJ A>' C?C?C □H'?'>M?C 0?K' J□CF F□' CDBH(FA G' ?NH'?'FALLE-FAD G OMA?('?NH' EAHN' F?LGDN? FGD'□H'?'PGMPGC A J□H' CD□@@GN'J□CF ?LMG WI

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?@MGC'F?' KDGP□AB ME NG OD□LGN' CFG L?N' KM?EGD' ? ' ='0?K?LMG A>' HACF□H ' LBC' □HG KM□O?LMG NB@L' FAJ I' &BCG G F□L□C□AH ' NBD□H ' CFG C□@G A>' F?(KGDG'?NH'LG>ADG?NH ?>CGD' JGDG A><GH'□HCDANBOGN' CA' G MD□L□C' BOF'O□OD@ C?HOG'? ' CFG M□@□C'A>' ?' KM?E' JABMN' HAC' ?N@□C CA'LG'DGKDG GHCGN' H' A@G'KM?E ' CFG G NB@L' FAJ '□ ' @□HBCGME' NG OD□LGN' ?NH' CFGE GHGD?ME' DGKDG GHC' OGHG ' J□FO□F ?DG HAC' A>>GDGN' CA' CFG BNHGD C?HN□H ' □H' CFG N□?WA BG' G' KDG B@G'FAJ-GPGD' CF?□ F?(KGDG' □H' CFG' □H C?HOG' LG>ADG' B ' F?N' A@G' C? G ?BCFAD□CE'>AD'@?(□H ' CFG NB@L' FAJ'DGKDG GHC' CFG ?@G ?OC□AH'CF?□' □HNO?GN'□H' CFG N□?WA BG' □ 'ND?@?□D' ALSGOC' FGD□ G ' GP□NGHC' FG J?HCGN' 'CA'0?COF' CFG OAH O□GHOG' A>'CFG (□H ' ?HN' CFB 'LG->ADG' CFG ?OCAD ' OA@G CA' CFG @BDNGD' A>'+AHT? A ' CFG (□H ' ?M?D@GN' ?HN ? (' ,' ?PG' EAB' FG?DN' CFG ?D B@GHC' W □ ' CFGDG' HA' A>>GHOG □H □CWI

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' A>' KM?EGD ' J ? ' ? ' OA@K?HE ' ?' 0 $ ' J ? ' ?' K?DC□O□K?C□AH' □H'CFG' KDA>□C ' ?@MGC' F?N' @?H? GN' CFG' KM?E ' A' JGM ' CF?C' F□ ' (□MM' AB F□' CA' GHC□MG' F□@' CA' BOF' ?' >GMA J F□K' =' ?M>' ?' F?DG I' ?E ' AD?C□A ' =';?' J FAMG' AHG I' ?E ' ?@MGC' H' &D ' AM□GD8 '=' □ CADE' A>'C□□G C? G I' PAM'□□□'K' /2 ' J G' >□HN' @?HE' OBD□AB ' NGC?□M ' AH' CFG' K?E-@GHC' A>' ?OCAD ' FAJ□H ' CF?C' CFG' KGD>AD@G' ?C' ABD' G?DM□GD' CFG?CDG ' J□DG' N□P□NGN' □HCA' J FAMG' F?DGD' QB?DCGD' F?DGD ' F?M> F?DGD ' ?HN' F□DGN' @GH

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H' ?' PAMB@G' A>' i ?E ' J□CCGH' LE' %D ' D@ CDAH ' BN□GD' CFG ? B@GN' H?@G' A>' $?HOGMAC'#G@KMG ' J G F?PG' CFG >BD' ?LMG ' CFGH' J GDG OA CME ?HN' @? H□>OGHC' LBC' HAC' G GHC?MME' CFG F?L□M□@GHC ' A>' ADDAJ ' CFAB F' CFGE'F?N' A@G' N□ FC ? AO□?C□AH' J□CF' @ABDH>BM' □NG? ' >' ?@MGC F?N' ?□N' = ?E ' MGC' CFG' NGP□M' JG?D' LM?0(' >AD' 8MM' F?PG?' ?' BC' A>'GD@□HG I' FG' JABMN' @GDGME' F?PG' ?□N'$GC' CFG' NGP□M' LG' H' @ABDH□H ' >AD' 8MM' LG' >□HG' . BC' ? ' □C □ ' FG ?E ' $GC' CFG' NGP□M' JG?D' CFG' DG?M OAMABD ' A>' D□G>' LBC' @? H□>OGHC' H' ?' ?DL' CF?C' AHME' F? ' ?' ?@□NMG' G? MG' ' ?H' ADH?@GHC' H' CFG' GOOMG □? C□O?M' CDBOCBDG ' A>' CFG' @□NMG' ?L BDN□CE' □H' CF?C ?OC□AH' A>' ?@MGC KDANBO□H ' CFG' CJA' @□H□?CBDG ' A>' F□ ' >?CFGD' ?HN' BHOMG' ABC' A>' F□ ' KAO(GC' C' GG@ ' @ADG' H?CBD?M CA' BKKA G ' CF?C' ?@MGC' J? ' CDBO(' J□CF' CFG' 0A@K?D□ AH' FG' @?(G ' LGCJ GGH' CFG' CJA' LDACFGD ' BKAH' O? C□H ' F□ ' GEG ' AH' CFG□D' K□OCBDG ' ? ' CFGE' F?H ' BK' □H' CFG ?K?DC@GHC' JFGDG' CF□ ' 0AH>GDGHOG' K? G ' J□CF' CFG' QBGGH' #FGDG □ ' HAC' AHME @ADG' H?CBDG' @ADG' GMG ?HOG' ?HN' N□ H□CE' □H' BKKA □H ' □C CFB ' LBC' □C □PG ' A00?' □AH' CA' @ADG K?' □AH?CG ?HN' @ADG' D?OG>B@' ?OC□AH ' ?HN' □ ' A>' 0AH GQBGHOG' M□(GM□D' CA' LG ?' F?(KGDG8 ' □@? □H?C□AH' F?N' 0AHOG□PGN' □C I' C' □ ' DG@?D(?LMG' CF?C CF□ ' C? G KD?OC□OG ' J F□O□' □HPAMPGN' CFG' □@KDAL?L□M□CE' CF?C ?@MGC FABMN' F?PG' 0?DD□GN' F□ ' BHOMG8 ' K□OCBDG' ?LABC' J□CF' F□@' FABMN' F?PG' LGGH' ?' @ANGD□HHAP?C□AH' H' ?' KD□HC' KDG>' GN' CA' "A J G8 ' F?(KGDG' V 71 ' ?@MGC □ ' DGKDG GHCGN' ? ' KA□HC□H ' CA' M?D G K□OCBDG ' AH' CFG' ?DD? ' #FG' 0A CB@G G O□CG ' ?' @MG' J□MG' □C ?KKG?D ' CF?C' CFG C? G CDO('A>' (□O(□H ' NAJ□H' CFG' OF?□D' BKAH' CFG' GHCD?HOG' A>' CFG' +FA C' □ ' @ADG' CF?H' ? 'OGHCBDE' AMN

?L BDN□CE' □H' CF?C ?OC□AH' A>' ?@MGC KDANBO□H ' CFG' CJA' @□H□?CBDG ' A>' F□ ' >?CFGD' ?HN' BHOMG' ABC' A>' F□ ' KAO(GC' C' GG@ ' @ADG' H?CBD?M CA' BKKA G ' CF?C' ?@MGC' J? ' CDBO(' J□CF' CFG' 0A@K?D□ AH' FG' @?(G ' LGCJ GGH' CFG' CJA' LDACFGD ' BKAH' O? C□H ' F□ ' GEG ' AH' CFG□D' K□OCBDG ' ? ' CFGE' F?H ' BK' □H' CFG ?K?DC@GHC' JFGDG' CF□ ' 0AH>GDGHOG' K? G ' J□CF' CFG' QBGGH' #FGDG □ ' HAC' AHME @ADG' H?CBDG' @ADG' GMG ?HOG' ?HN' N□ H□CE' □H' BKKA □H ' □C CFB ' LBC' □C □PG ' A00?' □AH' CA' @ADG K?' □AH?CG ?HN' @ADG' D?OG>B@' ?OC□AH ' ?HN' □ ' A>' 0AH GQBGHOG' M□(GM□D' CA' LG ?' F?(KGDG8 ' □@? □H?C□AH' F?N' 0AHOG□PGN' □C I' C' □ ' DG@?D(?LMG' CF?C CF□ ' C? G KD?OC□OG ' J F□O□' □HPAMPGN' CFG' □@KDAL?L□M□CE' CF?C ?@MGC FABMN' F?PG' 0?DD□GN' F□ ' BHOMG8 ' K□OCBDG' ?LABC' J□CF' F□@' FABMN' F?PG' LGGH' ?' @ANGD□HHAP?C□AH' H' ?' KD□HC' KDG>' GN' CA' "A J G8 ' F?(KGDG' V 71 ' ?@MGC □ ' DGKDG GHCGN' ? ' KA□HC□H ' CA' M?D G K□OCBDG ' AH' CFG' ?DD? ' #FG' 0A CB@G G O□CG ' ?' @MG' J□MG' □C ?KKG?D ' CF?C' CFG C? G CDO('A>' (□O(□H ' NAJ□H' CFG' OF?□D' BKAH' CFG' GHCD?HOG' A>' CFG' +FA C' □ ' @ADG' CF?H' ? 'OGHCBDE' AMN

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□D' 0AFH' ?J(□H ' ?E ' =' AC' AHME' CFG' JADN' LBC' CFG' FGM@GC' ?BHCMGC' KBD ' ?HN' C?L?DN' V□ G ';' 0A?C' J□FGDAH' CFG' ?D@AD□?M' GH □ H ' J GDG' ?HO□GHCME' NGK□OCGN ' >DA@' J□FGHOG' CFG' CGD@' 0A?C' A>' ?D@ABD ' ?DG FBH ' APGD' CFG' D?PG' A>' GPGDE' (H□ FC I

'2 +

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#FG'@B □D' CMM' BH ' □H' CFG' OF?D?OCGD' A>' KFGM□?' CA' CFG' >D? @GHC ' A>' AH ' □H' CFG' >□CF' OGHG' A>' 0C') ' □ ' BKKA GN' CA' LG' CFG' ?@G' AD' HG?DME' A ' CF?C' J? ' B GN' □H' F?(KGDG8 ' C@G' ?HN' CFGHOD' CD?H @CCGM' CA' B ' LE' CD?N□CAH' FGH' %DBDE $?HD' #FG?CDG' J? ' NG CDAEGN' LE' >DG' □H' 6 2 ' CFG' 0AKE' A>' CFG G AH ' B>>GDGN' CFG' >?CG' A>'CFG' J FAMG' @B □O?M M□LD?DE' LBC' %D' DHAMN' HACGN' NAJ□H' CFG' ?□D ' >DA@' &D ' 0ADN?H8 ' DGOAMGOC□AH' A>' CFG@

-' ') S B'' D ' $'D ; J F ' /

H' ?DOF□CGOCBD?M' ADH?@GHC ' AD' @AHB@GHC?M' 0BMKCBDG ' ?HN' □H' AMN' LAA(' A>'>?LMG ' ?HN' G@LMG@ 'CFG' KGM□O?H □ ' ?MJ?E' DGKDG GHCGN' ? ' ?H' G? MG' ' ?H' ADH?@GHC' □H' CFG' GOOMG □? C□O?M' CDBOCBDG ' A>' CFG' @□NNMG' ?' G ' □C □ ' 1?>?CFGD' ?HN' BHOMG' ABC' A>' F□ ' KAO(GC' C' GG@ ' @AD' H?CBD?M CA' BKKA G ' CF?C' ?@MGC' J? ' CDBO(' J□CF' CFG' 0A@K?D□ AH' FG' @?(G ' LGCJ GGH' CFG' CJA' LDACFGD ' BKAH' O? C□H ' F□ ' GEG ' AH' CFG□D' K□OCBDG ' ? ' CFGE' F?H ' BK' □H' CFG ?K?DC@GHC' JFGDG' CF□ ' 0AH>GDGHOG' K? G ' J□CF' CFG' QBGGH' #FGDG □ ' HAC' AHME @ADG' H?CBDG' @ADG' GMG ?HOG' ?HN' N□ H□CE' □H' BKKA □H ' □C CFB ' LBC' □C □PG ' A00?' □AH' CA' @ADG K?' □AH?CG ?HN' @ADG' D?OG>B@' ?OC□AH ' ?HN' □ ' A>' 0AH GQBGHOG' M□(GM□D' CA' LG ?' F?(KGDG8 ' □@? □H?C□AH' F?N' 0AHOG□PGN' □C I' C' □ ' DG@?D(?LMG' CF?C CF□ ' C? G KD?OC□OG ' J F□O□' □HPAMPGN' CFG' □@KDAL?L□M□CE' CF?C ?@MGC FABMN' F?PG' 0?DD□GN' F□ ' BHOMG8 ' K□OCBDG' ?LABC' J□CF' F□@' FABMN' F?PG' LGGH' ?' @ANGD□HHAP?C□AH' H' ?' KD□HC' KDG>' GN' CA' "A J G8 ' F?(KGDG' V 71 ' ?@MGC □ ' DGKDG GHCGN' ? ' KA□HC□H ' CA' M?D G K□OCBDG ' AH' CFG' ?DD? ' #FG' 0A CB@G G O□CG ' ?' @MG' J□MG' □C ?KKG?D ' CF?C' CFG C? G CDO('A>' (□O(□H ' NAJ□H' CFG' OF?□D' BKAH' CFG' GHCD?HOG' A>' CFG' +FA C' □ ' @ADG' CF?H' ? 'OGHCBDE' AMN

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#F□ '□ ' ?' D'N□OBMG' A>' CFG FGD?MN□O' JDCGD ' H' $G□ F8 '=' OO□NGHOG' A>' D@ABD□G' I' V 51 ' JG' F??PG' = AD' CF?C □C @□ FC LG' (HAJH' CF?C GPGH' ?HAH' ?>CGD' CFG ODG?C□AH' A>' N?@' CFGDG' J? 'LACF' '?HN' ;'EAB' F?MM' BHNGD C?HN' CF?C CFG GOAHN' @?H' CF?C J? 'LA@' J? '?' ; JFA G' H?@G' J? ' LGM I' #FG' ?@G' CEMG' A>' JD□CH ' KDGP?□M 'H' AMNGD' JAD(' ? 'H' CFG =' .AA(' A>' C' ML?H I CFG' KGGOF' A>' AHG' A>'CFG' OABH GM'H' CFG G? G LG>ADG B ' R

=' ?M F' ?'N' CF?C CFG ?OC' OAH □ C ' A>' CFDGGG K?DC ' #FG' >□D C □ 'CFG □@?□AH' JFO□F □ '? DG>MGOC□AH' AD @GN□C?□AH' A>'CFG @□HN 'JFGCFGD' AD' HA' □C □ 'OAHPGH□GHC' >AD' F□@' CA' NG CDAE' F□@ GM>' ?HN' JF?C J?E' □C O?H' LG' NAHG' #FG' GOAHN' □ 'CFG DG AMBC□AH' JFO□F □ '? NGCGD@□H?-C□AH' A>' CFG @□HN' CA' NG CDAE' F□@ GM>' ?HN' CA' NA' □C □H' CF□ ' AD' CF?C K?D-C□DBM?D' J?E' #FG' CF□D' □ 'CFG' KGD>GOC□AH' JFO□F' □ 'CFG G GOB□AH' A>' J F?C CFG' @□HN' F? ' DG AMPGN' CA' NA' HN' CF□ 'KGD>GOC□AH' OAH □ C ' A>' C□A' K?DC ' P□T ' CFG' LG □HH□H ' ?HN' CA' GHN' #FG' LG □HH□H ' □ ' CFG' NA□H ' A>' CFG' ?OC' JFO□F' 0?B G ' CFG' NG?CF' ?HN' CFG' GHN □ 'CFG' NG?CF' JFO□F □ ' AH□E' ?' GQBGM CA' CFG' ?OC I

?H 'CFG' OMAJH' ?E '=' GDG' MG' CFG' J?CGD' AAN ' FGDG' C?HN ' CFG @?H' AAN' >'CFG @?H' A' CA' CF□ 'J?CGD' ?HN' NDAJH' F□@ GM>' □C □ ' J□M' FG' H□M' FG' FG AG ' @?D(' EAB' CF?C'W LBC' □>'CFG' J?CGD' OA@G' CA' F□@' ?HN' NDAJH' F□@ 'FG' NDAJH' HAC' F□@ GM>' ?D ?M' FG' CF?C □ 'HAC' B□MCE' A>' F□' AJH' NG?CF' FADCGH 'HAC' F□ 'AJH' M□>G I' G' F?PG' A>' OABD G'HA' BOF' NGM□OAB' G ? GD?C□AH' ? ' CF?C A>' CFG' OMAJH 'LBC' CFG >AMMAJ□H 'DG? AH□H 'A>' AHG' A>' CFG' $BN G ' □ 'PGDE' HG?DME' GQB?M CA' □C R ' = □D' 0?@G ' ?MG ' J? ' NG?N '?HN' FAJ' 0?@G' FG CA' F□ 'NG?CFW C' @?E' LG' ?H JGDGN 'LE' NDAJH□H '?HN' JFA' NDAJHGN' F□@'W □D' 0?@G ' ?HN' JFGH' N□N' FG' NDAJH' F□@'W H' F□ 'M□>GC□@G' A'CF?C □D' 0?@G ' ?MG 'LGH '?M□PG' 0?B GN' □D' 0?@G ' ?MG 'CA' N□G ' ?HN' CFG ?O□ A>' CFG' M□P□H ' @?H' J? ' CFG' NG?CF' A>' CFG' NG?N' @?H' HN' CFGH' >AD CF□ ' A>>GHOG' □C □ 'DG? AH?LMG' CA' KBH□ F' CFG' M□P□H ' @?H' JFA' 0A@@□CCGN' CFG' A>>GHOG' ?HN' HAC' CFG' NG?N' @?H' BC' FAJ' 0?H' FG' LG' ?N' CA' LG' KBH□ FGN' ?M□PG' JFGH' CFG' KBH□ F@GHC' 0A@G ' ?>CGD' F□ 'NG?CFW □D' CF□ ' 0?H' LG' NAHG' HA' ACFGD' J?E' LBC' LE' N□PG C□H 'AB□' A>' F□@' >DA@' CFG' C□@G' A>' CFG' ?OC' NAHG' □H' F□ 'M□>G' J□FO□F' J? ' CFG' 0?B G' A>' F□ 'NG?CF' CFG' C□MG' ?HN' KDAKGDCE' A>' CFA G' CFC□H ' J□FO□F' FG' F?N' □H' F□ 'M□>GC□@G I

#FG' ?@G' A>'MA ?C ' □ ' ?' OAB□HCDE' KM?E' □H' J□FO□F' CFG' KM?EGD ' CFDAJ' F?PG' OABHCGH?HOG' □H' CF□ ' JADMN' CA' NDAJH' AD' F?H ' CFG@ GMPG I' J? ' MG ?M' FAJ ' CF?C CFG' OA@KM?□HC' A>' CFG' OMAJH' =' DG?C >AM(' F?MM' N□DC' LBC' CFGE' >?DG' OACHHMAHME' A' JGMM ? ' CFG (□H ß I ?HN' N□DC' LBC' CFGE' >?DG' OACHHMAHME' A' JGMM ? ' CFG (□H ß I

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#FG' ?@G' A>'MA ?C ' □ ' ?' OAB□HCDE' KM?E' □H' J□FO□F' CFG' KM?EGD ' CFDAJ' F?PG' OABHCGH?HOG' □H' CF□ ' JADMN' CA' NDAJH' AD' F?H ' CFG@ GMPG I' J? ' MG ?M' FAJ ' CF?C CFG' OA@KM?□HC' A>' CFG' OMAJH' =' DG?C >AM(' F?MM' N□DC' LBC' CFGE' >?DG' OACHHMAHME' A' JGMM ? ' CFG (□H ß I ?HN' GD' ?HN' JADN I' J□FO□F' CFGE' □DN' AH' CFG (H□ FC

i □M' J? ' >AD@GDME ?' CGD@' □H' OA@@AH' B G' >AD' P□HG ?D' ?HN' CFB' A>' P□HG ?DW R A>' A@GCF□H ' P□DE' N□ ? DGG?LMG' #FGDG' □ ' FAJGPGD' M□CCMG' NABLC' CF?C FG' DG>GDDGN' CA' CFG' "F□HG ' ?HN ' CF?C J□FO□F' □ ' CFG' HG?DG C' CA' %GH-HADCFGDH' LD?HOF' A>'CFG' +?DCGD ' ?HN ' CF?C J□FO□F' □ ' CFG' HG?DG C' CA' %GH-@?D(' CA'J' ?HN' %D?ECAH' ?DG' >?@M?D' J□CF' CFG' H?@G

Z ' R =' & ;' ' ' $' ' 3 R'

#A' : ' ?HO□GHCME' B GN' >AD' CA' $ $' #FG' = OABKMGC I' A>' CFG' NAPG' ?DG' >□D C' OAPGDGN' J□CF' EGMMAJ' NAJH ' ?HN' CFG' K?C□GHC' >G@?MG □C ' LDAAN□H ' A8GD' CFG' HG C' OFGD□ F□H ' CFG@' J□CF' FGD' J?D@CF' >AD' GPGD?M' N?E ' ?>CGD' CFGE' ?DG' F?CON□FGN

' R =' %$ ' ' 3 ' $ ' $ ' ' . ; J 0' $ '$ 0' 0 ' 0 / F□MA AKFE' ? ' KDA>AB□HN' ? ' □C □ ' LG?B□>BM' ?E ' CFG' BH□H□C?CGN' DG?NGD' A>' F?(KGDG' . BC' FG' CF?C □ ' GHNB□GN' J□CF' CFG' J□ NA@' A>' CFG' OA@@GHC?CAD ' J□MM' MG?DH' FAJ' G? E□C □ ' CA' @□ C?(G' >AD' KF□MA AKFE' ?HN' KAGCDE' J□F?C DG?MME' AH□ME' KDAOGGNGN' >DA@' CFG' PGDE' PB□ ?D' DGOAMMGOC□AH ' A>' ?H' □ HAD?HC' @□HN' =' %D' ?D@GD' □H>AD@' @G I' ?E ' CGGPGH ' =' CF?C CFG G' JADN ' ?DG ' $ ' J 0' $ '$ 0' 0 ' / LBCOFGD' ?HN' NG?MGD' □H' (GJGD ' MG?CGME' AL GDPGN' CA' F□@' CF?C F□ ' HGKFGJ' V?H' □NMG M?N ' OABMN' AH□E' ? □ C F□@' □H' @?(□H ' CFG@ ' ‹'FG' OABMN' $ $ 0' CFG@' LBC' ' J? ' AL□D' GN' CA' $ ' $ ' R #A' F?KG' CFG' GHN ' A>' JAAN' (GJGD ' ;' CA' KA□HC' CFG@ ' DGQB□DG ' ?' NG DGG' A>' (□M' ?HE' AHG 0?H' DAB F FGJ' CFG@ ' FAGPGD' DGOAMMGOC' $' '($ DJ ' $;' J□MM ?N@□C CF?C F□ ' AH' @□ F□ LG' HA' □□?H GD' CA' BOF CGD@ ' ' F?PG' >DGQBGHC□E' GGH' K?O(? G ' A>' JAA□M' K□HH8N' BK' J□CF (GJGD I

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#FG' >AMMAJ□H ' □ ' >DA@' ?DD□ AH8 ' = %G' OD□K□AH' A>' iH M?HN'I' V 5 ' R =' H' CFG' >GHHE' OABHCDG ' ?HN' HADCFGDH' K?DC 'BHCA' CF□ ' N?E ' >AD' M?O(' A>' JAAN' CFGE'?DG' GH>ADOGN' CA' OAHC□HBG' CFG' ?HO□GHC' @?HHGD'A>' LB□MN□H ' VFAB G ' GC' BK' J□CF' ?' >GJ'KA C ' ?HN' @?HE' D?NNMG ' A'□H' CFG' AKGH' ?HN' OF?@K?□H' OABHCDG ' CFGE' ?DG' GH>ADOGN' >AD' J?HC' A>' CB>' CA' B G HA' CBN ' ?C' ?MM' LBC' AHME' >D?H(KA C ' ?HN' BOF' KD□HO□K?M ' J□CF' FGDG ?HN' CFGDG' ?' □DN□H ' J□FGDGBHCA' CFGE' >? CGH' CFG□D' K□H□?DN ' □H' BGGH' &'?DE8 ' N?E CF□ ' DBNG' (□HN' A>' LB□MN□H ' @?NG' CFG' K?H□?DN ' □H' BGGH' &'?DE8 ' N?E CA' J?AHNGD' ?HN' ?E' ‹'CFG G i H M□ F' F?PG' CFG□D' FAB G ' @?NG A>' C□O(' ?HN' N□DC' LBC' CFGE' >?DG' OACHHMAHME' A' JGMM ? ' CFG (□H ß I

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2 OA@KDGFGH AH A> CF CD? GNE CFG F CADE A> ?@?H8 AJH @HN H A@G F?KG AD ACFGD = ?@MGC CFG %?HGI PGDE G?DME LGOA@G >?@M?D CA ?M@A C GPGDE EABCF A> CAMGD?LMG GNBO?CAH G A@GC@G KDG GHCGN CFDAB F CFG @GNB@ A> CFG C? G4 @ADG >DGQBGHCME H A@G AHG A> CFG @?H>AMN GNCAH A> CFG ?OCGN KM?E #FG BLM@G OGHG JFGDG CFG +FA C ?KKG?D ?DG (HAJH GPGH CA CFG EABH G C OFAAM LAE H F = KG?(GD I ?HN = "G?NGD I ?HN A CFG AMAQBE =#A LG AD HAC CA LG I JG H G?DME M>G LGOA@G ?OQB?HCGN JCF CFG OA@KMGCG ?OCGN KM?E JG F?CG CFG (H R JG JGGK >AD KFGM? R JG CF H(?@MGC ODBGM CA FGD R JG ?DG KGDF?K HOMHGN JCF %D 0AFH AH CA M?B F ?C ?@MGC8 @?NHG R V=CFG KDGCGHNGN @?NHG A> ?@MGC O?B G @BOF @DCFI R JG JAHNGD CF?C ?@MGC NAG HAC (MM CFG (H G?DMGD R ?HN JG LGMGPG ? +?DDO(LGMGPGN CF?C CFG O?C? CDAKFG @ FC F?PG LGGH DG?CME @KDAPGN GG H CF?C CFG JO(GN ?HN CFG PDCBAB AB FC HAC CA >?MM CA GCFGD ? OC JGDG LE ?OONGHC

 >GJ EG?D AHJ?DN ?HN JG F?PG LGOA@G ?OQB?HCGN JCF CFG ?@MGC A> F?(KGDG R HAC CFG ?@MGC A> CFG KM?EGD #FG LAA(HAJ CFG OA@K?HAH A> ABD MAHGME J?M(R C DGOAMMGOCAH F?H ?LABC ABD @A C OFGD FGN CFAB FC G CFH(MG A> CFG ND?@?CO @APG@GHC A> CFG KM?E CF?H A> CFG M@K G JFOF C ?>>ADN A> CFG F F ?QN AMG@H CFH ?F?C LGMAH CA ABD LGH G GG ?@MGC F?LCB?MME BLSGOCGN CA CFG KDCB?M K?DC A> F H?CBDG R OA@@BHH JCF CFAB FC CF?C ?DG HAC A> CF JADMN R ?L CD?OCGN >DA@ CFG LB H G QB CG C? CG . BC CFGDG CF?C ?LABC FC@ JFOF JG O?HHAC BHNGDC?HN FG G GHC?MME = H @?NHG I AD @?N = AHME H OD?>CWI FGDG CF MHG CA LG ND?JH LGCJGGH F ?DC>OC?M ?HN F DG?M OF?D?OCGD W #FGDG CF A@GCFH ?MCA GCFGD HNG>H?LMG ?HN @E CGDAB H CFG KAGC8 NGMHG?CAH A> CF OF?D?OCGD A@GCFH JMN ?HN DDG BM?D H CFG OCDOB@ C?HOG JCF JFOF CFG OF?D?OCGD ? AOC?CGN JG GG CF?C ?@MGC KDAKGMMGN D?CFGD CF?H KDAKGMMH . BC JFE CF CBDH PGH CA CFG NGMHG?CAH W G O?HHAC G ?OCME CGMM GDF?K A@G A> CFG PGDE OF?D@ A> CFG KM?E CA CFG ?NBMC @HN C @E CGDAB HG C ?J?(G HAC AHME CFAB FC A> CFG D?HN ?HN CFG LG?BC>BM LBC A> CFG HOA@KDGFGH LMG C AL OBDCE OAH CCBCG ? KADCAH A> C BLM@CE #F CFG C? G H JFOF @A C @HN ?DG OAHCGHC CA DG C ?HN KGDF?K ?NP?HC? GAB ME A JCF DG ?DN CA CFG OA@KDGFGH AH A> ?@MGC

#FG >H?M ?KKDGOC?CAH A> CFG ?@MGC A> F?(KGDG LGMAH CA CFG NGPGMAK@GHC A> CFG ODCCO?M >?OBMCE R CA CFG OBMCP?CAH A> C LE DG?NH ?HN DG>MGOCAH CFABC @BOF ?OQB?HC?HOG JCF CFG CFAB FC A> ACFGD @?HE @GH JG F?PG HA NABLC LGH G?DHG C ?HN NM GHC CBNGHC A> F?(KGDG F?PG ?DDPGN ?C ? CAMGD?LME ?NGQB?CG OA@KDGFGH AH A> F H CF JAHNGD>BM KM?E H K? H CFDAB F CFG C? G A> ?N@D?CAH CFGE F?PG BCCGDME DGSGOCGN CFG CD? F JFOF CFG OA@@GHC?CAD F?PG FG?KGN BKAH C BHNGD CFG H?@G A> ODCCO @R CFG AMG@H 0A@@AHKM?OG A> 0AFH AH CFG >MKK?HC ?HN H AMGHC ?CC?O(A> CGGPGH FGH CFG AHG ?E =#FG ?KK?DCAH MG>C CFG DG AH A> CFG NG?N CA MCCMG KBDKA G I ?HN CFG ACFGD C?M(A> CFG =?L BDNCG I JFOF NG>AD@ CFG KGOG ?HN =CFG 0F?D?OCGD A> ?@MGC I CFG MAPG >AD F?(KGDG CGMM CFG@ CF?C DG@?D(BOF ? CFG G LGMAH CA CFG ?@G OM? A> KDGSBNOG ?)AMC?DG8 =@AH CDBA CN GC >A AEGBD I . BC ?>CGD CFGE F?PG DGSGOCGN ?MM CF?C LGMAH CA ODCCO @ JCFABC MAPG CFG PGDE NGKCF A> CFG DGPGDGHOG A> ?HACFGD OFAAM A> ODCO @?E CGHN CA KGDKMG CFG@ #F A@GJF?C ABD AJH KA CAH #FG QB?HCCE ?MAHG CF?C F? LGGH JDCCGH H MMB CD?CAH A> ?@MGC G@L?DD? H +AGCFG AMGDN G OFMG GM $?@L ?TMCC ?HN JG @?E ?NN &D 0?@G AH R LG NG ?HAHE@AB JDCGD ABC A> HB@LGD ?HN A@G A> CFG PGDE F FG C ADNGD A> G OGMMGHOG R F?PG LDAB FC CA CFG MMB CD?CAH A> CF KM?E ?@A C P?MBGN >BHN A> SBN @GHC C? CG ?HN G CFGCO?M (HAJMGN G #A OAHNGH G JF?C @A C NG GDP H A> DG@G@LD?HOG H CFG G ?N@D?LMG KDANBOCAH

JCF H NBG M@C JABMN LG @KA LMG G @B C GHNG?PABD CFGDG->ADG CA >GGM ABD GMPG H CFG OAHNCAH A> AHG JFA F? FAJGPGD @KGD>GOCME JAD(GN ABC H F AJH @HN ?OA@KDGFGH AH A> CFG NG? A> F?(KGDG AOO? AH?MME ? CH ABD NGPGMAK@GHC A> CF H?NGQB?CG OA@KDGFGH AH LE ?>GJ G CD?OC >DA@ A@G A> CFG GMAQBGHC K? G CA JFOF JG F?PG ?NPGDCGN

#FG AKGH H A> ?@MGC AHG A>CFG @A C ?L ADLH OGHG H CFG F?(KGDO?H ND?@? C KDANBOG C >>GOC LE CFG BKGDH?CBD?M LGH LDAB FC HCA CFG @A C @@GNO?CG OAHC?OC JCF CFG DG?M #FG GHCHGM ?DG KDGK?DGN >AD CFG ?KKG?D?HOG A> CFG +FA C R AD?CA HODGNBMAB R ZLBC CFGE ?DG ?M BDDABHNGN JCF ?H ?C@A KFGDG A> OA@@AH M>G =$AH MPG CFG (H IR =+GC CFGG CA LGN IR =8# LCCGD OAMN IR = AC ?@AB G CDDH IR ?HN CFG >?@M?D KMG? ?HCDE A> >MKD?CA =?K GOG A> FL@ IR G FLC CA B @HN BHNGD CFG ADNH?DE C?CG A> FB@?H >GGMH C CFG @A@GHC JFGH CFG DGOAMMGOCAH A> . GDH?DNA ?D G HCA CF?C @? H?CPG KAJGD JFOF LGMAH CA CFG C?MG FG ?LABC CA CGMM CFG +FA C ?KKG?D MM CF?C J? NABLC>BM H CFG H?DD?CPG A> CFG BKGDH?CBD?M P AH R ZJF?C MG>C BKAH AD?CA8 @HN CFG @KDG AH AHME A> ?, CFH 88R LGOA@G ? DG?M ? CFG MGHOG CFG OAMN ?HN CFG @NH FC #FG P AH CFGH =@A C M(G CFG (H IR

6 JKH MG NHP P E M I J HP HMO !+R

#FG +FA C DG@?H LBC ?H H C?HC ?HN JG ?DG ? ?H ?@AH C CFG DG?MCG A> OA@@AH M>G R CFG KDGK?D?CAH >AD J?D R CFG F CADE A> CFG QB?DDGM CF?C O?B GN CFG KDGK?D?CAH #FG P AH H CFG @HN A> AD?CA AHHGOCGN JCF CFG >?CG A> F =OM@?CBDG ?HN OABHCDE-@GH I FGH CFG +FA C DG?KKG?D CFGDG CMM ?CH G A> OGKCO @ H CFG AMN GD R

/ HM99 2 GN UP MN N NH I T LM N GM!\R

.BC CFGD HODGNBMCE ?C AHOG BLNBGN ?HN ?DG AMBCAH C?(GH LE AD?CA BKAH CFG OAHPOCAH CF?C JF?C FG AHOG FGMN ? ? = >?HC? EI ? NDG?NGN CFH A> JFA G G CGHOG CFGDG O?H LG HA NABLC R

$ / PN JG I LM N HMN P HM P GPP! N ! QHN !N T J!Q " M I 9PN 7 JL ! I T 9 7P H G GL N OJ I A N JG 99 GLPMU N H I+R

G F?PG FGDG LE ?HCOCK?CAH ?MM CMG NGGK ?HN HG KMO?LMG OAHGQBGHOG A> CF P AH M?N BKAH EABH ?@MGC C 5 NG CHER C CA :CFG

6 - 9 QJP N NHP I P!K I !Q !+R

+AGCFG H F =MFGM@ &GD CGD I F? @?NG F FGDA NG ODLG CFG @ANG H JFOF FG GHNG?PABDGN CA BHNGD C?HN ?@MGC = GC ?LABC HPG C ?CH GPGDE CD?OG A> ?@MGC8 OF?D?OCGD ? C F?N FAJH C GM> LG>ADG F >?CFGD8 NG?CF GHNG?PABDGN CA N CH B F JF?C H C J? HNGKGHNGHC A> CF @ABDH>BM GPGHC HNGKGHNGHC A> CFG CGDDLMG GPGHC CF?C >AMMAJGN ?HN JF?C @A C KDAL?LME CFG EABH @?H JABMN F?PG LGGH F?N HA BOF CFH AOOBDDGN I H CF KDC FG CGMM B CF?C FG J? KMG? H KAM FGN OABDCGAB BHCGN CFG NG?A> @AD?M DGOCCBNG JCF KDHOGME GMGP?CAH NG DAB A> KD? G KBDG H GHC@GHC C? CG>BM O?M@ H F CG@KGD ?DCMG H F OAHNBOC KA G H @ADG @DCF A> FB@ABD CF?H A> FG?DC #F   H GHAB LBC C ?KKG?D CA B CA DG>HG A@GJF?C CAA @BOF H F?(KGDG8 ND?@? CFG OF?D?OCGD ? CFGE ?DG NGPGMAKGN LE CFG HONGHC G KABHN CFG@ GMPG ?HN H CFG ADNGD H JFOF CFG G KA CAH LGOA@G HGOG ?DE MFGM@ &Z CGD8 KDGM@H?DE ?H?ME A> ?@MGC8 OF?D?OCGD C?HN AHME H CFG KM?OG A> CFG NG ODKCAH LE JFOF ND?@?C C HGD AD CA F?(KGDG KDG GHC ?OF?D?OCGD CA ?H ?BNGHOG BD KAGC >D C FAJ B JF?C ?@MGC LG>ADG F _HN M?N BHNGD CFG CGDD>O JG FC ?HN DG KAH LMCE A> ? DGPGM?CAH Z @AD?M GH G ABCD? GN LE CFG HNGOGHC @?DD? G A> F @ACFGD G F?PG ? M FC HC@?CAH CF?C F FAHABD?LMG ?@LCAH J? NO ?K-KACHCGN H CFG GMGOCAH A> F BHOMG CA CFG APGDG HCE #FG BNNGH

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E? $ ’ >’ E

NG?CF A>’ F ’ >?CFGD F?N O?MMGN >ADCF ?M CFG GH LMCG ’ CF?C LGMAH GN CA ?’ NGGKME @GNC?CPG H?CBDG R

6’2’HM P’NHMN’ NH !’ H KH’LMGGPNH’GH +R

C ’ H CF ’ KGDAN’ CF?C F ’ AJH JABHNGN’ KDC @?(G ’ F@’ MAA (’ JCF ?’S?BHNOGN’ GEG’ BKAH’ =’?M’ CFG’ B G ’ A>’ CF ’ JADMN I’ ?HN’ CA’ HNBM G’ ?’ J F ’ DG CD?HGN’ AHME’ LE’ ?’ GH G’ A>’ KGCE ’ CF?C’ CFG’ =’ BH JGGNGN’ ?D-NGH’I’ @ FC’ LG’ MG>C’ LE’ F@’ CA’ LG’ KA G GN’ LE’ =’ CF H ’ DA ’ ?HN’ D?H (’ LE’ H?CBDG I’ . BC’ FG’ OA@@BHG ’ JCF’ F@ GM>’ H’ ?’ CAHG’ JF OF’ LG KG?(’ CFG’ F?LCB?M’ DG>HG@GHC’ A>’ F ’ CFAB FC ’ ?HN’ F ’ JADN ’ F?KG’ CFG@ GMPG ’ HCA’ @? G ’ JF OF’ LGMAH ’CA’ CFG’ F F’?HN’ OBMCP?CGN’ HCGMMGOC ’ #FG’ @ANG’ H’ JF OF’ FG’ DGOGPG ’ AD?CA’ FAJ ’ CF?C’ F ’ NGSGOCAH’ ’ HAC’ F?LCB?M ’ C’ F? ’ LGGH’ @KDG GN’ AH’ F ’ H?CBDG’ LE’ ?’ BNNGH’ LMAJ ’ ?’ >?CFGD’ NG?N R ?’ @ACFGD’ N D?OG>BMME’ @?DDGN R ?’ ODAJH’ H?COFGN’ >DA@’ F@ ’ G’ JGMOA@G ’ F ’ AMN’ >DGHN’ JCF’ CFG’ J?D@CF’ ?HN’ >D?H(HG ’ A>’ CFG’ GHCMG@?H ’ LBC’ CFG’ ?LNH ’ ADDAJ’ H’ ?’ @A@GHC’ OA@G ’ APGD’ F@’ R

6’2’L MT’NHPP’O ’ ! N’ I KU’ I P’7P99 GNJOP!N+R

#FG’ N OMA BDG’ A>’ AD?CA8 ’ KBDKA G’ H’ F ’ P C’ ’ ?N@D?LME’ @?H? GN’ H’ C ’ ?L@KCHG ’ ACF H ’ C’ ?KKG?D ’ CA’ B ’ JCF H’ CFG’ KAJGD’ A>’ M?H B? G ’ O?H’ KDANBOG’ CFG’ G>>GOC’ A>’ CFG’ QBG CAH ’ JF OF’ ?@MGC’ KBC ’ CA’ AD?CA’ ’ ?HN’ F ’ ?H JGD’ CA’ CFG’ A@GJF?C’ OA@@AHKM?OG’ DG@?D(’ = C’ JABMN’ F?PG’ @BOF’ ?@?TGN’ EAB IR = PGDE’ M(G’ PGDE’ M(G I’ ’ A@GCF H ’LGEAHN’?DC ’ C’ MAA(’ M(G’ ?H’ H CHOCPG’ KGDOGKCAH’ A>’ CFG’ @A C’ OA@KMG ’ @GHC?M’ KDAOG G

AMGDN G’ O?MM ’ CFG’ HG Cf’ OGHG ’ CF?C’ LGCJGGH’ $?GDCG ’ KFGM?’ ?HN’ . AMAH B ’ = AHG’ A>’ F?(KGDG8 ’ MED O’ @APG@GHC I’ ?HN’ FG’ GMG ?HCME’ ?NN ’ =’ , AB’ G KGDGHOG’ CFG’ GH ?CAH’ A>’?’ K?B G’ JCFABC’ CFG’ GH G’ A>’ ?’ CAK I’ C’ ?’ HGOG ?DE’ CA’ HCGDKA G’ ?’ OGHG’ LGCJGGH’ AD?CA8 ’ H?DD?CPG’ ?HN’ CFG’ ?KKG?D?HOG’ A>’ CFG’ + FA C’ CA’ ?@MGC ’ ?HN’ CF ’ OGHG’ LG>ADG’ B ’ O?DD G ’ ABC’ CFG’ ND?@?CO’ OF?D?OCGD ’ JF OF’ ?DG’ G GHC?M’ CA’ CFG’ KMAC ’ JCFABC’ HCGDDBKC H ’ CFG’ @?H’ HCGDG C’ . BC’ CFG’ FABD’ A>’ ?@MGC8 ’ CD?M’ ’ OA@G ’ #FG’ DGPGM?CAH’ ’ CA’ LG’ @?NG ’ G’ ’ CA’ GHNBDG’ ?H’ ADNG?M’ JF OF’ ’ CA’ F?(G’ F ’N KA CAH

6’X NH’NH JQHNG’APT !O’NHP’ PMKHPG’ 7’ J’G J9G+R

#FG’ P AH’ JF OF’ GPGH’ JFGH’ F ’ HODGNBMCE’ F?’ K? GN’ ?J?E’ GG@ ’ CA’ AD?CA’ AHME’ ?’ = CF H ’ @?SG CO?M I’ ’ CA’ ?@MGC’ = (H ’ >?CFGD’ DAE?M’ ?HG I’ DA@’ CFG’ >D C’ J AD’ A>’ AD?CA8 ’ H?DD?CPG’ CA’ CF ’ @A@GHC’ A>’ CFG’ DG?M’ KDG GHOG’ A>’ CFG’ ?KK?DCAH ’ ?@MGC’ F? ’ HA’ NABLC ’ #FG’ G OCGN’ C?CG’ A>’ F ’ @HN’ F?N’ KDGK?DGN’ F@’ CA’ JGMOA@G’ CFG’ LGMG>’ CF?C’ = CFGDG’ ?DG’ @ADG’ CF H ’ H’ FG?PGH’ ?HN’ G?DCF’ CF?H’ ?DG’ NDG?@C’ A>’ H’ ABD’ KF MA AKFE I’ . G?BC>BMME’ OF?D?OCGD CO’ ’ F ’ NGCGD-@H?CAH’ CA’ >AMMAJ’ CFG’ P AH’ ’ ?HN’ JFGH’ CFG’ DGPGM?CAH’ OA@G ’ JFA’ OABMN’ F?PG’ @?H? GN’ C’ M(G’ F?(KGDGW’ #FG’ @? G ’ ?DG’ A>’ CF ’ JADMN ’ ?HN’ ?DG’ HAC’ A>’ CF ’ JADMN ’ #FGE’ LGMAH ’ ?C’ AHOG’ CA’ KAKBM?D’ BKGD CCAH ’ ?HN’ CA’ CFG’ F FG C’ KAGCDE ’ ACF H ’ O?H’ LG’ @ADG’ N -CHOC’ CF?H’ CFG’ H?DD?CPG’ A>’ CFG’ P AH ’ HACF H ’ @ADG’ @E CGDAB ’ CF?H’ CFG’ =’ GCGDH?M’ LM?TAH’ I’ CF?C’ =’ @B C’ HAC’ LG’ CA’ G?D ’ A>’ >MG F’ ?HN’ LMAAN I’ AJ ’ G QB CG’ ?DG’ CFG’ M? C’ MHG ’ A>’ CFG’ + FA C ’ >BMM’ A>’ CFG’ KAGCDE’ A>’ G CGDH?M’ H?CBDG ’ ?HN’ A>’ CFG’ NGKCF’ A>’ FB@?H’ ?>>GOCAH ’ ? ’ >’ CFG’ KDC CF?C’ F?N’ >AD’ A’ FADC’ ?’ C@G’ LGGH’ OBC’ A>’ >DA@’ M>G ’ CA’ (HAJ’ CFG’ GODGC ’ A>’ CFG’ =’ KD AH FAB G I’ CMM’ OMBH ’ CA’ CFG’ G?DCFME’ DG@G@LD?HOG’ A>’ CFG’ LG?BC>BM’ ?HN’ CFG’ CGHNGD’ CF?C’ GPGH’ ?’ KDC’ @ FC’ HNBM G R

6’ HP’Q9 I’GH G’NHP’ I MN !’N ’AP’ !PM +
! O’ %Q !G’N ’LM9P’H G’ !P77PKNJM9’7 P’ ’ %
#O PJ’MO PJ’ " M I 9PN[P I P I AP ’ I P+R

#FG’ @ANG’ H’ JF OF’ ?@MGC’ CF H(’ ?MABN ’ ?>CGD’ CFG’ KDC’ F? ’ >?NGN’ ?J?E ’ B G C ’ CF ’ BLCMG’ MMB CD?CAH’ CA’ AMGDN G R =’ F?(-KGDG’ ?MAHG’ OABMN’ F?PG’ KDANBOGN’ CFG’ PAJ’ A>’ ?@MGC’ CA’ @?(G’ F ’ @G@ADE’ ?’ LM?H(’ A>’ ?M’ @? @ ’ ?HN’ GHGD?MTGN’ CDBCF ’ CF?C’ 6’ AL GDP?-CAH’ F?N’ OAKGN’ CFGDG 8 R Z>AMMAJGN’ @@GN?CGME’ LE’ CFG’ KG?(GD’ HACH ’ NAJH’ CFG’ GHGD?MTGN’ >?OC’

Y HMN’ !P’ I MT’G I 9P’ M!O’G I 9P’ M!O’AP’M’ 99M !+%R

AMGDN G’ A>’ OABD G’ @G?H ’ CA’ A>>GD’ CF ’ ? ’ ?’ CD?C’ A>’ CFG’ N CBDL?HOG A>’ ?@MGC8 ’ HCGMMGOC R VHAC’ @?NHG ’ GPGH’ H’ CFG’ KAKBM?D’ GH G’ A>’ CFG’ CGD@ R OGDC?HME’ HAC’ @?NHG ’ KFE AMA O?MME’ KG?(H ’ LBC’ BH> GN-HG ’ NGD?H G@GHC ’ JG’ JABMN’ F?PG’ ?N ’ F?N’ HAC’ CF?C’ JADN’ LGOA@G’ ?’ ADC’ A>’ EHAHE@’ >AD’ @?NHG ’ JF OF’ F?(KGDG’ HCGHNGN ’ ? ’ C’ ?KKG?D ’ CA’ B ’ CA’ G F L C’ ? ’ CFG’ DG BMC’ A>’ F ’ BKGDH?CBD?M’ P C?CAH ’ +AGCFG’ ?E ’ ,’ #A’ @G’ C ’ OMG?D’ CF?C’ F?(KGDG’ @G?HC ’ H’ CFG’ KDG GHC’ O? G ’ CA’ DGKDG GHC’ CFG’ G>>GOC ’ A>’?’ DG?C’ ?OCAH’ M?N’ BKAH’ ?’ ABM’ BH>C’ >AD’ CFG’ KGD>AD@?HOG’ A>’ C I’ AMGDN G ’ H’ KG?(H ’ A>’ CF?C’ K?DC’ A>’ CFG’ OGHG’ ?>CGD’ CFG’ HCGDP GJ’ JCF’ CFG’ +FA C ’ H’ JF OF’ ?@MGC’ ? B@G ’ JF?C’ F? ’ LGGH’ O?MMGN’ =’ ?H’ @KDAL?LMG’ GOOGHCD OCE I’ ?CCD LBCG ’ CA’ ?@MGCCFG’ N KA CAH’ CA’ G O?KG’ >DA@’ F ’ AJH’ >GGM H ’ A>’ CFG’ APGD-JFGM@H ’ ?HN’ BKGDH?CBD?M’ LE’ ?’ JMN’ CD?H CAH’ CA’ CFG’ MBN ODAB ’ ?’ AD’ A>’ OBHH H ’ LD?P?NA ’ LADNGD H ’ AH’ CFG’ >M FC ’ A>’ NGM D B@ I’ G’ ?NN ’ ,’ ’ ’ ’ $ ’ " 3 ’ $ ’ : ’ O ’ ’ " ’$ ’

R: C’ ’ BHNGD’ CFG’ @@GN?CG’ H>MBGHOG’ A>’ CF ’ =’ N ADNGD’ H’ F ’ AFM I R CF ’ =’ F?(H ’ ?HN’ BH GCCM H ’ A>’ C ’ KAJGD ’ >DA@’ CFG D’ NBG’ ABDOG ’ A>’ ?OCAH I’ U’ CF?C’ ?@MGC’ C?(G ’ CFG’ H C?HC?HGAB ’ DG AMBCAH’ A>’ >G H H ’ F@ GM>’ @?N ’ G’ >GGM ’ CF?C’ F ’ @HN’ ’ FADDNME’ N CBDLGN’ JCF’ CFAB FC ’ LGEAHN’ @ADC?M’ DG?OF ’ LBC’ FG’ LGMGPG ’ CF?C’ CFG’ F?LCB?M’ KAJGD ’ A>’ F ’ HCGMMGOC’ O?H’ OAHCDAM’ CF ’ N CBDL?HOG ’ ?HN’ GPGH’ DGHNGD’ C’ ?H’ H CDB@GHC’ A>’ F ’ AJH’ ?>GCE ’ #FG’ PGDE’ ?LMG’ JDCGD’ >DA@’ JFA G’ ?HAHE@AB ’ K?KGD’ JG’ F?PG’ B C’ QBACGN’ ?E ’ =’ >’ CFGDG’ LG’ ?HE’ CF H ’ N KDAKADCAHGN’ H’ F ’ @HN ’ C’ GG@ ’ CA’ LG’ CF ’ AHME R CF?C’ HCGMMGOC’ ’ H’ G OG ’ C’ ’ GPGH’ BH APGDH?LMG ’ ?HN’ CAA’ BLCMG ’ ’ AJH’ NG ODKCAH’ A>’ KGD>GOC’ @?H ’ GHN H ’ JCF’ ’ H’ ?KKDGFGH AH’ FAJ’ M(G’ ?’ AN’ ’ ?KKG?D ’ CA’ @G’ OAH AH?HC’ JCF’ CF?C’ OF?D?OCGD ’ ?HN’ KA(GH’ H’ CFG’ F F’ ?HN’ APGDJDAB FC’ OAH OAB HG ’ A>’ HCGMMGOC ’ &BOF’ CF?C’ DGQBDG ’ G KM?H?CAH’ H’ CFG’ KM?E’ @?E’ KGDF?K ’ LG’ G KM?HGN’ LE’ CF ’ KDGNA@H?HOG’ ?HN’ OAH OAB HG ’ A>’ DG?C’ HCGMMGOCB?M’ KAJGD ’ ’ C HAC’ KA LMG ’ CF?C’ CFG’ H C?HC?HGAB ’ NG?’ A>’ >G H H ’ F@ GM>’ @?N’ LGMAH ’ CA’ CF ’ W I

C ’ FGDG ’ CFGH ’ CF?C’ CFG’ OA@KMG CE’ A>’ ?@MGC8 ’ OF?D?OCGD’ LG H ’ C ’ H’ CFG’ NG OD KCAH’ A>’ KFGM?’ CF?C’ FG’ ’ >D C’ KDG GHCGN’ CA’ B ’ ?C’ A@G’ FADC’ KGD AN’ ?>CGD’ CFG’ BKGDH?CBD?M’ P C?CAH’ R

$’ 6’ " P’N U’ I P’AT’NHP’ GN ’M!O’HP9O’! P’HM O8
HP!’Q PG’HP’N ’NHP’9P!QNH’ 7’M99’H G’M I’8
! O ’ NH’H G’ NHP ’HM!O’NHJG’ MP ’H G’A
" P’7M99G’N ’GJKH’LP JGM9’ 7’ I T’7MKP+
G’HP’ J9O’O M ’ N+’ / !Q’GNMT%O’HP’G 8
N’9MGN SM’9 NN9P’GHMU !Q’ 7’I !P’M I +
! O’NH KP’H G’HPMO’NHJG’ M !Q’JL’M!O’O ! S
" P’ M GMO’M’G QH’G ’L NP JG’M!O’L 7 J!O
HMN’ N’O O’GPP I ’N ’GHMNNP ’M99’H G’AJ9U
! O’P!O’H G’AP !Q ’ HMN’O !P’HP’9PNG’ I P’Q
! O ’ NH’H G’HPMO’ P ’H G’GH J9OP ’NJ !%O
" P’GPP I %O’N ’7 !O’HG MT’ XNH JN’H G’ PTPG’8
O ’ JN’ %O G’HP’ P!N’ NH JN’NHP ’HP9L+
! O ’N ’NHP’9MGN ’AP!OPO’NHP ’9 QHN’ !’ I P+R

#F ’ J? ’ HAC’ CFG’ =’ ?HCO’ N KA CAH’ I’ JF OF’ ?@MGC’ CFAB FC’ @GGC’ CA’ KBC’ AH ’ C’ J? ’ HAC’ CFG’ =’ GO C? E’ A>’ MAPG I’ KDANBOGN’ LE’ KFGM?8 ’ OAMNHG ’ ?OOADN H ’ CA’ AMAH B ’ . BC’ C’ J? ’ CFG’ BCCGD?HOG ’ ? ’ >?D’ ? ’ C’ OABMN’ LG’ BCCGDGN ’ A>’ F ’ GH G’ A>’ CFG’ F?DN’ HGOG CE’ CF?C’ J? ’ KBC’ BKAH’ F@’ CA’ A’ >ADCF’ CA’ ?’ @ADC?M’ CDB MG’ JCF’ GP M’ KAJGD ’ ?HN’ H>MBGHOG R CA’ O? C’ ?J?E’ ?MM’ CFG’ F F’ ?HN’ KMG? ?HC’ CFAB FC ’ CF?C’ LGMAH GN’ CA’ CFG’ OBMCP?CAH’ A>’ F ’ BHNGD C?HN H R CA’ CG?D’ F@ GM>’ >DA@’ ?MM’ CFG’ AACF H ’?HN’ NGMOAB ’ >?HO G ’ CF?C’ JABMN’ ?D G’ ABC’ A>’ CFG’ DAJCF’ A>’ F ’ ?>>GOCAH’ >AD’ CF?C’ @KMG’ @?N’ BKAH’ JFA@ ’FG’ LG CAJGN’ =’ ?’ F’ A’ KCGAB I’ * HNGD’ CFG’ KDG BDG’ A>’ CFG’ AHG’ ?L ADL H ’ =’ OA@-@?HN@GHC I’ CF?C’ F?N’ LGGH’ @KA GN’ BKAH’ F@ ’ FG’ F?N’ PAJGN’ CF?C’ FABMN’ MPG’ =’ JCF H’ CFG’ PAMB@G’ A>’ F ’ LD?H ’ BH@ GN’ JCF’ L? GD’ @?CCGD I’ MM’ GM G’ H’ CFG’ JADMN’ F?N’ LGOA@G’ CA’ F@’ @G?H’ ?HN’ BH@-KADC?HC ’ $APG’ J? ’ HAJ’ CA’ F@’ ?’ =’ CDPM’ >AHN’ DGOADN’ I R CFG’ J NA@’ A>’ KF MA AKFE ’ =’ CFG’ ?J ’ A>’ LAA(I’ MM’ ,’ CF?C’ EABCF’ ?HN’ AL GDP? ’ CAH’ OAKGN’ I’ J? ’ CA’ LG’ >AD ACCGH’ H’ CF?C’ NDG?N’ JADN ’ =’ DG@G@LGD’ @G I’ . BC’ ?@MGC’ F?N’ KBC’ CFG’ =’ ?HCO’ N KA CAH’ AH I’ #FG’ (H ’ F?N’ GGH’ F ’ =’ CD?H >AD@?CAH I’ #FG’ OABDC GD ’ C?M(GN’ >?@M?DME’ A>’ F ’ =’ MBH?OE I’ #FG’ N B G’ JF OF’ FG’ F?N’ ?NAKCGN’ J? ’ HAC’ ?OONGHC?MME’ OFA GH ’ #FG’ BLCMGCE’ A>’ F ’ HCGMMGOC’ NDGOCGN’ F@’ CA’ CF?C’ CAHG’ A>’ J?EJ?DN’ ?DO? @’ H’ JF OF ’ JF MG’ FG’ ?KKG?DGN’ CA’ ACFGD ’ CA’ LG’ @GDGME

;’ 3’ ()8 0%’ D ’’ 9’ ’L’) +

7 ? Ε ‘

J?HNGD□H ’CFG L□CCGDHG ’ A>’ F□ ’ ABW @□ F□’LG’DGMGPGN’LE’CFG BCCGD-
?HOG A>’=’J□MN’?HN’FBD□H’J?DN I’ .BC’GPGH’□H’CF□’N□ B□ G’F□’
□HCGMGOCB?W ’BKDG@?OE □ ’0?AH C?HCME’@?H>G CGN’ =’ G’□ ’>?D’ AHG’
>?D’ AHG I’?E’ AMAH□B ’LBC’,’FAJ’KDG H?HC F□’DGKM□?EGD□H’CFAB FC’
QB□O(ME’>AMAJ ’ H’CFG OGHG’J□CF’"A GHOD?HCT’?HN’+B□MGH CGDH’
□HCA’CFG BHHE’DG□AH’A>’C? CG’?HN’>?HOE’H’J?□F’FG’AHOG’NJGMC’
.BC’GPGH’FGDG’CFG’AHG’CFAB’FC’>AMMAJ ’F□@ R=’%A C’CFAB’FG?D’@G’
AMN’>DGHN’W ?H’EAB’KM?E’CFG’@BDNGD’A>’+AHT?’AWI’#FGH’0A@G ’
=’AJ’’?@’?MAHG’’I’?HN’?’ F?DMG’$?@L’F?’LG?BC>BME’G KDG GN’
□C’=’CFG’ □MGHC’@GNC?CAH’J□CF’J?□F’F□’LA A@’□’LBD□H’?DG’
DGNBOGN’CA’JADN’>AD’CFG’?(G A>’CFG’DG?NGD I’ .BC’H’CFG’@□N C A>’
F□’K?DA E @’F□’□HCGMGOCB?M’?OC□P□CE’KDGNA@□H?CG’=’LABC’@E’
L□D?□H ?HN’FG’G 0?KG’>DA@’CFG’CFAB FC□R

’?’GH ?9D’HM P’7MNNPO’M99’NHP’PQ i’U NPG
X NH’NHP’G9M PNG’77M9 R

□HCAR
’ 6’?9GY HM P’Q JiOG
P’P9MN P’NHMI’NH G’ HP’L9MT%G’NHP’NH iQ+R

#FG’□HNGO□ □AH’A>’?@MGC□’?CFB’NG’OD□LGN’LE’+AGCFG’DR=’’MAPGME’
KBD□’HALM□’?HN’@A C’@AD?M’H?CBD□’J□CFAB□’CFG CDGH CF’A>’HGDPG’
J□F□O’>AD@’?’FGDA’ □H’(’LGHG?CF’?’LBDNGH’J□F□OF’□C’O?HHA□’LG?D’?HN’
@B C’HA□’0?’C’?J?E’I’#FG’JD□CGD’□H’L D0 :’ 9 ’C?(G’
?HAC□FGD’P□J’A>’CF□’□HNGO□ □AH’J□F□OF’CA’ABD’@□HN ’□’@ADG’KF□MA-
AKF□O’R=’ G’GG’HA’0AB□G’OM□?D’GHAB F’CA’?□C>E’F□’BHNGD’C?HN-
□H I’ ?@MGC’LG’□C’AL GDPGN’□’@A□’J□CFAB□’HGDPG’$G□’B’DGOAMMGO□’
R=’’J□M□’J?COF’CA H□ F□C?HNR

6’ T’7MNP’K PG’ JN
#i□’IMUPG’PMKH’LPMNT’M NP T’i’NH G’A OT’
#G’HM OT’MG’NHP’ P1PMI’9 i%’ip P+R

G’□’HA□’J□CFAB□’HGDPG’ .B□’F□’0 ’□’ BL5GO□’CA’F□ FG□’>?OBMC□G ’
G’JABMN’F?PG’LGGH’ DG?C□D’F?N’FG’LGGH’MG ’ DG?C
G’?DG 0?DOGME’EG□’OA H□ ?HC A>’CFG NGKCF’A>’ ?@MGC8’ @GN□C?-
□AH ’ *HNG□’CFG >□D□’KDG BDG A>’F□’JABHNGN’ GH □L□MC□G’JG’F?PG’
FG?DN’F□@’G OM?□@R

6’1’NHMN’NH G N ’N ’G 9 G’79PGH’ J9G’ I P9N8R’

LB□’FG’F?’ □HOG’OA@@BHGN’J□CF’BHG?DCFME□CF□H ’?HN’FG’HAJ’>G?D-

#FG ?C >?OC AH FG C?(G ' H CFG NGP OG A> CFG = AHG OGHGI R CFG FAKG ' JF OF FG F? ' CF?C F ' NABLC ' @?E LG DG AMPGN R ZMGHN ?' DG?M GMGP?C AH CA F ' K D C ' JF OF @?E K? ' >AD F ' >G HGN =' @?NHG I' G BCCGD ' JF?CGPGD OA@G ' BKKGD@A C ' ?HN CFG >DGGNA@ ' JF OF FG C?(G ' J CF KFGM?' JF MG CFGE ?DG GQB?MME DG@ACG >DA@' LCCGDHG ' AD F?D FHG ' ?DG BOF ?' H F?(KGDG8 ' ? G' JABMN HAC A>>GHN KBDG' G?D ' #FQ' @ CBDG H F ' J MN KGGOFG ' A> >BH ?HN K?CFA ' ' HGPGDCFGMG ' @A C CAB0F H ' ' = F?C FABMN ?' @?H NA LBC LG @GDDEWI' OA@G ' >DA@' CFG KDA>ABHNG C NGKCF ' A> ?' JABHNGN K D C ' #FG CG C ' ?KKM GN ' CFG (H ' ' =' >D FCGN J CF >?M G >DG I' R 'F ' =' AOOBMCGN B MC I' F? ' BH(GHHGMMGN IC GM>' #FG GM?C AH A> ?@MGC8 ' @HN ' ?C C ' FG FC ' ' OAHCG@KC A> CFG (H ' ' AKGHME KDAHABHOGN CA F ' ODG?CBDG R "A GHOD?HCT ?HN +B MNGH CGDH QB?M LG>ADG F ' L C H ' ?DO? @ R AMAH B ' ' F ' LBCC ' MM CF ' ' ? ' FG CF H(' CFG OADB - O?C AH A> CFG OMABN LG>ADG CFG NG?NME >M? F ' =' AJ ' OABMN ' ND H (' FAC LMAANI' ' CFG >GGM H ' CF?C ' ?C CFG LACCA@' A> ?MM ' #FGH OA@G ' CFG OGHG H JF OF CFG (H ' KD?E ' ?HN ?@MGC KA CKAHG ' F ' DGPGH G ' J CF ?H G OB G ?M@A C CAA NDG?N>BM CA LGMAH ' CA FB@?H @AC PG ' #FGE JGDG HAC $ ' @AC PG ' AMGD N G N OD@H?CG ' LG-CJGGH =' @KGCBAB ' FADDAD CD(H '>GHN FHG ' I' ?HN =' CFG @?D(' A>' DGMBOC?HOG ?HN KDAOD? C H?C AH?HN ' C B>>O GHC CA HACG CF ' N - C HOC AH ' J CFABC GHCGD H ' HCA ?HE DG>BC?C AH A> AK H AH ' JF OF FAJ' CF?C C ' G? GD CA JD CG @ABCF ME AD KGDCME ' ?' A@G F?PG NAHG ' CF?H CA BHNGD C?HN F?(KGDG ' C ' H CFG OGHG J CF CFG QBGGH CF?C ?@MGC P HN O?CG ' F ' AJH ?H CE R

6 2N G ! N IMO!PGG
HMN 2 HM P JNP %O8 A !Q IP N ' NHP NPGN
#!O 2NHP IMNP' 99 P O8 HKH IMO!PGG
X J9O QM IA 97 I+R

#M ' ' =' F?(KGDG8 ' #G C A> H ?H CECFG' CCMG A> ?H ! ?E LE D ' ?N>ADN ' H JF OF FG MMB CD?CG '>DA@' F ' G KGD GHOG CFG ?OOBD?OE A> ABD DG?C KAGC8 ' NGM HG?C AH ' A> CFG KFGHA@GH?' A> @GHC?M N - ADNGD ' BD DG?NGD ' J MN >HN ?' PGDE ?LMG ?DC QMG AH CF ' ! ?E H CFG U ' 3 O .' PAM ' M ' K ' 6D

' ?@MGC ?L C?HGN >DA@' (MMC H ' CFG (H ' JFGH FG J? ' =' KD?E H I' #F ' J? ' ?' K?DC A> F ' JG?(HG ' .BC FG N N HAC ?L?HNAH F ' KBD-KA G ' #FG >ADOGN NGPAC AH A> CFG BMCE @?HR CFG = KFE O I' ? ' ?@MGC O?MM ' C R N N LBC KDAMAH ' F ' =' O(ME N?E I' AMAH B '>?MM ' LE ?H ?OO NGHC ' H CG?N A> F ' = LGCCGD I' #FG = JDGCOFGN ' D? F ' HCDBN H '>ANMI' J? ' ?OD>OGN CA ?' BNNGH @KBM G ' JF OF CAAN H CFG 'KM?OG A> ?' NGCGD@H?CG G GDO G A> CFG J MM ' ?@MGC O?DOGME DG DGC ' CFG ?OO NGHC R =' C?(G CFE >ADCBHG I' ' @HN ' G? GN LE F ' OAMMAQBE J CF F ' @ACFGD ' #FG P AH ? ?H ?KKG?D ' CA JFAC F ' = ?M@A C LMBHCGN KBDKA G I' LBC HACF H ' ' NAHG ' ' HCGMMGOC ' ? ?H ?C C ' BLCMGC G ' R

6 HP P%G 9PNP G GPM9HO8 M!O IT N 'GKH 9 7P99 G S
XH I' 2' 99 N JGN ' MG 2' 99 MOOP G 7M!QHO S
HPT APM ' NHP IM!OMNP8 NHPT IJGN G PPL IT MT+
#!O IM GHM9 IP N ' U!M P T' /PN N U8
O '%N G NHP GL N' N ' HM P NHP P!Q !PP'
" GN NH HG !' LPNM ' M!O %N GHM99Q ' HM O+
JN 2' 99 OP9 P !P TM O' AP9 ' NHP ' I !PG+
#!O A9 'NHP I' MN NHP I !+R

G OF C ' F@ GM> M (G ?' >G?CFGD BKAH CFG DG?C J?PG A> '>?CG R FG G@LD?OG ' CFG GPGHC ' CF?C @?D F?MMGN F@' =' CA (H?PGDE I' %?H GDKB ' ?' CFGE LG ' CFGE ?DG LGCCGD CF?H NABLC ' G' LGM GPG ' CF?C FG K GDOG ' CFDAB F CFG N?D(HG ' A> F ' >?CG R =' ' GG ?' OFGDBL' CF?C GG ' F@ I' G MG?PG ' >AD ! H M?HN ' HAC >AD GCC H '$ [' JFA G

6' 7 I' M!O' KMJGP' K !E !%O ' L PMKH !Q' N ' GN !PG+
X J9O IMUP NHP I' KMLMA9P8 R

LBC C MM @GN C?C H ' H CG?N A>' ?OZH ' C JABMN LG ?' OBD AB ' KDALMG@' CA LG AMPGN ' LBC C J MM HGPGD LG AMPGN ' JFGCFGD F?(KGDG F @ GM> ALM CGD?CGN CFG OGHG JF OF AHME ?KKG?D ' H CFG GOAHN QB?DCA ' H JF OF CFG JAD(H ' A> ?@MGC8 ' @HN ?C CF ' SBHOCBDG ?DG A' N - C HOCME DGPG?MGN CA B ' #F?C FG @G?HC CFG OF?D?OCGD CA LG @E CG-D AB ' CFAB F HAC HG KM O?LMG ' CFGDG O?H LG HA NABLC ' %AG ' C LGOA@G CAA KM?H JFGH ?@MGC8 ' @GGC H ' J CF CFG ADJG ?H O?K-C?H MG?N ' F@' HCA ?' CD?H A>' CFAB FC ' ?C >D C @?NG BK A> GHGD?M ?'

C AH ' LBC H CFG GHN @A C OAHOMB PG ?' CA CFG O?B G ' A> F ' HNGO AH W

6' ' HPNHP ' N AP'
PGN MG A9 !' ' G IP K M P!' GK JL9P
17 NH !U !Q N ' L PK GP9T !' NHP P P!N S
@#' NH JQHN ' H KH]JM NP %O ' HMNH AJN !P LM N GO I+
#!O' P P ' NH PP LM NG K M O S2' O ' ! N U! '
X HT TPN 2' 9 P N ' GMT+ H G NH !Q%G N ' O ' 8
NH 2' HM P KMJGP ' M!O 99 ' M!O' GN P!QNH ' M!O' IPM!G+
' O %N+R

C J? ' HAC = LG C ?M ALM P AH I' F HA ' #FG GCGDH?M KDG GHOG A>C FG CFAB FC R =' CF ' CF H 8 ' CA NA' I R @?NG F @' HO?K?LMG A> NA H ' C C J? ' CFG =' CF H(H ' CAA' KDGO GME AH CFG GPGHC I' CF?C NG CDAEGN F ' J MM ' C J? ' H CFG ?@G K D C CF?C F ' J MM F?N LGGH =' KBTTMGN I' LE CFG =' NDG?N A> A@GCF H ' ?>CGD NG?CF I R CF?C F ' OAH O GHOG R VOAH-O AB HG R =' O(M G A8GD I' F ' =' H?C PG FBG A> DG AMBC AH I' #FG =' NGM O?CG ?HN CGHNGD KD HOG I' G KA GN JF?C J? ' @ADC?M ?HN BH BDG CA >ADCBHG ' NG?CF ' ?HN N?H GD ' GPGH >AD ?H G FGMM ' # JGHCE CFAB-?HN @GH ' >AD ?' >?HC? E ?HN CD O(' A> '>?@G ' JGHC CA CFG D D?PG ' M (G LGN ' . BC CFGH ' CFG @GH ?HN CFG D MG?NGD =' @?NG @ABC F ' ?C CFG HP LMG GPGHC I' #FG =' M?D G N OABD G I' A> ?@MGC =' MAA(H 'LG>ADG ?HN ?>CGD I' ?L ADLGN CFG C?H LMG ?HN KDG GHC ' H' ?OC AH ' CF?C ?KKG?D HN DGOCME CA ?NP?HOG CFG G GOBC AH A> CFG DG?C =' OA@@?HN-@GHC I' CF?C J? ' M?N BKAH F@' FG F? ' NGO AH ?HN ?M?OD CE GHAB F ' ' DGM?C AH CA AD?C A' VJG ?DG A@GJF?C ?HC O?C H ' A> F ' BO-OG >BM NGP OG ? ?H C "A GHOD?HCT ?HN +B NGH CGDH ' JABMN ?KKG?D CA OA@G >DA@' ?' @?H JFA' ' J MM ' ' HCGMMGOCB?M ?OC P CE DGPGM ' H CFG CGMM H ' A> CFG CADE ' AMGD N G F? ' ?N@ D?LME KA CGN ABC H = '#FG D GHN I' FAJ =' CFG O DOB@ C?HOG ' A> C@G ?HN KM?OG ?DG ?MM C?CGN J CF GQB?M OA@KDG AH ?HN D?K N CE I' LBC C MM ' J CF CFG DGM?CGD8 ' OB CA@?DE CGHNGHOE CA GHGD?M G ' #FG GPGHC F? ' F?KKGHGN ' ?HN ?@MGC NAG ' HAC CF H (' CAA KDGO GME A> C ' OAH GQBGHOG ' #FG BG J MM LG FADCME (HAJH R

6' N 99 AP GA N N9 P' !NP I' G I !P+
!O' M' I M!%G 97P' ! ' I P' NHM!' N ' GMT S !P+R

#F ' MAA(' M (G NGO AH ' DAJ H ' ABC A>' CFG H?DD?C PG A>' CFG GPGHC ' H JF OF ?@MGC F?N G F L CGN F ' NGO AH ' .BC GPGH H F ' AJH ?OOABHC ' CFG LG HH H ' A>' CF ' ?OC AH ' J?' F ' =' HN ODGC AH I' KDA-OGGN H ' >DA@' BNNGH ?HN HNG>H?LMG @KBM G ' R

6' ' !' I T' HPM N' NHP P' MG M' U !O' 7'7 QHN !Q'
HMN J9O' ! N' 9PN I P' G9PPL+R

AHNGD>BMME HNGGN F? ' F?(KGDG @?H? GN CA' >AMMAJ' CFG' AMN F CADE R =' AJ' GH AH' NGP GN' CA' GHN' ?@MGC' CA' CFG' (H ' A> !H M?HN ' J CF' GODGC' MGCCGD ' CA' F?PG F @' KBC' CA' NG?CF ' ?HN' FAJ' ?@MGC ' JFGH' F ' OA@K?H AH ' MGKC ' DG?N' CFG' MGCCGD ' ?HN' H CG?N' A> ' CFG@' OABHCGD-> GCGN' ACFGD ' J MM H ' CFG' (H ' A> !H M?HN' CA' KBC' CFG' CJA' @G GH GD ' CA' NG?CF I R J CFABC' NG CDAE H ' CFG' BH CE' A> F ' AJH' OAHOGKC AH' A> ?@MGC

& D '0?@G AH ' H' FGD' NGM FC>BM =' F?D?OCGD C O ' A> A@GH I' F? ' (GCOFGN' CFG' OF?D?OCGD' A> KFGM?' J CF' ?MM ?' JA@?H8 ' CDBCF' ?HN' CGHNGDHG ' HG' K? ? G' AHME O?H' JG' PGHCBDG' CA' C?(G '>AD C ' ?H @? G' CF?C' CA' ABD' @ HN ' ' >?D' LGCCGD' CF?H' @?HE' JADN ' R =' HOG' ?C & BD?HA ' ' ?J' ?' NAPG' O?B FC' H' ?' CG@KG C ' KGDF?K ' C' J? ' EABH ' ?HN' G CFGD' M?O (GN' CDGH CF' A> J H ' CA' DG?OF' C ' FA@G ' AD' CFG' H C HOC' JF OF' CG?OFG ' CA' FBH' CFG' LDAAN H ' CAD@ ' LBC' A' C' J8? R ?HN' ' J?COFGN' C ' K CE H ' ?' ' C' >M CCGN ' KAAD' L DN' ' F CFGD' ?HN' CF CFGD' J CF' C ' MPGD' K H AH ' F H H ' ? ?H C' CFG' LM?O (' CFBHNGD OMABN ' C MM ' ?>CGD' ?' >GJ' NNE' JF DM ' C' >GMM' LM HNGN ' ?>>D FCGN ' ?HN' LGJ MNGDGN ' HCA' CFG' CBDL N' J?PG' LGHG?CF ' ?HN' J?' J?MMAJGN' BK' >AD' GPGD' C' DG@HNGN' @G' CFGH' A>' CFG' >?CG' A>' KFGM?' ?HN' HAJ' JFGH' ' CF H(' A>' FGD' ' GG' ? ?H' LG>A>G' @G' CF?C' KAAD' NAPG ' LG?C H ' J CF' JG?DE' J H ' LGJ MNGDGN' ?@N' CFG' CAD@ I' HN' JFE ' C ' JFGH' JG' CF H(' BKAH' CFG' >?CG' A>' CFG' KAAD' CAD@ CD O(GH' KFGM?' CF?C' JG' HGPGD' DGKDA?OF' ?@MGC' C G' ?DG' OGDC?H' CF?C' C' J?' HA' =' CD K H ' A>' F ' >?PABD' I' CF?C' LDA(G' FGD' FG?DC' G' ?DG' ? BDGN' CF?C' F ' GG@H ' F?D FHG ' N N' HAC H(' NGGK' HCA' FGD' K D C' G' LGM GPG' CF?C' FG' MAPGN' FGD' @ADG' CF?H' =' >ADCE' CFAB ?HN' LDACFGD ' I R CFAB F' ?' PGDE' H GH AB ' QBG C AH' F?' LGGH' D?' GN' BKAH' CF?C' KA HC' HN' EGC' FG' OGDC?HME' KGD' FGN' CFDAB F

?@MGC' ?HN' F□ ' ?OC□AH ' . BC' JG' LM?@G' F□@' HAC ' >AD' FGD' NG C□HE' J? ' □HPAMPGN' □H' F□ ' G' O?HHAC' ?PA□N' CD?H OD□L□H ' ?' K? ? G' >DA@' CFG' ?DC□OMG' □H' L DO :' 9 ' JF□OF' JG' F?PG' ?MDG?NE' @GH-C□AHGN' R =' AAH' ? ' JG' OAHHGOC' FGD' NG C□HE' J□CF' ?@MGC ' JG' (HAJ' CF?C' N?D(HG ' □ ' CA' APGD F?NAJ' FGD ' ?HN' CF?C' ?NHG ' ?HN' ADDAJ' J□MM' CGK' □H' LGCJGGH' FGD' ?HN' CFG' FA C F?BHCGN' ?PGH GD' A>' F□ ' >?CFGD8 ' @BDNGD' AAH' ? ' ABD' K□CE' □ ' G PO□CGN' >AD' FGD ' □C' OAHC□HBG ' D?NB?MME' CA' NGGKGH' ' ?HN' JFGH' FG' ?KKG?D ' □H' FGD' @?NHG ' JG' ?DG' HAC' @ADG' KDGK?DGN' CA' JGGK' APGD' ?MM' □C ' @A C' K?CFGC□O' @APG@GHC ' CF?H' JG' ?>CGDJ?DN ' ?DG' CA' FG?D' A>' FGD' NG?CF ' GDF?K ' CFG' NG OD□KC□AH' A>' CF?C' O?C? CDAKFG' LE' CFG' QBGGH' □ ' KAGC□O?M' D?CFGD' CF?H' ND?@?C□O ' LBC' □C ' G QB□ □CG' LG?BCE' KDGP?□M ' ?HN' KFGM□?' NE□H ' ?HN' NG?N ' □ ' C□MM' CFG' ?@G' KFGM□?' CF?C' >□D C' JAH' ABD' MAPG ' GDF?K ' CFG' PGDE' >AD GC>BMHG ' A>' FGD ' CFDAB FABC' CFG' DG@?□HNGD' A>' CFG' KM?E ' MG?PG ' CFG' ABM' ?C' >BMM' M□LGDCE' CA' NDG?@' A>' CFG' NGK?DCGN ' FG' F? ' K? GN' ?J?E' >DA@' CFG' G?DCF' M□(G' ?' LG?BC□>BS' ?□DR ?' NGM□ FC>BM' NDG?@' ' #FGDG' JABMN' F?PG' LGGH' HA' KM?OG' >AD' FGD' □H' CFG' ? □C?C□AH' ?HN' CG@KG C' A>' CFG' >□H?M' O?C? CDAKFG I

+?DD□O(' A@□CCGN' CFG' D?PGN□ GD ' G' F?N' CFG' CGDDAD' A>') AMC?□DG' LG>ADG' F□ ' GEG ' #FG' ! H M□ F' ?BN□GHOG' OA@KGMMGN' CFG□D' DG CAD?C□AH ' ? ' □C' CF?C' =' CFG' DABHNM□H ' I' OABMN' HAC' GHNBDG' CFG' MA ' A>' CFG' CGH' J?□ COA?C ' JF□OF' CFG' OMAJH' F?N' N□PG CGN' F□@ GM>' A>' C□@G' ABC' A>' @□HN' WR AD' J? ' CFGDG' □H' CF□ ' OGHG' A@GCF□H ' CF?C' LDAB FC' ?@MGC' FA@G' CA' CFG' FB@LMG C ' □H' CFG' M?D G' DG?OF' A>' F□ ' BH□PGD ?M' KF□MA AKFEW' & ') □MMG@?□H ' □H' □ ' ! ?E' AH' F?(KGDG ' ?KKG?D ' CA' B ' BCCGDME' CA' F?PG' @□ C?(GH' CF□ ' OGHG' 'U R =' CD□(G' HAC' ABC' >DA@' CFG' CD? GNE' A>' ?@MGC ' ? ' +?DD□O(' F?N' ?CCG@KCGN' CA' NA ' CFG' M?LABD ' ?HN' CFG' KMG? ?HCD□G ' A>' CFG' D?PGN□ GD ' . G' KDG GHC' ?C' CF□ ' CGDD□LMG' LB>->AAHGDE' ' ?HN' EAB' J□MM' LGFAMN' CGDDAD' ?HN' ?□GCE' D?K□NME' @AP□H ' ?H □@@GH G' ?BN□GHOG , ABCF' ?HN' LG?BCE' OAHCG@KM?CG' J□CF □H ?C□?LMG' OBD□A □CE' □@? G ' 17 NGO?E ' ?HN' @□HBCG' NGC?□M ' A>' NG?CF ' ?HN' CFGH' CFG' BHOABCF' KMG? ?HCD□G ' JF□OF' ?DG' LMGHNGN' J□CF' CFG' ?OC□AH' A>' CFG' OF□G>' KGD AH? G ' GG@' >DA@' C□@G' CA' C□@G' CA' DGM□GPG' CFG' KGO-C?CAD ' >DA@' CFG' JG□ FC' JF□OF' AKKDG G ' CFG@' ?HN' FABC ' A>' M?B FCGD' LBD C' >DA@' GPGDE' G?C ' CCGHC□PG' CA' CF□ ' KGOC?OMG ' CFG' OAMNG C' OABHCGH?HOG ' ?MCGDH?CGME' @?H□>G C' CFG□D' MAA@' AD' CFG□D' ?□GCE ' ?HN' GPGH' CFG' C?CG @?H' @□MG ' ?C' CFG' ?DO? @' A>' CFG' D?PGN□ GD' JFA' O?H' N□ C□H B□ F' LGCJGGH' CFG' (BMM' A>' ?' OABDC□GD' ?HN' ?' LB>>AAH I' #F□ ' @?E' LG' CFG' ?@MGC' A>' CFG' CFG?CDG ' LBC' & ') □MMG@?□H' FABMN' F?PG' MAA(GN' ?C' CFG' ?@MGC' A>' CFG' OMA GC ' #FG' OAHPGD ?C□AH' A>' CFG' OMAJH ' LG>ADG' ?@MGC' OA@G ' BKAH' CFG' OGHG' □ ' □HNGGN' KMG? ?HCDE' □HCGD@□ GN' J□CF' ?DO? @ ' LBC' CFG' @A@GHC' CF?C' ?@MGC' AKGH ' F□ ' M□K ' CFG' @GN□-C?C□PG' D□OFHG ' A>' F□ ' @□HN' □ ' KABDGN' ABC' BKAH' B ' ?HN' FG' D?KKMG ' J□CF' CFG' @A C' >?@□M□?D' ?HN' EGC' CFG' NGGKG C' CFAB FC ' A>' FB@?H' H?CBDG ' □H' ?' CEMG' CF?C' □ ' BLM□@G' >DA@' □C ' PGDE' ALP□AB HG ' ?HN' □@KM□O□CE ' FGDG' □ ' CFG' CGDDAD ' BHMG ' □C' LG' CGDD□LMG' CA' CF□H(' A>' = CFG' FAB G' ?KKA□HCGN' >AD' ?MM' M□P□H WI' ?H/' JF?C' □ ' CA' KDAPA(G' CFG' MAH ' KG?M ' A>' M?B FCGD' JFGDG' CFG' DACG QBG' □ ' ?MCA GCFGD' BLADN□H?CG' CA' CFG' AMG@H ?HN' CFG' KF□MA AKF□O?M' W C' □ ' CFG' GHC□DG' ?L ADKC□AH' A>' CFG' >GMMAJ' JFA' =' F? ' HA' >GGM□H ' A>' F□ ' LB □HG I' LE' F□@' A>' =' N?□HC□GD' GH G I' JFA' OAH □NGD ' □C' =' CAA' OBD□AB ME I' CF?C' @?(G ' CF□ ' OGHG' A' □@KDG □PG' CA' CFG' DG?NGD ' Z

>' ?@MGC8 ' P□AMGHOG' ?C' CFG' D?PG' A>' KFGM□?' JG' CF□H(' J□CF' CFG' OD□C□O' AH' □D' GHDE' ?M>ADN8 ' ! ?E CF?C' □C' J? ' ?' DG?M' ?LGDD?C□AH ' ?HN' HAC' ?' □@BM?CGN' >DGHTE ' □ ' ?KK?DGHCME' OAMN' G KDG □AH ' =' F?C ' CFG' >?□D KFGM□?' I' ?KKG?D ' CA' B ' CA' F?PG' LGGH' ?H' G>>ADC' A>' DG CD?□HC ' JF□OF' >AD' CFG' @A@GHC' APGD@? CGDGN' F□ ' DG? AH ' H' CFG' □HCGDP?M' LGCJGGH' CF□ ' = CAJGD□H ' K? □AHI' ?HN' CFG' >□H?M' O?C? CDAKFG ' ?@MGC' □ ' CFADAB FME' F□@ GM>R @GN□C?C□PG' CA' G OG ' J□CF' AD?C□AR @A C' ?0BCG' KM?j>>BM ' LBC' ?MCA GCFGD' GHCMG@?HME ' □H' CFG' OGHG' J□CF' CFG' >D□PAMAB ' OABDC□GD' . BC' AL GDPG' CF?C' FG' >AD@ ' HA' KM?H ' G' (HAJ ' CFG' N?H GD' JF□OF' BDDABHN ' F□@ ' ?HN' FG' C□MM' >GGM ' J□CF' DG ?DN' CA' CFG' B BDKGD' ? ' FG' ?MJ?E ' >GMC R

6' GMM' ! M'LP 7PKM'K !GK P!KP
']J M'H I' NH'NH G'M I' \' .

. BC' F□ ' J□MM' □ ' C□MM' G GHC□?MME' KAJGDMG ' ?HN' HAJ' FG' E□GMN ' CA' CFG' GH G' A>' KDGNG C□H?C□AH R =' >' □C' LG' HAJ ' 8C□ ' HAC' CA' OA@G' S' □>' □C' LG' HAC' CA' OA@G ' □C' J□MM' LG' HAJ ' $ □>' □C' LG' HAC' HAJ ' EGC' □C' J□MM' OA@G ' CFG' DG?N□HG ' □ ' ?MM I' #FG' O?C? CDAKFG' □ ' KGD>GOCME' □H' ?OOADN?HOG' J□CF' CF□ ' KDA CD?C□AH' A>' ?@MGC8 ' @□HN ' C' □ ' CFG' DG BMC' A>' ?H' ?OO□NGHC ' KDANBOGN' JG' (HAJ' HAC' FAJ ' A@G' AHG' F? ' B G CGN' ?' KAM□CG' OGDG@AH□?M' AH' CFG' K?DC' A>' ?@MGC ' LE' JF□OF' CFG' >A□M ' @□ FC' LG' G OF?H GN' J□CF' KGD>GOC' OAH □ CGHOE ' G' JABMN' D?CFGD' HAC' (HAJ' FAJ' CFGE' JGDG' G OF?H GN ' =' #FG' O?C? CDAKFG I' ?E ' 0AFH AH ' =' □ ' HAC' PGDE' F?KK□ME' KDANBOGN4' CFG' G OF?H G' A>' JG?KAH ' □ ' D?CFGD' ?H' G KG-N□GHC' A>' HGOG □CE' CF?H' ?' CDA(G' A>' ?DC ' ' OFG@G' @□ FC' G? □ME' LG' >AD@GN' CA' (□MM' ?@MGC' J□CF' CFG' N? GD' ?HN' $?GDCG ' J□CF' CFG' LAJM I' A' NABLC ' ' CD? GNE' CGD@□H?CGN' LE' D ' ' CA' LG' ?' O?K□C?M' CF□H ' >AD' CFG' DBMG ?HN M□HG' @GH' CA' M?E' FAMN' A>' . BC' CFGE' >AD GC' CM□G' KAGC8 ' KBDKA G ' ?N' ?@MGC' LGGH' ACFGDJ□ G ' F□ ' J□MM' JABMN' F?PG' LGGH' CFG' KDGNA@□H?HC' ? GHC' □H' CFG' O?C? CDAKFG ' #FG' G@K□DG' A>' OF?HOG' JABMN' F?PG' LGGH' APGDDBMGN ' CFG' B□MCE' JABMN' F?PG' LGGH' KBH□ FGN ' CFG' □HHAOGHC' KGDF?K ' JABMN' F?PG' LGGH' K?DGN ' ?PG' JG' MA C' ?HECF□H 'W #FGH' JG' FABMN' HAC' F?PG' F?N' CFG' ?@MGC' JFA' □ ' =' CFG' N?DM□H ' A>' GPGDE' OABHCDE' □H' JF□OF' CFG' M□CGD?CBDG' A>' ! H M?HN' F? ' LGGH' >A CGDGN I' C' CFGH' JG' FABMN' HAC' F?PG' F?N' CFG' ?@MGC' JFA' □ ' =' ?' OAHOGHCD?C□AH' A>' ?MM' CFG' □HCGDG C ' CF?C' LGMAH ' CA' FB@?H□CE ' □H' JFA@' CFGDG' □ ' ?' @ADG' □HCGH G' OAHOG5'C□AH' A>' □HN□P□NB?M' FB@?H' M□>G' CF?H' KGDF?K ' □H' ?HE' ACFGD' FB@?H' OA@KA □C□AH ' CF?C □ ' ?' LG□H ' J□CF' KD□H ' A>' CFAB FC' ?HN' >GGM□H ' ?HN' ?OC□AH ' NGGKGD' CF?H' JG' O?H' G?DOF I 0' CFGH' JG' FABMN' HAC' F?PG' F?N' CFG' ?@MGC' A>' JFA@' □C' F? ' LGGH' ?□N ' =' ?@MGC' □ ' ?' H?@G ' F□ ' KGGOFG ' ?HN' ?E□H ' LBC' CFG' □NMG' OA□H? G' A>' CFG' KAGC8 ' LD?□H ' F?C ' CFGH ' ?DG' CFGE' HAC' DG?M'W #FGE' ?DG' ? ' DG?M' ? ' ABD' AJH' CFAB FC ' #FG□D' DG?M□CE' □ ' □H' CFG' DG?NGD8 ' @□HN ' C' □ ' O ' JFA' ?DG' ?@MGC I' ^

$H?COM□G ' □H' F□ ' PA□OG' ?HN' LBD C' A>' KG?(□H ' I' □NGHC□>E' F□@' ? ' CFG' =' PGDE' MACGH'8 CF?C' HAHG' ACFGD' LBC' F?(KGDG' OABMN' F?PG' K?□HCGN

%&& ' ' % ' ' '

=' F□D ' AKG I' ?E ' CGGPGH ' =' BKKA GN' CFG' CADE' A>' CF□ ' KM?E' CA' F?PG' LGGH' LADDA JGN' >DA@' ?' HAPGM' A>' . AOO?OGE' LBC' FG' J? ' @□ C?(GH ' ? ' ?H' □@□C?C□AH' A>' □C' □ ' >ABHN' □H'?H' AMN' CADE LAA(' GHC□CMGN' ‹ G CJ?DN' >AD' DHGMC 8 I' #F□ ' □8 BHQBG C□AH?LME' AHG' A>' CGGPGH 8 ' D?HNA@' ? GDC□AH ' &?MAHG' F? ' KD□HCGN' CFG' C?MG ' ?HN' F? ' G KDG GN' F□ ' AK□H□AH ' □H' AKKA □C□AH' CA' CF?C' A>' CGGPGH ' CF?C' CFG' GHGD?M OFG@G' A>' E@LGM□HG' □ ' >ABHNGN' AH' . AOO?OO□A8 ' HAPGM' VH□HCF' CADE' A>' CFG' GOAHN' N?E' A>' CFG' =' %GO?@GDAH' &D ' $GHHA ' F? ' □PGH ' □H' FGD' = F?(KG?DG' MMB CD?CGN I' ?' K?D?KFD? G' A>' . AOO?OO□A8 ' CADSQ' JF□OF' FG' F? ' @□ GN' BK' J□CF' @ADG' □DDGPGDGHC' □@KGDC□HGHOG' CAJ?DN ' F?(- KGDG' CF?H' O?H' LG' KGDF?K ' >ABHN' GM GJFGDG' □H' CFG' !H M□ F' M?H B? G ' G OGKC' □H' %D ' 0AFH AH8 'SBN @GHC' BKAH' CF□ ' KM?E ' JF□OF' ABHN ' PGDE' M□(G' =' KD□ AHGD' ?C' CFG' L?D I' C' @□ FC' F?PG' LGGH' BKKA GN' CF?C' CFG' ANABD' A>' &D ' $GHHA 8 ' OD□C□O□ @ ' BKAH' F?(KGDG' F?N' LGGH' N□ - □K?CGN' MAH ' LG>ADG' CFG' OMA G' A>' CFG' M? C' OGHCBDE ' LBC' HGPGDCFGMG ' &D ' %BHMAK ' □H' F□ ' =' □ CADE' A>' □OC□AH I' KBLM□ FGN' □H' 6 4 ' @?(G ' CFG' AK□H□AH ' A>' &D ' $GHHA ' F□ ' A J H R =' #FG' □HO□NGHC ' A>' CFG' HAPGM' F?PG' LGGH' PGDE' OMA GME' ?NFGDGN' CA' LE' F?(G KG?DG ' LBC ' ? ' F? ' LGGH' DG@?D(GN' LE' ?H' ?OBCG' ?HN' GMG ?HC' OD□C□O' V&D ' $GHHA ' CFG' OGHG ' ?HN' OF?D?OCGD ' F?PG' LGGH' @A C' □HSBN□OO□AB ME' ?MCGDGN ' ?HN' CFG' @?HHGD ' A>' ?' CD?NG @?H8 ' J□>G ' ?HN' CJA' □HCA □O?CGN' C?M□?H' @GDOF?HC ' F?PG' LGGH' LG CAJGN' AH' ?' DG?C' KD□HOG ' ?' . D□C□ F' FGDA ' ?HN' ?' HALMG' "A@?H I' &D ' %BHMAK ' FAJGPGD ' F? ' □PGH' ?' HG?C' ?LD□N @GHC' A>' CFG' C?MG ' ?HN' □H' CF□ ' @?CCGD' □C' J□MM' LG' B>>□O□GHC' CA' DG>GD' CFG' GHGD?M DG?NGD' CA' F□ ' JAD(' ?HN' CFG' C?M□?H' CBNGHC' CA' . AOO?OO□A

F?(KGDG' >ABHN' F□ ' F□ CAD□O?M' @?CGD□?M ' □H' AM□H FGN ' ?HN' FG' F? ' ?NFGDGN' CA' CFG@' ? ' >?D' ? ' □ ' 0AH □ CGHC' J□CF' CFG' KDA DG ' A>' ?' DA@?HC□O' CADE ' #FG' >AMMAJ□H ' G CD?OC ' □HOMBNG' ?MM' □H' AM□H FGN' CF?C' LG?D ' BKAH' CFG' KMAC' A>' CF□ ' ND?@? R

6' # 7NP ' NHP' OPMNH' 7' MGG AP99M!P ' HP I MJN JG' ' /P!MJN JG ' NHP' T J!QPGN' G !' 7' / JO ' MG' I MOP' U !Q' 7' NM !' !' NHP' TPM ' 7'NHP' 9O' = ' M7NP ' NHP' AJ 9O !Q 7' & I P' ' M!O' AP7 P' NHP' K I !Q' 7' H GN')++++++++++ HP I MJN JG' J9PO' NHP 9M!O' !' Q O'] J PN ' M!O' LM O' NHP' N AJNP' N ' NHP' & I M!G' H KH' MGG AP99M!P' HMO' Q M!NPO ' M!O' 7 !M99T' OPLM NPO' NH G' 9 7P' M7NP ' HP' HMO' P Q!PO' N P!NT N ' TPM G ' M!O' MG' AJ PO' MN' / !O !+

6' T I AP9 !P' ' I AP9 !P ' NHP' G !' 7' HP I MJN JG ' MG' 7' NHP' NM !G' I MOP' U !Q ' M7NP ' NHP' OPKPMGP' 7' H G' 7MNHP ' !' NHP' TPM ' 7' NHP' 9O' = ⁄ M7NP ' NHP' AJ 9O_ !Q' 7' & I P' ' M!O' AP7 P' NHP' A NH' 7' J ' M I ' ⁄ H G' I M!' @MG' G I P' NP ' MG' A JQH N' JL' MN' & I P ' M!OD NHP P' I MOP' U! QHN' AT' #JQJGNJG' GPGM ' I OP ' H I ' HP' GP PO' !' NHP' M G ' M!O' MG' !' GJKH' 7M J ' NH' H I ' NHMN' HP' MG' MN 9 AP NT' N ' LMT' H G' N AJNP' ' ! N++++++++++ JKH !Q' NHP' K !N !JM!KP' 7' N P' TPM G' 7 T I AP9 !P NG' P Q!' G I P' NP G' O ' M T ' AJN' NHP' APGN' MLL PO' M77 I ' NHMN' HP' P Q!PO' NH NT 7 P' TPM G' M!O' NHP!' O PO ' M!O' MG' AJ PO' MN' / !O ! '9PM !Q' APH !O' H I ' N ' G !G ' : J OP JG' M!O' # MQJG⁄ JN' HP P' G' N ' AP' ! NPO' NHMN ' M9NH JQH' J ' H GN PG' O ' M77 I ' NHMN' MG' P99' NH G' T I AP9 !P ' MG' M9G ' H G' 7MNHP ' HP I MJN JG ' 9 PO' !'] J PN' NH' NHP' & I M!G ' M!O' K !N !JM99T' N ' NHP I ' LM O' NHP' N AJNPG' H KH' NHP' NM !G' HMO' K P!M!NPO' NH' ?J9 JG' MPGM ' N ' LMT ' TPN' P 7 !O' !' NHP' & I M!' NP G ' NHMN' M7NP ' ?J9 JG' MPGM %G' OPMNH ' HP!' # JQJGNJG' HMO' NMUP!' JL !' H I ' NHP' J9P' 7' NHP' P I L P ' NHP' NM !G' P7JGPO' N ' LMT' NHMN' N AJNP' ' HP PMN ' MG' !P9 JG' MK NJG' PL NPNH ' # JQJGNJG' @AP !Q' NHP GP' KKJL PO ' MG' K !NP!NPO' N ' !U8 H AP N ' NH JQH' PM !PGN' KM99 !Q' JL !' N ' PK P ' H G' QHN' AT' GJKH' MG' P P' OPG JG' N ' GPP' NHP' JNNP I GN' 7' NHP' N GH' U !QO I 8 MN' 9P!QNH ' N ' N ' !' NHP' NP!NH' TPM ' M7NP ' NHP' OPMNH' 7'?J9 JG' MPGM ' H KH' MG' MA JN' NHP' NH NPP!NH' TPM ' 7' NHP' GM O' HP I MJN JG ' # JQJGNJG' I MOP' L G !' N ' LMGG' NH' M!' M I T' P ' !N ' NM !' M!O' MG' K I P' 7 M O' JL !' H G' E J !PT' !N ' : M99 M' P9N KM ' 'MG' P' I MT' GMT' !N ' NHPGP' H NHP ' LM NG' 7'O M!KP+

6' JN' HP P' PKP !Q' MO P N GP I P!NG' NHMN' NHP' -M!! ! M!G ' H KH' !HMA NPO' NHP' K J!N T' ! ' KM99PO' " J!QM T ' M!O' NHP' 5M9 I MN M!G ' H I' ! ' P' KM99' 9M !G ' HMO' PAP99PO ' HP' NH JQHN' N' APGN' 7 GN' N ' GJAOJP' NH GP' PAP9G' !PM ' H I P ' MNHP ' NHM!' N ' GPPU' !P ' K J!N PG ' M!O' 9PM P' GJKH' !' HMCM O' HP P 7'HP' HMO' L PGP!N' L GGPGG !' M!O' G ' NJ ! !Q' H G' L P ' MQM !GN' NHP' -M!! I 9M!G' M!O' 5M9 I MN M!G ' HP' 9P7N' 77' 7 ' M' N I P' NHP' M G' 7' NM !' HP PAT' NHP' 9M!O' P I M !PO' NH JN' 7PM ' 7' M!T' ! M_ G !' N ' AP' I MOP' AT' NHP' & I M!G' N 99' NHP' TPM ' M7NP ' NHP' AJ 9O !Q' 7'N9 P' K NT' 7' & I P')' M!O' MA JN' NHP' ! !PNPP!NH' TPM ' 7' U !Q' HP I MJN JG% P Q!' NHMN' #JQJGNJG' NH' M!' M I T' OPLM NPO' !KP' MQM !' 7 I' & I P' N ' LMGG' P ' !N ' NM !' NHP P' N ' I MUP' M ⁄ JN' M7NP ' H G' K I !Q' !N ' : M99 M' HP!' NHP' NM !G' GP!N' N ' H I ' KP NM !' M I AMGGMO G' N ' N PMN' NH' H I ' 7' LPMKP ' HP' GNM O' NHP P' N ' GPNN9P' NHP' GNMNP' 7' NH !OG' M I !Q' NHP' : M PG ' 7 ' NHMN' NHPT' P P' ! N' !' P T' Q O' OP ⁄ #!O

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' -9 !T' GMTG' NHP' N !G' M!O' : MJ9G' P' M' !Q' !' NHP' I OO9P' 7 !QP +

N' #' N GH' K GP9PN' 7' Q 9O' 7 J!O' MN' 9O' !' O9 !NGH P ' G' ! ' !' NHP' N GH' JGPJ I +

' N MA ' GMTG' NHP' N !G' M P' NM99P ' NHM!' NHP' : MJ9G8 NHP ' HM ' ! N' G ' TP99 ' M!O' NHP ' A O PG' 9 GP ' AJ 9N+

î PGM ' NP99G' JG' NHP' N !G' P P'9 !Q HM PO ' M!O' GHM PO' M99' NHP' A OT' PWKPLN' NHP' HPMO' M!O' NHP' JLLP ' 9 L+

HM !Q' 7 ! GHPO' NHP P ' HP' P!N' !N ' LM ! ' M!O' G ' H G' E J !PT' !N ' NM !' MG' LJN' 77' N !' NHP' !PWN' TPM ' NHMN' G ' NHP' NH' M7NP ' NHP' AJ 9O !Q' 7' & I P ' H KH' 7P99' AP7 P' NHP' A NH' 7' J ' M J ') ' MA JN' H KH' N I P' # JQJGNJG' P7NG !G' I PM !N' NHP' N9 O' N I P' N ' HM P' I MOP' M' TMQP' !N ' NM ! ' APKMJGP' NHPT' K J9O' ! N' MQ PP' JL !' K P!M!NG⁄ JN' MG' NHP' - M!! ! M!G' M!O' 5M9 I MN M!G' HMO' M7 PN I P' GNM O' H I ' HP!' @MG' AP7 P' G' GM O ' HP' I PM !N' N ' HM P' Q !P' MQM !GN' NHP' NM !G' 8 G ' P P!' ! ' NHP' M9MG N M!G' @M' LP L9P' !HMA N !Q' MA JN' 2NM9T' M!O' NCP 9M!O ' NHP' M!NMA M!G' M!O' # GNJ M!G ' AT' GJKH' PAP99 JG' GN G' MG' NHPT' M GPO ' NHO P ' H I ' 7 I ' H G' LJ _ L GPO' E J !PT⁄ JN' HPNHP ' NH G' K !N P GT ' H KH' MLLPM PNH' N ' 7M99' 7 NH' APN WN' NHP' NM !G' M!O' # JQJGNJG ' MG' KKMG !PO' AT' T I AP9 !P ' ' G I P' NHP ' L !KP' 7'NHP' NM !G ' 2 ' HM P' ! N' N ' M JKH' ' 7 ' NHMN' AT' J ' NP G' N' G' PL NPO' NHMN' T I AP9 !P ' AP !Q' A JQHN' JL' !' & I P ' M!O' U! QHNPO' !' NHP' K J N' 7' # JQJGNJG ' P P ' GH PO' H I GP97' M' 7 P!O' N ' NHP' & I M!G ' M!O' KH P79T' MG' 9 NH' N ' A PMU' NH' NHP I ' APKMJGP' NHP' T JNH' 7' NHP' NM !' !MN !' GH J9O' ! N' AP' OPL PO' 7' NHP' AP!P7 N' N ' AP' N M !PO' M!O' A JQHN' JL' M I !Q' NHP' & I M!G ' HP PAT' NHPT' $ I QHN' 9PM !' A NH' N ' APHM P' NHP I GP9 PG' 9 9KP' K 9' I P!' M!O' N ' MNNM !' N ' NHP' U! 9POQP' 7' 7PMNG' 7' M ⁄ JN' HPNHP ' 7 ' NH G' PGLPKN ' ' 7 ' NHMN' N' L9PMGPO' NHP' #9 I QHNT' : O' G ' N ' O GL GP' NHP' I !OG' 7' I P!' MN' NHMN' L PGP!N ' ! N' !9T' NHP' NM !G ' AJN' !' I M!!P ' M ' NHP ' !MN !G ' E P P' K !NP!NPO' N ' AP' APO P!N' N ' NHP' & I M!' P I L P⁄ HMN' NH G' MG' N JP' !' NHP' NM !G ' N' G' P OP!N' P! JQH' !' N MA %G' OG ' H KH' M P' !' P77PKN' MG' 7 99 PNH' SY#N' NH G' L PGP!N' @GM NH' HP ' KP NM !' L !KPG' 7' NM !' L KJ !Q' AT' M I AMGGMO G' M!O' OJN 7J9' OP I PM !P G' NHP' M I NT' 7' NHP' P I LP ' # JQJGNJG ' HM P' 77P PO' !' NHP' KML NM9' J!N ' NHP' Q OG' L PGP!NG' ' Q 7NG ' M!O' HM P' OM !PO' NHP' H 9P' 9P' !' M' I M!!P ' N ' AP' MLLP N !P!N ' L LP ' M!O' 7M I 9 M ' N ' NHP' & I M!G⁄ HPT' M P' AJ OP!PO' NH' G P' KJGN I G' H KH' NHPT' LMT' 7 ' M G ' P NHP ' N ' AP' GP!N' 7 NH' !N ' : M99 M ' ' A JQHN' 7 I ' NHP!KP ' H KH' M P' K I I !9T' T' PGGP9G ' GHPM G ' !KHPG' ' PM !QG ' M!O' NHP ' K !KP NG' I MOP' 7' M I AP ' M!O' Q9MGGPG ' M!O' GJKH' 9 UP' I M!!P ' 7' I P KHM!O GP' ' G ' NHMN' ! ' NHP P' G' ! ' !PPO' 7' M!T' M I T' ' QM G !' 7' I P!' 7' M ' N ' UPPL' NHP' 9P' 7 ' NHP P' !PPOPNH' ! N' LMGN' !P' 9PQ !' 7' 7 N I P!' ' G I P' !Q' 7' H GP I P!' N ' QMNHP ' JL' M!O' PKP P' NHP' N AJNP8 7 ' NHP' KHM QPG' M P' MNPO' MKK O !Q' N ' NHP'] JM!N NT' 7' NHP' N AJNPG' ' 7 ' NHP GP' N' GH J9O' AP' !PPO7J9' N ' MAMNP' NHP' KJGN I G' 7' NHP' N AJNPG% P P' M9G ' M GPO8 M!O' 7' M!T' 9P!KP' GH J9O' AP' JGPO ' N' P P' OM!QP JG' 9PMGN' NHPT' I QHN' AP' L UPO' N ' PAP99 !+% HJG' 7M ' N MA +R

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AD' CFG' NDG ' A>' ABD' ?HO□GHC' . D□C□ F' ?HOG CAD ' A>' CFG' C□@G' A>' E@LGM□HG' AD' BHALGM□H' JG' F?PG' HA' K□OCAD□?M' ?BCFAD□CE' ?HN' CFG' HAC□OG ' A>' ?HNGHC' . D□C□ F' OA CB@G' J F□OF' JG' >□HN' O?CCGDGN' ?@AH C' CFG' OM? □O?M' F□ CAD□?H ' ?DG' G OGGN□H ME' O?HCE' ?HN' □HNG>□H□CG ' #F?C' CFG' OF□G>' ?HN' CFG' BKGD□AD' OM? G ' ?@AH C' CFG@' FAJGPGD' JGDG' OMACFGN' '?HN' J□CF' L?DL?D□O' KMGHNABD ' CFGDG' G □ C ' ?C' KDG GHC' M□CCMG' NABLC ' ?HN' CFG' H?(GN' ?P? G ' P□CF' K?□HCGN' (□H ' JFA G' □@? □H?DE' G>>□ □G ' ?NADHGN' CFG' =' □OCAD□?M' □ CAD□G ' I' A>' ABD' OF□MN- FAAN ' ?DG' HAJ' OAH □NGDGN' CA' OAHPGE' ?' LGCCGD' □NG?' A>' CFG' @ADG' DG@ACG' ?HN' L?DL?DAB ' CD□LG ' A>' CFG' &?G?CGG' CF?H' A>' CFG' □HF?L□C?HC ' A>' ?H ' C□B@' AD' GHC' V=' CFG' @A C' O□P□M□ GN' A>' ?MM' CFG' . D□CAH ' I' ? ' G?DME' ? ' CFG' C□@G' A>' CG ?D ' ?HN' GPGH' CA' DGKDG GHC' CFA G' AHME' JFGH ' □H' ?OOADN- ?HOG' J□CF' ?' GMC□O' OB CA@' CFGE' F?N' CFDAJH' A>>' CFG□D' ?D@GHC ' A>' (□H' AD' NEGN' OMACF ' CA' DB F' BKAH' ?H' □HP?N□H ' GHG@E

' # F?C' ?MM' CFG' . D□CAH ' C?□HGN' CFG@ GMPG ' J□CF' JA?N ' JF□OF' ?PG' ?' LMB□ F' O? C' CA' CFG' (□H ' ?HN' @?NG' CFG@' MAA (' NDG?N>BM' □H' L?CCMG ' □ ' N□ C□HOCME' C?CGN' LE' ?G ?D ' LBC' FG' ?M A' ? BDG ' B ' G KDG ME' CF?C' CFG' □HF?L□C?HC ' A>' CFG' ABCFGDH' OA? C ' N□>>GDGN' LBC' M□CCMG' □H' CFG□D' @?HHGD ' >DA@' CFG' +?BM R ?H' ? GDC□AH' JF□OF' □ ' 0AH>□D@GN' LE' CFG' CG C□@AHE' A>' CD?LA ' #?O□CB ' ?HN' A@KAH□B ' & GM?' CFG' M?CCGD' A>' JFA@' ?E =' # FG' . D□CAH ' >AB FC' ?D@GN' ?>CGD' CFG' +?BM□ F' @?HHGD I

#FG' >AMMAJ□H ' NG OD□KC□AH ' CFGDG>ADG ' A>' CFG' +?BM ' LE' %□ANADB ' □OBMB ' LGOA@G ' ?H' ?BCFAD□CE' >AD' CFG' ?D@ ' ?HN' NDG ' A>' CFG' . D□CAH ' K?DC□OBM?DME' ? ' □H' @?HE' K?DC ' □C' OADDG KAHN ' J□CF' BOF' GP□NGHOG' ? ' G □ C ' □H' ACFGD' OAHCG@KAD?HGAB ' JD□CGD ' DG KGOC□H ' CFG' NDG ' A>' CFG' . D□CAH ' CFG@ GMPG R

6 HP' : MJ9G' PM ' A MKP9PNG' MA JN' NHP ' GNG' M!O' M I G ' M!O' I MGGT' KHM !G' 7' LJ P' M!O' APMNP!' Q 9O' MA JN' NHP ' !PKUG ' M!O' P QHNT' !QG' JL !' NHP ' 7 !QP G ' M!O' K G9PNG' 7' Q 9O' JL !' NHP ' A PMGNG+7' O ' GNMNJ P' NHPT' M P' NM99 ' 7' M' LM9P' K I L9PW !' M!O' PO HM PO ' ! N' !9T' !MNJ M99T ' AJN' NHPT' P!OPM J ' M99' NHPT' KM!' N ' I MUP' N' POOP ' AT' M N+e' HPT' 7NP !' MGH' NHP ' HM ' !' M' MNP ' A 9PO' NH' 9 I P ' M!O' NJ !' N' AMKU M OG' 7 I ' NHP' 7 PHPMO' N ' NHP' K !' 7' NHP' HPMO ' M!O NHP!KP' N ' NHP ' P T' !PKUG ' NHMN' NHP ' 7MKPG' I MT' AP' 7J99T' GPP! ++++++++++ I P' 7 NHP I ' GHM P' NHP ' APM OG ' NHP G' 9PN' NHP I ' Q ' M' 9 NN9P⁄ - LG !G' 7'] JM9 NT' GHM P' NHP ' KH !G' K9 GP ' AJN' NHP ' I JGNMKHPG' NHPT' 9PN' 7M99' G ' 9 ' NHMN' NHPT' P P!' K P' NHP ' I JNHG⁄ î + + + + ' HP ' QM I P!NG' M P' P T' GN M!QP ' 7 ' NHPT' PM ' LM NT ' K 9 J PO' NJ! KG' @79 P PO' NH' M JG' K 9 J G' !' O G !G ' M!O' H GP' H KH' NHPT' KM ' MKMP+8 HPT' 9 UP GP' PM ' KHP] JP PO' GMQMG' @K9 MUG ⁄ H GP' NHPT' PM ' !

2 M N MG' HMG' M' 9 !P ' 6' / UP' NHP' 9O' A MKHGP' 7' M' !PPOT' N !+R S E ' W⁄ + HPT' MLLPM ' !' NHP' 9PQG' 7' NHP' : MJ9 GH' 7 QJ PG' !' I M!T' & I M!' GKJ9LNJ PG' N ' HM P' APP!' M' G N' 7' 9 GP' LM!NM9 !' NP I ! MN !Q' MN' NHP' M!U9P ' HP P' NHPT' P P' I PN' AT' M' H QH' GH P' ' A QJP⁄ HP P' KM!' AP' 9 NN9P' O JAN' NHMN' NHP' " QH9M!O' % G' M' I 7 7 KMN !' 7' NH G' M!K P!N' N JGP ' 7' ! N' NHP' OP!N KM9' PPO' NGP97+

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#'KH 9O'NHMN'QJ OPO'O NM OG'N'HG I GN PGG S
O ' H I'HP'i 'G AMi GH%O SHP' i'L KP'
- K9M I G'H 'GHP'PGNPPI%O'H I'MiO'H G' NJP8
T'HP 'P9PKN i'T J'MO KMNP' IM T'TPN'
2' 99'AP'Ui i'T J'MO KMNP' IM T'TPN'
HP'7 P' 7 MQP'G i'H I 8 Mio'%M p P'Q O
X HMN'U iO' 7 IMi'HP' G+
%' ' 2'H i J'H I
3 pi' JN' 7T J ' pL N+ JN'%L MT'T J'NP99 Ip+
2G'GHP G 9P'KH 9O'N 'NHP'U iQ'\
' ' " G i9T'KH 9O+
"P'HMO'N 'G iG'@ 7NH G'AP' NH'T J'HPM iQ
M U N 'NHP'P9OPGN' 7NHPI'MN'NH PP'TPM G' 9O
2%NHP'G MNH iQ'K9 NHPG'NHP' NHP '7 I'NHP 'iJ GP T'
X P P'GN 9PI8 MIO'N 'NH G'H J'i 'QJPGG' i'UI 9POQP'
X H KH' MT'NHPT' piN+
%' ' " '9 iQ' G NH G'MQ '\
' ' Ip'N piNT'TPM G+
%' ' HMN'M'U iQ%G KH 9O pi'GH J9O'AP'G 'K i PT%O[
'G9MKU9T'QJM OPO'[#iO'NHP'GPM KH'G 'G9 +
HMN'K J9O'i N'N MKP'NHPI'[
' ' G p%P '%N G'GN MiQP+
1 'NHMN'HP'ipQ9 QPiKP' I MT' P99'AP'9MJQH%O'MN+
4PN' G N'N JP'G +
% ' 2'O ' P99'AP9 p P'T J+
2 ' X P' I JGN'7 APM ' "p P'K IPG'NHP'QPiN9p IMi'
H I ' PMO iQ
6' XP' I JGN'7 APM 8 HP P'K IPG'NHP']JPPi'MiO'L ikPGG+R'
X HMN'KMi'EJGN 7T'+GJKH'KML K JG'M9NP MN iG 7'NHP'NPWN

3 3'22 F -'
' '9((' "'

<& ' 'AP'MGGJ %O'T J'GHM99'i N'7 iO' I P'OMJQHNP +'
#7NP'NHP'G9MiOP' 7 I GN'GNPL I NHP G+
3 9 PTPO'JiN'T J'T J'M P'I T'L G ip 'AJN
4 J'QM 9P'GHM99'OP9 p'T J'NHP'UPTG

B '9(
<& ' P'A P7'2'L MT'T J
27'NHP'U iQ'K IP'2'GHM99' ikJ'2'Ui 'i N
" 'IJKH' 7H G O GL9PMGJ p'4PN'2%99' I P'H I' + -"
' M9U'NH G MT'2'ip p'O'H I' iQ+
JN'HP'O PG'AJT'I T' iEJ PG'N 'AP'7 piOG'8D
-MTG'OPM'7 'IT' 77PikPG+ + 4
i- ' H J9O' P'AP'MU iQ'9PM P
#G 9 iQ'M'NP I'MG TPN' P'HM P'N '9 P+
HP'9 MNHIPGG'N 'OPLM N' J9O'Q 'U #O PJ'[
' MT'GNMT'M'9 NN9P'
XP P'T J'AJN' O iQ'7 NH'N 'M 'T J GP97+
JKH'LM N iQ' P P'N 'LPNNT+'; / U'HP P'9 P8
H G'O MI iO' MG IT' I NHP %G' NMUP' N'HPM N#
JN'UPPL'N'N 99'T J' 'MI NHP' 7P+
XHPI'2I QPi' G OPMO+
i- ' " [H [MI NHP'\S
4 J'QPIN9P'Q OG'Q P'IP'AJN'NH G'2'HM P+
#iO'GPM'JL'IT'PIA MKPIPING'7 I'M'IPWN'
X NH'A iOG' 7OPMNH'[S&PIM i'NH J'HP P
+ & 3'i ' 3
XH 9P'GPiGP'KMi'UPPL'N' i' #iO'G PPNPGN'7M PGN+
#G'2'IT'L 'GP97O O'PWKHMiQP'7 'T J+
'T J'G' i7 i NP'9 GG8 G ' i' J'N 79PG'
2'GN 99' i' 7'T J'O 'IT'GMUP' PM'NH G8
2N'G M' IMiMK9P' 79 P8 2%99'L9MKP'N
L i'NH G'7M PGN'L G ip'+ + & 3' 'i' '
i' 1'NHP'Q OG[
XHPi'GHM99' P'GPP'MQM i'\

H G'GPiNPiKP' G AGKJ P'8 AJN'NHP' IPMi iQ' 7'NHP' K M7NT']JPPi'MLLP+M G N 'AD'
NHMN'NHP'U iOipGG' 7HP'HJGAMiO'p pi' HPi'GHP' G O iQ'H I' iQ'LJ KHMGPG'
iEJ PG'MG 7'NHPT' P P'APiP7'NG+
F#'H QHP'7PP9 iQ+
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HPT P P MQM ! N QPNHP T J HM P O !P
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M7NP J K I I M!O # MT NH HP +
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O L 7A9 O M OMT8 M!O AP !Q MQPO+
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HM I 2 N JGN G O !P \
- HP P I QHN HM P APP!+
JN NHMN I T I MGNP MNHP L9MT%O NHM! 7 JQHN+
! O HMO ! HP9L 7M!QP NHPT P P L M NPO
T QP!N9P I P! MN HM!O+
<& 2 M I P T Q9MO ! %N+
! 4 J G !%G I T 7MNHP %G 7 P!O8 HP NMUPG H G LM N+
O M JL ! M! PW 9P[D A M P G [
2 J9O NHPT P P ! #7 K A NH N QPNHP 8
TGP97 AT NH M ! PPO9P NHMN 2 I QHN L KU
HP Q P AMKU+S X HT KM I P T J 7 I T J I MGNP \
- 1 ! H G K I I MLO " P J9O ! N GJ77P I P
A !Q H I N NHP HM P! 9P7N NHPGP ! NPG
17 HMN K I I M!OG 2 GH J9O AP GJAEPKN N +
X HP! %N L9PMG%O T J N P I L9 T I P+
<& H G HMNH APP!
4 J 7M NH7J9 GP M! N 2 OM P 9MT I ! P H ! J +
" P 99 P I M ! G +
- 2 HJ I A9T NHM! U T J H QH! PGG+
<& - MT M9U M H 9P+
! #A JN G I P HM97 H J HP! KP
2 L MT T J GLPMU NH I P T J+GHM99 MN 9PMGN+
: GPP I T 9 O MA M O 7 NH G N I P 9PM P I P+ 9: 4 &

3 3 222+SD , E

2! / OG+
?! " 2 J9O MO GP T J N GH 7N M GH N8 NHP
9P! KP 7MKN ! HMNH I MOP T J PPU MG M GMK 7 KP X HP P
M K I PG JN M K I PG ! NHP P%G ! ! P MA MO G H 9P_
G I P MG NHMN T J P! N+
! 27 I T GH N P P A9 OT NHP! N GH 7N N+ " M P 2
HJ N H I
%? ! "$ 7M NH8 ! N G I JKH MG H G LMN P! KP+ + - "
?! " J N H I \ H G A OT%G M LMGGMA9P KM KMGG 7 HP
AP ! N HJ N N G M NH JQH7M P 7 GNPP9 7 N AP ! N HJ N+
%? ! " G GNPP9 MG ! OPAN N P! N %NHP AMKU G OP
NHP N !+$ + - "
! HP 99M ! J9O ! N GNM! O I P+
%? ! " 8 AJN$HP 79PO 7Q M O GN 99 N M O T J 7MKP+
+ - "
?! " NM! O T J[4 J HM P 9M! O P! JQH 7 T J
! AJN HP MOOPO N T J HM !Q8 QM P T J G I P
m J!O+
%? ! " #G I M! T !KHPG MG T J HM P KPM! G -JLL PG[
+ - "

! 2 J9O NHPT HMO ! N K I P APN PP! JG+
%? ! " 2 J9O 2 N 99 T J HMO I PMGJ PO H 9 !Q M
7 9 T J P P JL ! NHP Q J!O+ + - "
! # ! O NHMN GHP GH J9O 9 P NH G 7P99 M! O P7JGP
I P[
%? ! " 27 N AP M G ! N I MUP M N JP P9PKN ! GHL G
OM I ! PO+ + - " $
? ! " MG 2 N 9O T J M9 MTG HP APMJNT M! O HP
A M ! Q ! N QPNHP HP%G M Q O G Q! AJN 2 HM P GPP!
G I M99 P79PKN ! 7HP N+
%? ! " HP GH ! PG ! N JL ! 7 9G 9PGN NHP P79PKN !
GH J9O HJ N HP +
! I P 2%99 N I T KHM I AP %X J9O NHP P HMO APP!
G I P HJ N O ! P(
%? ! " 2 GH ! N-! # J! 9PGG N HMO APP! NHP 7M99 7M!
MGG H KH G ! Q PMN HJ N+ + - "
! 4 J%99 Q NH JG \
? ! " 2%99 MNNP! O T J 9 OGH L+
! MT K I P 9PN%G Q N QPNHP +
%? ! " X P99 I T 9 O+ + 4

3 3 2 F !! T I AP9 ! P%G $

2 1 : 3 "
! 2 J9O NH J Q P %GN J! N NHP GH PG %NHP HM P! +
! O] JPGN ! %OGN P P T GM 9 7 HP GH J9O NP+
! O 2 ! N HM P N %N P P M LMLP 9 GN+
G 77P %O I P KT G X HMN MG NHP 9MGN
HMN HP GLMUP N NHPP \
- 2N MG 6 " G] JPP! H G] JPP! R
! HP! M %O H G HM! OUP KH P7\
-$ # ! O U GG%O N I MOM I +
! P! GP9PGG 9 ! P! 2 HMLL P NHP P ! NHM! 2 [
! O NHMN MG M99
- , I MOM I 8 7 G 9 ! Q
G HP K J9O I MUP I P NH H G PTP PM
5 GN ! QJ GH H I 7 I NHP G HP O O UPPL
HP OPKU NH Q9 P HMN HM! OUP KH P7
N 99 M ! Q MG NHP 7 NG M! O GN G 7H G I ! O
J9O APGN PWL PGG H G9 H G G J9 GM 9%O !+
" G 7N H G GH L+
! H J GH J9OGN HM P I MOP H I
G 9 NN9P MG M K 9PGG P P 9P7N
M7NP PTP H I +
- MOM I G 2 O O+
! 2 J9O HM P A UP I ! P PTP GN ! QG8 ; K MKU%O
NHP I AJN
9 U JL ! H I 8 N 99 NHP O I ! JN !
17 GLMKP HMO L ! NPO H I GHM L MG I T ! PPO9P
MT 7 99 %O H I N 99 HP HMO I P9NPO 7 I
HP G I M99 ! PGG 7M Q ! MN N M 8 M! O NHP!
" M P NJ ! %O I ! P PTP M! O PL+S JN Q O - GM!
X HP! GHM99 P HPM 7 I H I \
U - P MGGJ %O I MOM I
X NH H G ! PWN M! NMQP+$D
! 2 O O ! N NMUP I T 9PM P 7H I AJN HMO
GN L PNNT NH ! QG N GMT P P 2 K J9O NP99 H I
" 2 J9O NH ! U ! H I MN KP NM ! H J G+
JKH NH JQHNG M! O GJKH 8 2 K J9O I MUP H I G PM
HP GHPG 7 2NM9T GH J9O ! N APN MT
! P ! NP PGN M! O H G H ! J 8 HM P KHM Q%O H I +
N NHP G WNH H J 7 I ! MN ! ! MN I O! QHN+
P! K J! NP I P NH G ! G 7 NHP!
2 M I ! HPM P! 7 H I 8 P P 2 K J9O
: P H I NHMN LM N ! Q U GG H KH 2 HMO GPN
PN WN N KHM I ! Q OG K I PG ! I T 7MNHP +
! O 9 UP NHP NT M! ! JG A PMNH ! Q 7NHP ! NH+
HMUPG M99 J AHOG 7 I Q !Q+D

[MOMI '2'GHM99+' 9: 4 &

3 3' +S& IP+' , ' '-H 9M %G !&-

' - ' * ! ' "' ' DGH0F@?H Z

'' P9 P P' N'G ' 2'HM P'GPP!'H I' !' NM !' HP' MG' NHP!' 7' M' K PGKP!N' ! NP8 PWLPKNPO' N ' L P' G ' NHT' MG' G !KP' HP' HMNH' APP!' M99 PO' NHP' !M I P' 78 AJN' 2' K J9O' NHP!' HM P' 9 UPO' !' H I' NH JN' NHP' HP9L' 7' MO I MN !8 NH JQH' NHP' KMNM9 QJP' 7' H G' P!O IP!NG' HMO' APP!' NMA9PO' AT' H G' G OP' M!O' 2' N ' LP JGP' H I' AT' NP I G+

' 4 J' GLPMU' 7' H I' HP!' HP' MG' 9PGG' 7J ! GHPO' NHM!' ! ' HP' G' NH' NHMN' H KH' I MUPG' H I' A NH' NH JN' M!O' NH !+

> ' 2' HM P' GPP!' H I' !' O M!KP' P' HMO' P T' I M!T' NHP P' K J9O' APH 9O' NHP' GJ!' NH' MG' 7 I' PTPG' MG' HP+

,' H G' I MNNP ' 7' I M T !Q' H G' U !Q%G' OMJQHNP ' @ HP P !' HP' I JGN' AP' P QHPO' MNHP ' AT' HP ' M9JP' NHM!' H G' ! ' OG' H I ' 2' O JAN' ! N ' M' Q PMN' OPM9' 7 I ' NHP' I MNNP +

> ' #!O' NHP!' H G' AM! GH I P!N S

! ' #T ' M!O' NHP' MLL AMN !' 7' NH GP' NHMN' PPL' NH G' 9M I P!NMA9P' O KP ' J!OP ' HP ' K 9 J G ' M P' !OP 7J99T' N ' PWNP!O' H I8 AP' N' AJN' N ' 7 N 7T' HP 'EJOQ I P!N' H KH' P9GP' M!' PMGT' AMNNP T' I QHN' 9MT' 79MN ' 7 ' NMU !Q' M' APQQM ' NH JN' 9PGG']JM9 NT+D' JN' H 'K I PG' N' HP' G' N ' G E J !' NH' T J' \ " 'K PPLG' MK]JM !NM!KP' \

' " G' 7MNHP ' M!O' 2' P P' G 9O P G' N QPNHP 8 N ' H I' 2' HM P' APP!' 7NP!' A J!O' 7 ' ! ' 9PGG' NHML' I T' 9 7P' S

' - G " N? +

" P P' K I PG' NHP' N !' ' /PN' H I' AP' G ' P!NP NM !PO' M I !QGN' T J ' MG' GJ NG ' NH' QP!N9P I P!' 7' T J 'U! !Q ' N ' M' GN M!QP ' 7' H G']JM9 NT+ S2' APGPPKH' T J' M99 ' AP' APNNP ' U! !' N ' NH G' QP!N9P I M!' H I' 2' K I IP!O' N ' T J' MG' M' ! A9P' 7 P!O' 7' I !P' " NHT' HP' G' 2' 99' 9PM P' N ' MLLPM ' HP PM7NP ' MNHP ' NHM!' GN T' H I' !' H G' !' HPM !Q+

> ' ' P' HM P' U! !' N QPNHP ' !' 1 9PM!G+

!-' !KP' HP!$ 2' HM P' APP!' OPAN ' N ' T J' 7 ' K J _ NPG PG ' H KH' 2' 99' AP' P P ' N ' LMT ' M!O' TPN' LMT' GN 99+

> ' ' T J' %P MNP' I T' L ' U !O!PGG' 8 2' MG' Q9MO' 2' O O' MN !P' F I T' K J!N T I M!' M!O' T J8 N' HMO' APP!' L NT' T J' GH J9O' HM P' APP!' LJN' N QPNHP ' NH' G ' I NM9' M' LJ _ L GP' MG' NHP!' PMKH' A P ' JL !' I L NM!KPDD' 7' G ' G9 QHN' M!O' N M9' M !MNJ P+

!-' T' T J ' LM O !' G ' 2' MG' NHP!' M' T J!Q' N M P99P ' MNHP ' GHJ!!PO' N ' Q ' P P!' NH' HMN' 2' HPM O ' NHM!' !' I T' P P T' MKN !' N ' AP' QJ OPO' AT' NHP G% PWLP P!KPG' AJN' JL !' I T' I P!OPO' EJOQ I P!N ' @ 7' 2' 77P!O' ! NF' N ' GMT' N' G+ I P!OPO ' I T']JM P9' MG' ! N' M9N QPNHP ' G9 QHN+

> ' %OM NH ' TPG' N ' AP' LJN' N ' NHP' M A N P I P!N' 7' G OG8' M!O' AT' GJKH' N ' NHMN' J9O ' AT' M99' 9 UP9 H O ' HM P' K !7 J!OPO' !P' NHP' NHP ' ' HM P' 7M99P!' A NH

' M!' P' NH' I M!!P G ' MGU' HMN' MG' NHP' O 77P P!KP' \

> ' M7P9T ' 2' NH !U ' %N MG' M' K !NP!N !' !' LJA9 K ' H KH' I MT' NH JN' K !N MO KN !+' J77P ' NHP' PL N+' 2N

MG' I JKH' 9 UP' M!' M QJ I P!N' NHMN' 7P99' JN' 9MGN' ! QHN ' HP P' PMKH' 7' JG' 7P99' !' L M G]' 7' J ' K J 7N T' I GN PGGPG8 H G' QP!N9P I M!' MN' NHMN' N I P' JKH !Q ' @M!O' JL !' M M!N' 7' A9 OT' M77 I MN ! ' H G' N ' AP' I P' 7M ' NJ JG' GP' KHMGNP ' K !GNM!N]JM9 7 PO ' M!O' 9PGG' MNNP I LN A9P ' NHM!' M!T' NHP' M PGN' 7' J ' 9MO PG' !' O M!KP+

' HMN' 9MOT' G' ! N' ! ' 9 !Q8 ' NH G' QP!N9P I M!%G L ! !' AT' NH G ' !' JN+

!-' HP' H 9OG' HP ' NJP' GN 99 ' M!O' 2' I T' I !O+'

' 4 J' I JGN' ! N' G ' 7M ' L P7P ' HP ' %7 P' J G' 7' 2NM9T+'

!-' P !Q' G ' 7M ' L UPO' MG' 2' MG' !' O M!KP ' 2' J9O' MAMNP' HP ' ! NH !Q8 NH $JQH' 2' L 7PGG' I TGP97' HP ' MO P ' ! N' HP ' 7 P!O+

' #G' 7M $M!O' MG' Q O ' @M' U !O' 7' HM!O ! HM!O' K H ' LM G ! ' HMO' APP!' G I PNH !Q' N ' 7M ' M!O' N ' Q O ' 7 ' M!T' 9MOT' !' NM!T+' 27' GHP' P!N' AP7 P' NHP G' 2' HM P' GPP!' MG' NHMN' O M I !O' 7' T J G' JN 9JGN PG' I M!T' 2' HM P' APHP9O ' 2' K J9O' ! N' AJN' AP9 P P' GHP' PWKP99PO' I M!T F' AJN' 2' HM P' ! N' GPP!' NHP' I GN' L PK JG' O M I !O' NHMN' G' ! ' T J' NHP' 9MOT+

!-' 2' L M GPO' HP ' MG' 2' MNPO' H P ' G ' O ' 2' I T' GN !P+'

' X HMN' O ' T J' PGNPP I ' N' MN' \

!-' $ U9 P' NHM!' NHP' 9O' P!E TG+' $

' 3 NHP ' T J ' J!LM MQ !PO' I GN PGG' G' OPMO' ' GHP%G JNL CPO' AT' M' N 79P+

!-' 4 J' M P' I GNMUP!' ' NHP' !P' I MT' AP' G 9O' ' Q P!' 7' NHP P' P P' PM9NH' P! JQH' 7 ' NHP' LJ KHMGP' ' I P N' 7 ' NHP' Q 7N' NHP' NHP ' G' ! N' M' NH !Q' 7 ' GM9P ' M!O' !9T' NHP' Q 7N' 7' NHP' Q OG+

' X H KH' NHP' Q OG' HM P' Q P!' T J' \

!-' X H KH ' AT' NHP ' Q MKPG ' 2' 99' UPPL+'

' 4 J' I MT' PM ' HP ' !' N N9P' T J G ' AJN' T J' U! ' GN M!QP' 7 9' 9 QHN' JL !' !P QHA J !Q' L !OG+' 4 J' !Q' I MT' AP' GN 9P!' N ' G ' T J ' A MKP' 7' J!L CPMA9P' PGN I M_ N !G' NHP' !P' G' AJN' 7 M 9 ' M!O' NHP' NHP ' KMGJM98' M' KJ!! !Q' NH P7 ' ' M' NHMN MT MKK I L9 GHPO' K J N P ' J9O' HMCM O' NHP' !! !Q' A NH' 7' 7 GN' M!O' 9MGN+

!-' 4 J ' 2NM9T' K !NM !G' ! !P' G ' MKK I L9 GHPO' M' K J N P ' N ' K ! !KP' NHP' H ! J ' 7' I T' I GN PGG8 7' !' NHP' H 9O !Q' ' ' NHP' 9 GG' 7' NHMN ' T J' NP I ' HP ' 7 M 9+' 2' O ' ! NH !Q' O JAN' T J' HM P' GN P' 7' NH P PG8 ! N NHGNM!O !Q' 2' 7PM ' ! N' I T' !Q+

' / PN' JG' 9PM P' HP P ' QP!N9P I P!+

', !-' ' NH' M99' I T' HPM N+ ' +H G' NHT' G Q! ' 2' NHM!U' H I ' I MUPG' ! ' GN M!QP ' 7' I P8 P' M P' 7M I 9 M ' MN' 7 GN+

' X NH' 7 P' N I PG' G ' I JKH' K ! P GMN !' 2' GH J9O' QPN' Q J!O' 7' T J ' 7M $ I GN PGG' I MUP' HP ' Q ' AMKU ' P P!' N ' NHP' T P9O !Q8 HMO' 2' MO I NNM!KP$M!O' LL NJ! NT' N ' 7 P!O+'

!-' ' ! +

')' OM P ' NHP PJL ! ' LM !' NHP' I PNT' 7' I T' PGNMNP' N ' T J ' !Q8 H KH ' !' I T' L ! ' %P M9JPG' N' G I PNH !Q' JN' 2' I MUP' I T' MQP ' MNHP ' MQM !GN' T J ' K !7 OP!KP' NHM!' HP ' PLJNMN ! ' M!O ' N ' AM ' T J ' 77P!KP' HP P !' N ' 2' OJ GN' MNNP I LN' N' MQM !GN' M!T' 9MOT' !' NHP' 9O+'

!-' 4 J' M P' M' Q PMN' OPM9' MAJGPO' !' N ' A 9O' M' LP GJM_ G !'8 M!O' 2' O JAN' ! N' T J' GJGNM !' HMN' T J% P' NHT' 7' AT' T J ' MNNP I LN+'

' X HMN%G' NHMN' \

!-' #' PLJ9GP' H JQH' T J ' MNNP I LN ' MG' T J' KM99' N' OPGP P' I P SM' LJ! GH I P!N' N +

' : P!N9P I P!' P! JQH' 7' NH G' N' KM I P' !' N ' GJO_ OP!9T' 8 9PN' N' O P' MG' N' IG A !' M!O' 2' L MT' T J ' AP' APNNP ' MK]JM !NPO+

?

E%

3 3′2+S i ′ .i ′ TIAP9 ip%G

′ ′ ″ 2i/ OG+

i′ X MG NHP p′p p′ I Mi′HMO′GJKH′9JKU[HPi′2′ U GGPO′
NHP′EMKU′JL i′Mi′JL KMGN′ ′AP′H N′M MT[ō 2′HMO′M′HJi_
O POL JiO i%′ i#iO′NHPi′M′ H PG i′EMKUMiMLPG′ IJGN̄
NMUP′IP′JL′7 ′G PM iQ8 MG 7′2′A PO′I ip′ MNHG′7
H I ′MiO′I QHN′i N′GLPiO′NHPI′M′IT′L9PMGJ p+
′ ?i ″′ XHMN′Q N′HP′AT′NHMN′\ 4 J′HM P′A UP′H G′LMNP′
NH′T J′A 9+
%′?i ″′ 27′H G N′HMO′APPi′9 UP′H I′NHMN′A UP′N′N
J9O′HM P′Ji′M99′ JN+ 9:-″
i′XHPi′M′QPiN9PIMi′G O GL GPO′N ′G PM ′N′G i N′
7 ′MiT′GNMiOP G AT′N ′KJ NM 9′H G′ MNHG′ ″M′\
%′ ?i ″′ ′IT′9 O′i ′9:-″ 9k L′NHP′PM G′ 7′NHPI+
i′XH pG i′O Q′[S Q P′H I′GMN G7MKN i′′ %X J9O′
HP′HMO′APPi′ ip′ 7′IT′ MiU[
%′ ?i ″′ ′HM P′G IP9N′9 UP′M′7 9+ 9-″

HP′ PMO iQ′ 7′NHP′ Q iMG′G S

′ H G′LMGGMQP′G JGJM99T L iNPO′NHJG S

′ H G′KP9PA MNPO′LMGGMQP′HMG′L OJKPO′G IP′77p piKP′7′L i i′Mi9 iQGN′NHP′
K I IpiMMN G+′0 GN′ ML-P99 GMTG′7′NHP′ 0′8 8%+ 6′NHP′L PN%G IPMi′QI G′
%$ % ;′ ″Mi MP′KMiOQP0′NHP′ O′N ′(%′ HP′8 8′G NHP′MLP NJ P′
NH JOH′ H KH′9 QHN′MiO′M ′M P′MOI NNPO′N ′M ISG IPU IPG′K9 GPO′MN′ NHP′
N IpG′LPipO+′2N′G 9 P′8 i ′ XP′HM P′NHP′ O′i′& Ip ′MiO′?J9 PN′
G I 9M 9T′MLL9 PO S

′ [′

i′ 2′MI′i N′ PWPO′I P′MN′MiTNH IQ′ i′NHP′PM NH S#′
L W′ i%[2′HMO′ MNHP′i N′AP′G′i A9P′MG′2′MI+′ HPT′
OM P′i N′7QHN′ NH′IP′ APKMJGP′7NHP′]JPPi′IT′I NHP′
P P TEMKU G9M P′HMNH′H G′AP99T′7J99′7′7QHN iQ′MiO′2′IJGN′
Q ′JL′MiO′O i′9UP′M′K KU′NHMN′i A OT′KMi′IMNKH+
%′ ?i ″′4 J′M P′K KU′MiO′KML i′N 8 MiO′T J′K ′
K KU′ NH′T J′K IA′i+′ 9-″
i′ MTPGN′NH J′\
%′ ?i ″′2N′ G i N′7N′T J′9 OGH L′GH J9O′JiOP NMUP′
P P T′K ILMi i′D NHMN′T J′Q P′77PiKP′N +
i′ ′ ′UI ′NHMN′ AJN′ N′ G′7N′2′GH J9O′K I I N′
77PiKP′N ′IT′iTP G+
%′ ?i ″′#T′N′G′7N′7 ′T J′9 OGH L′ i9T+
i′XHT′G′2′GMT+
′?i ″′5 O′T J′HPM′ 7M′GN MiQP′NHMN%G′K IP′N ′K J N
N i QHN′\
i′#′GN MiQP′[MiO′2′i N′UI ′i%[
%′?i ″′ ″pN%G M′ GN MiQP′7P99 ′H IGP97′ MiO′UI G′N
i N+ 9-″
i′/p iMNJG%7 piOG+
7′/p iMNJG7 piOG+
2?i ″′ HP p%G MI′2NM9 MI′K IP8 MiO′%W G NH JQHN′ IP′
HMNG p p′HP′AP+′ XH′N 9O′T J′ 7NH G′GN MiQP′\
2?i ″′ 1IP′ 7T J′9 OGH L%G′LMQPG+

′ H G′JGJM99T L iNPO′6′ HPi′2′H GG%O′NHP′EMKU′JL i′MI′JLKMGN′N ′AP′H N′
M MT+R′ iN NHP A ()′ ″%G)%% ′AT′9 NPi%G 8″MiO′NHP -i(%′7MI NHP′
A 9P′$ ′; 8 2′ HP′GMIP′NPKHI KMG′PWL PGG iG 7′)%%′MiO′(%′M P′JGPO′AT′
& 9PT′i′6′#′X IMi′ip p′ pW%O′R S6′ H G′K NT′$ 8′ ′HMG′)%%O ′NHP′I GN PGG
MN′NHP′7 GN′(% .

′ - ′G JGPO′HP P′MiO′ i′ NHP′LMGGMQPG′7 HMUGLP p′i′NHP′GMIP′
GPiGP′MG ″′8′G MN′L PGPiN+′ ″′JQH′3 MiG′OPi JiKPG′NHP′H GN′7′NHP′:M NP′
MG M 6 GKJ T′K QQ iQ′K ILMi i+R

′ H G′LMGGMQP′G JGJM99T L iNPO′NHJG S

6 #′ p+
P′HMNP7J9′NHMi′NHP′7 J9′PWLJ9G i′G
1 7′NHP′O KP′HP%O′IMUP′HPM pIG′H 9O′7 I′
HP′ PMO iQ′ 7′NHP′ Q iMG′G S

' ' PGGPIQP +

E --' '9UP'T J'G 'MI AMGGMO G7 I'&& IP'8
HP' IP' G M JG' /JK JG+
5 ' #' NHT' 7P99 +
? "5'
'UPPL'HP 'KMM I AP +
#9AP'N'HP'K IPG' I'MIQ T'LJ L GP'I 8
JN'NHMN%G'I '7MJ9N' 7H G' XP' I JGN' PKP P'H I'
#KK O IQ'N 'NHP'H I J' 7H G GPIOP 8
#IO'N M OG'H I GP97'H G'Q OIPGG'7 PGLPIN' I'JG+
XP' I JGN'PWNPIO' J'I N KP+ 1J'OPM'G I+
XHPI'T J'HM P'Q pI'Q O' I IQ'N 'T J' I GN PGG+
#NNPIO'NHP']JPPI'MIO'JG8 P'GHM99'HM P'IPPO'
'PILQ TT J'N M OG'NH G'& IMI+S IP' J']JPPI+
+; 4 ; ' ' 9 (' / OG' "' PGG+
I' 27'GHP'AP'JL+'2%9Y GLPMU' NH'HP 8 7'I N+
/PN'HP'9 P'GN 99'MIO'O PMI+S T'T J'9PM P'H '[S+ I '-
)'UI 'HP' IP'M P'MA JN'HP +' XHMN
27'2'O'9'IP' IP' 7'NHP 'HMIOG'\ % G'Q 9O
XH KH'AJTG'MOI NNMIKP'8 7N' N'O NH8 TPM'MIO' IMUPG
5 MIM%G' MIQP G'7M9GP'D'NHPI GP9 PG'T P9O'JL
HP 'OPP'N 'NHP'GNMIO' %'NHP'GNPM9P 8 MIO'%'G'Q 9O
XH KH' IMUPG'NHP'N JP' IMI'U 99%O'MIO'GM PG'NHP'NH P78
MT'G IPN IP'HMIQG'A NH'NH P7'MIO'N JP' IMI'' X HMN'
MI' N'I N'O 'MIO'JIO '\ 2' 99' IMUP'
1IP' 7HP' IPI'9M TP'N 'I P8 7 '
2'TPN'I N'JIOP GNMIO'NHP'KMGP' ITGP97+
T'T J'9PM P+' + I '-
' '/MOT+
? "5' XH %G'NHP P'NHMN'UI KUG'\
I' #'QPIN9P I MI+
? "5' ' P'\
I'4PG'MIO'M'QPIN9P IMI%G G I+
? "5' HMN%G' I P' +
HMI'G IP' H GP'NM 9 G'M P'MG'OPM'MG T J G+
MI'EJGN9T'A MGN' 7' X HMN%G T J'9 OGH L%G'L9PMGJ P'9
' PGGPIQP +
E --' '9UP'T J'G 'MI AMGGMO G7 I'&& IP'8
HP' IP' G M JG' /JK JG+
5 ' #' NHT' 7P99 +
? "5'
'UPPL'HP 'KMM I AP +
#9AP'N'HP'K IPG' I'MIQ T'LJ L GP'I 8
JN'NHMN%G'I '7MJ9N' 7H G' XP' I JGN' PKP P'H I'
#KK O IQ'N 'NHP'H I J' 7H G GPIOP 8
#IO'N M OG'H I GP97'H G'Q OIPGG'7 PGLPIN' I'JG+
XP' I JGN'PWNPIO' J'I N KP+ 1J'OPM'G I+
XHPI'T J'HM P'Q pI'Q O' I IQ'N 'T J' I GN PGG+
#NNPIO'NHP']JPPI'MIO'JG8 P'GHM99'HM P'IPPO'
'PILQ TT J'N M OG'NH G'& IMI+S IP' J']JPPI+
+; 4 ; ' ' 9 (' / OG' "' PGG+
I' 27'GHP'AP'JL+'2%9Y GLPMU' NH'HP 8 7'I N+
/PN'HP'9 P'GN 99'MIO'O PMI+S T'T J'9PM P'H '[S+ I '-
)'UI 'HP' IP'M P'MA JN'HP +' XHMN
27'2'O'9'IP' IP' 7'NHP 'HMIOG'\ % G'Q 9O
XH KH'AJTG'MOI NNMIKP'8 7N' N'O NH8 TPM'MIO' IMUPG
5 MIM%G' MIQP G'7M9GP'D'NHPI GP9 PG'T P9O'JL
HP 'OPP'N 'NHP'GNMIO' %'NHP'GNPM9P 8 MIO'%'G'Q 9O
XH KH' IMUPG'NHP'N JP' IMI'U 99%O'MIO'GM PG'NHP'NH P78
MT'G IPN IP'HMIQG'A NH'NH P7'MIO'N JP' IMI'' X HMN'
MI' N'I N'O 'MIO'JIO '\ 2' 99' IMUP'
1IP' 7HP' IPI'9M TP'N 'I P8 7 '
2'TPN'I N'JIOP GNMIO'NHP'KMGP' ITGP97+
T'T J'9PM P+' + I '-
' '/MOT+
? "5' XH %G'NHP P'NHMN'UI KUG'\
I' #'QPIN9P I MI+
? "5' ' P'\
I'4PG'MIO'M'QPIN9P IMI%G G I+
? "5' HMN%G' I P' +
HMI'G IP' H GP'NM 9 G'M P'MG'OPM'MG T J G+
MI'EJGN9T'A MGN' 7' X HMN%G T J'9 OGH L%G'L9PMGJ P'9
' PGGPIQP +
E --' '9UP'T J'G 'MI AMGGMO G7 I'&& IP'8
HP' IP' G M JG' /JK JG+
5 ' #' NHT' 7P99 +
? "5'
'UPPL'HP 'KMM I AP +
#9AP'N'HP'K IPG' I'MIQ T'LJ L GP'I 8
JN'NHMN%G'I '7MJ9N' 7H G' XP' I JGN' PKP P'H I'
#KK O IQ'N 'NHP'H I J' 7H G GPIOP 8
#IO'N M OG'H I GP97'H G'Q OIPGG'7 PGLPIN' I'JG+
XP' I JGN'PWNPIO' J'I N KP+ 1J'OPM'G I+
XHPI'T J'HM P'Q pI'Q O' I IQ'N 'T J' I GN PGG+
#NNPIO'NHP']JPPI'MIO'JG8 P'GHM99'HM P'IPPO'
'PILQ TT J'N M OG'NH G'& IMI+S IP' J']JPPI+
+; 4 ; ' ' 9 (' / OG' "' PGG+
I' 27'GHP'AP'JL+'2%9Y GLPMU' NH'HP 8 7'I N+
/PN'HP'9 P'GN 99'MIO'O PMI+S T'T J'9PM P'H '[S+ I '-
)'UI 'HP' IP'M P'MA JN'HP +' XHMN
27'2'O'9'IP' IP' 7'NHP 'HMIOG'\ % G'Q 9O
XH KH'AJTG'MOI NNMIKP'8 7N' N'O NH8 TPM'MIO' IMUPG
5 MIM%G' MIQP G'7M9GP'D'NHPI GP9 PG'T P9O'JL
HP 'OPP'N 'NHP'GNMIO' %'NHP'GNPM9P 8 MIO'%'G'Q 9O
XH KH' IMUPG'NHP'N JP' IMI'U 99%O'MIO'GM PG'NHP'NH P78
MT'G IPN IP'HMIQG'A NH'NH P7'MIO'N JP' IMI'' X HMN'
MI' N'I N'O 'MIO'JIO '\ 2' 99' IMUP'
1IP' 7HP' IPI'9M TP'N 'I P8 7 '
2'TPN'I N'JIOP GNMIO'NHP'KMGP' ITGP97+
T'T J'9PM P+' + I '-
' '/MOT+
? "5' XH %G'NHP P'NHMN'UI KUG'\
I' #'QPIN9P I MI+
? "5' ' P'\
I'4PG'MIO'M'QPIN9P IMI%G G I+
? "5' HMN%G' I P' +
HMI'G IP' H GP'NM 9 G'M P'MG'OPM'MG T J G+
MI'EJGN9T'A MGN' 7' X HMN%G T J'9 OGH L%G'L9PMGJ P'9

P LM9P 2 APQ AJN 9PM P N M NH G EP P9 PP [S
#!O ! %N G JL MQM !2N I JGN AP I M PO
NHMN T J O M I !O$8 2%99 UPPL NHP I +
!- ? P[
1!KP I P 9PN I P APH 9O N G N NHMN
XH KH 2 9P7N NH HP \
' @Z NHM!U HP NHMN
HP GN LL%O N7 I HP M I 8 2 GPP HP TPN8
"P L PNNT MKN ! O O JNGP99 HP Q 7N+
#!O TPN P! KH%O N N HP QM P N I P M!O GM O
HP L C%O N !KP+
!- MT AP GHP L9JKU%O N 77+
GP!O N I P+
' HP NPG G N T J A O NH GHP \
!- 1 ! ! ! 8 %N G N JP+ "P P NMUP NH G N 8
3
2N G M AMG 9 GU J!N I !P PTP+
99G I P N 9 U !%N / P N NHP P AP ! H ! J
XHP P NHP P G HPMJNT8 N JNH HP P GP I A9M!KP8 9 P+
XHP P NHP P%G M! NHP I M!8 HP G 7 I P!
17 ! I P A !OMQP AP N HP P NHPT M P I MOP+
HM! NHPT M P N NHP NJPG8 H KH G ! NH !Q S
1 MA P I PMGJ P 7M9GP 2
"M P LMN P!KP G +
#!O NMUP T J !Q MQM !8 %N G ! N TPN !
2N I MT AP L AMA9P GHP 9 GN N8 +
XH U! G 7 !P 7 HP I P! AP !Q K JLNPO
"MNH GN 9P!7 I HP \
!- P T N JP8
#!O G 2 H LP HP KM I P A T%N S MKU I T !Q8S;
&P!OP N I P G I P KA L MG G Q!MA JN HP +
P P OP!N NHM!NH G8 7 NH G MG GN 9P!+
T ?JL NP 2 HMO N7 I HP M I +
!- "M U T J HP G PM G8 AT ?JL NP HP G PM G+
% GN JP8SHMT UPPL NHP !QS%N G N JP 2 M I GJ P
HP J9O ! N9 GP N HP MNNP!OM!NG M P
#99G !M!O H ! J MA9P S HPT !OJK%O N GNPM9 N[
#!O AT M GN M!QP 9D HP HMNH P!E T%O HP
HP K Q! CM!KP 7HP !K !N !P!KT
2G NH G SGHP HMNH A JQHN NHP !M I P 7 H P NHJG OPM 9T+
HP P NMUP NHT H P8 M!O M99 NHP 7 P!OG 7HP99
5 OP NHP I GP9 PG APN PP!T J+
AP LMN P!N[
H G G ! N GN !Q P! JQH N AP AP9 P %O
17 !P LP GJMOPO P99 7S
!- P P NM9U !%N 8
HP HMNH APP!K 9NPO AT H I +
27T J GPPU
0 7J NHP GMN G7T !Q J!OP HP A PMGN
@X NHT NHP L PGG !Q 9 PG M I 9P QHN L JO
17NHMN I GN OP9 KMNP 9 OQ !Q T I T 9 7P
2U GG%O N8 M!O N QM P I P L PGP!N HJ!QP
7PPO MQM ! NH JQH 7J99+ 4 J O P I P I AP
H G GNM !JL !HP \
!- #T M!O N O NH K !7 I
#! NHP GNM ! MG A Q MG HP99 KM!H 9O
XP P NHP P ! I P AJN N+
X 99 T J HPM N! P \
!- LM P T J M NH I PN K !P P K J!N NHP NJ !G8
1!KP M!O M I 99 !
2%99 AP G ! S
!- G PM !Q+
27T J 99 G PM T J HM P ! N O !P%N T J 9 P8
#!O 2 99 U 99 NHPP 7NH J O GN OP!T
H J HMGN I MOP I P KJKU 9O+
2%99 OP!T ! NH !Q+
!- 1 NHMN 2 HMO HP HP P N NPM HP 9 I A I PM9

2 99 Q NHP P M!O O %N 8 %NHP K J N8 AP7 P
"P 7MNHP S2%99 O G I PNH !QS
>J NP APG OPG
HP Q P ! I P!N 7LMN P!KP 2S4 J HM P !
/PN%G 7 99 H I M!O LP P N D NHP L PGP!N MNH
"P HMNH MQM !GN H I GP97+
X NH M99 I T HPM N+ 9 4 &

3 3 F - ! !! - (
!- 2G NHP P ! MT 7 I P!N AP AJN I P!
JGN AP HM97 UP G X P M P M99 AMGNM OG8
#!O NHMN I GN P!P MA9P I M! H KH 2
5 O KM99 I T 7MNHP MG 2 U ! N HP P
XHP! 2 MG GNM I L%O 8 G I P K !P NH H G N 9G
MOP I P M K J!NP 7P N 4PN I T I NHP GPP I %O $
HP 5 M! 7NHMN N I P8 G O NH I T 7P
HP ! !LM P 9 7NH G+S1 P!QPM!KP P!QPM!KP
P 7 I T 9M 7J9 L9PMGJ P GHP PGN M !%O+
#!O L MT%O I P 7N 7 APM M!KP O O N NH
#LJOP!KT G GT NHP G PPN P !%N
QHN P99 HM P M I %O 9O MNJ !8 NHMN 2 NH JQHN HP
#G KHMGNP MG J!GJ!!%O G! S1 M99 NHP OP 9G [S
H G TP99 9MKH I !M!H J S MG%N ! N \S
1 9PGG SMN 7 GN -P KHM!KP HP GL UP ! N8 AJN+
/UP M 7J99 MK !%O A M M : P I M! !P+
PO H M!O I J!NPO 7 J!O ! LL G N !
JN HMN HP 9 U%O 7 GH J9O LL GP M!O GHP
H J9O 7 I P!K J!NP QJM O+ J9O 2 7 !O JN
HP I M!%G$LM N !I P 2 O NHP P%G ! I N !
HMN NP!OG N KP !I M! AJN 2 M77 I
2N G NHP I M!%G LM N P N 9T !Q ! NP N+
HP I M!%G 8 79MNNP !Q HP G 8 OPKP !Q HP G 8
/JGN M!O M!U NH JQHNG HP G HP G 8 P P!QPG HP G8
#I A N !G K PN !QG KHM!QP 7L OPG O GOM !
KP 9 !Q !QG G9M!OP G I JNMA 9 NT+
#99 7MJ9NG NHMN I MT AP !M I %O !MT NHMN HP99 U! G+
XHT HP G ! LM N M998 AJN MNHP M998
0 P %! N KP
HPT M P ! N K !GNM!N AJN M P KHM!Q !Q GN 99
1!P KP AJN 7M I !JNP 9O 7 !P
N HM97 G 9O MG NHMN+ 2%99 N MQM !GN NHP I
5PNPGN NHP I KJ GP NHP I 4PN %N G Q PMNP GU 99+
2!M N JP HMNP N L MT NHPT HM P NHP 99
HP P T OP 9G KM!! N L9MQJP NHP I APNNP +F 9 4 $

3 3 2+S NM !+ !! !.7 T I AP9 !P%G
$ 9 (G2 "/ OG ! "!! #
" ! $ (/JK JG "#NNP!OM!NG+
5 GMT HMN J9O #JQJGNJG MPGM NH JG \
?& XHP!?J9 JG MPGM @ H GP P I P I A M!KP TPN
/ PG !I P!%G PTPG8 M!O 99 N PM G M!O N !QJPG
P NHP I P M!O HPM !Q P P MG !NH G NM !
#!O K !]JP %O N MGG AP9M! NH !P J!K9P
@OM I JG !MPGM %G L M GPG ! H N 9PGG
HM! !H G 7PMNG OPGP !Q N 7 H I +
#!O H G GJKKPGG !Q M!NPO & I P M N AJNP

S7 M P N+
H G G NHP GM I P OPM NHMN G I P L JG9T PWL PGGPO AT H I MG P S
6 : O K J9O ! N9 QHN9T O M I M! I P P!QPM!KP NHM! !NH G 9O N Q M!H I
H G !7 9 GH GHPG+R
=

4PM 9T'NH pP'NH JGMiO'L JiOG8 HKH'AT'NHPP'9MNP9T+
2G'9P7N'JiNPiOP %O+
<& ' #iO'N'U 99'NHP'IM P9
HM99'AP'G'p p+
i' HP P'AP'IMiT' MPGM G
3 P'GJKH'MI NHP'?J9 JG+' NM i' G
#' 9O'AT' NGP97# MiO' P' 99'i NH iQ'LMT'
O ' PM iQ' J' i'i GPG+
HMN' LL NJi NT+
<& '
XH KH'NHPi'NHPT'HMO'N'NMUP'7 I'JG'N ' pGJ lP'
XP'HM P'MQM i+S&PlPlAP 'G ' lT'9 PQP+
HP'U iQGT J'MiKPGN G8N QPNHP' NH'
HP'iMNJ M9'A M p T' 7T J' G9P' HKH'GNMiOG'
#G' pLNJipG'LM U' AAPO'MiO'LM9PO' i'
X NH' KUGDJiGKM9PMA9P'MiO' M iQ' MNP G8
X NH'GMiOG'NHMN' 99'i N'APM'T J'PipI PG%A MNG+
JN'GJKU'NHPl'JL'N'NHP'N L lMGN+' #'U iO' 7K i]JPGN'
MPGM'lMOP'HP p8 AJN'lMOP'iAN'HP P'H G'A MQ'
17' $MiO'- 2$MiO'i1 * NH'GHMlP'
@ HP7 GN'NHMN'P P'N JKH%O'H l'HP' MG'KM PO'
O l' 77 J'K MGN'N KP'APMNPi'8 MiO'H G'GH LL iQ'
@- ' Qi MiN'AMJA9PG'[' i' J'NP A9P'GPMG+
/ UP'PQQ GHP99C' l %O'JL i'NHP 'GJ QPG'K MKU%O'
#G'PMG 9T'%M i GN' J' KUG'O 'E T' HP p 7'+
HP'7Ml %O' MGG A9PMi' H ' MG iKP'MN'L iN'
@1'Q Q9 ND'7 NJip['N ' lMGNP ' MPGM%G'G O+
MOP'/JO%G'N i' NH'pE KiQ'7 PGA QHN F
#iO' N iG'GN JN' NH'K J MQP+
i' lP'NHP p%G i ' l P'N AJNP' N ' AP' LMO' 1J'
UiQO l' G GN iQP'NHMi' N MG'MN'NHMN'N lp8 MiO'MG'2'
GMO'NHP P' G i ' l P'GJK‡ MPGM G' NHP' 7 NHPl' lMT'
HM P'K UPO'i GPG8 AJN'N ' P'GJKH' GN M QHN'M l G'i ip+
5 ' i'9PN'T J'l NHP'pio+
i' XP'HM P'TPN' lMiT'M l iQ'JG KMi'Q LP' MG'HM O'MG'
MG APM9i';2'O ' i N' GMT'2'Ml' ip8 AJN'2'HM P'M'HMio+S'
XHT'N AJNP'\ HT'GH J9O' P'LMT'N AJNP'\ 27' MPGM'KMi'
HOP'NHP'GJi'7 l'JG' NH'M'A9MiUPN' 'LJN'NHP' l i'i'HG'
L KUPN' P' 99'LMT'H l'N AJNP'7 '9QHN8 P9GP'G 'i'
l P'N AJNP'L MT'T J'i +
5 ' 4 J'l JGN'Ui +
99'NHP'iEJ JG'& lMiG'O O'PWN N'
H G'N AJNP'7 l'JG' P' p P7 PP' MPGM%G'MlAN i'
@XH KH'G P99%O'G ' lJKH'NHMN' N O O'M9 l GN'GN PNKH'
HP'G OPG' %'NHP' 9O 'MQM iGN+M99'K 9 J'HP P'
5 O'LJN'NHP'T UP'JL i'JG'8 H KH'N 'GHMUP' 77
PK lPG'M M 9 UP'LP L9P' H l' P' PKU i'
lJ GP9 PG'N 'AP+' XP'O 'GMT'NHPi'N ' MPGM
lJ 'MiKPGN 'XMG'NHMN' J91JN JG' H KH'
1 OM i%O' J'9M G'8 @ H GP'JGP'NHP'G O' 7' MPGM'
"MNH'N ' lJKH'lMiQ9PO8 H GP' PLM 'MiO'7 MiKH GP'
HM99'AT'NHP'L p' P'H 9O'AP' J'Q O'O'PPO+
<& ' HMN' LL NJi NT+
XH KH'NHPi'NHPT'HMO'N'NMUP'7 l'JG'N ' pGJlP'
XP'HM P'MQM i+S&PlPlAP 'G ' lT'9 PQP+
HP'U iQGT J'MiKPGN G8N QPNHP' NH'
HP'iMNJ M9'A M p T' 7T J' G9P' HKH'GNMiOG'
#G' PLNJipG'LM U' AAPO'MiO'LM9PO' i'
X NH' KUGDJiGKM9PMA9P'MiO' M iQ' MNP G8
X NH'GMiOG'NHMN' 99'i N'APM'T J'PipI PG%A MNG+
JN'GJKU'NHPl'JL'N'NHP'N L lMGN+' #'U iO' 7K i]JPGN'
MPGM'lMOP'HP p8 AJN'lMOP'iAN'HP P'H G'A MQ'
17' $MiO'- 2$MiO'i1 * NH'GHMlP'
@ HP7 GN'NHMN'P P'N JKH%O'H l'HP' MG'KM PO'
O l' 77 J'K MGN'N KP'APMNPi'8 MiO'H G'GH LL iQ'
@- ' Qi MiN'AMJA9PG'[' i' J'NP A9P'GPMG+
/ UP'PQQ GHP99C' l %O'JL i'NHP 'GJ QPG'K MKU%O'
#G'PMG 9T'%M i GN' J' KUG'O 'E T' HP p 7'+
HP'7Ml %O' MGG A9PMi' H ' MG iKP'MN'L iN'
@1'Q Q9 ND'7 NJip['N ' lMGNP ' MPGM%G'G O+
MOP'/JO%G'N i' NH'pE KiQ'7 PGA QHN F
#iO' N iG'GN JN' NH'K J MQP+
i' lP'NHP p%G i ' l P'N AJNP' N ' AP' LM O

9MKU MG NHP ! U NHMN%G !' NHPP [P ! GP9PGG AMJA9P
N NH J M 7P OM TD 7 NH G MKN M ! O 9 U%GN
Q ! 9 UP NH JN \ / HP P GHP K I PG+

=

2 M I Q ! M ! N ! HMN 2 M I K I I M ! OPO+
! " ! A - GM ! \
- MOM I HP P G M 9PNNP 7 I I T 9 O+
! X H \ NHT 9 O \ NHMN G I T 9 O 9 / P ! MNJG \
1 9PM ! %O ! OPPO P P NHMN MGN ! I P
HMN U ! P NHP GNM G MG 2 H G KHM MKNP G 8
" P%O 9MT NHP 7JNJ P LP ! + S 4 J Q O Q OG+
/ PN HMN G HP P K ! NM ! %O P9 GH 7 9 P+
17 I T 9 O%G HPM9NH 7 H G K ! NP ! N STPN ! N+
HMN P N M P MGJ ! OP 9PN NHMN Q P P H I S
I P Q P7G M P I PO%K ! MA9P8 NHMN G ! P 7 NHP I +
0 N O NH LHTG K 9 P8 S 7 H G K ! NP ! N+
#99 AJN ! NHMN [S : O MW NHT 9PM P S 9PGG%O AP
4 J APPG NHMN I MUP NHPGP 9 KUG 7 K J ! GP9 [/ P G
! O I P ! ! OM ! QP JG A ! OG L MT ! N M9 UP8
H JQH 7 7P NP G T J KMGN ! L G ! TPN
4 J K9MGL T J ! Q JL O%G NMA9PG+D S : O ! P G Q OG [
; "-

?JGN KP M ! O T J 7MNHP %G MNH GH J9O HP NMUP I P ! H G O I ! ! K J9O ! N AP G K JP9 N I P M ! T J 1 NHP OPM PGN 7 K PMNJ PG J9O P P ! P ! P I P NH T J PTPG+R M9 ! P ! GP NPO *M ! O PWL9M ! G NHP PMO ! Q NHJG SD?JGN KP BK+ K J9O ! N AP G K JP9 N I P $ $ 2 8 " N P ! P I P BK+ H G I MT AP NHP I PM ! Q8 AJN N G GKM KP9T A ! P JN AT NHP K ! GN JKN ! 7 M9 ! P%G I L PO GP ! NP ! KP+ 2 ! NHP Q ! M9 N GNM ! OG NHJG S6 ?JGN KP M ! O T J 7MNHP %G MNH @GH J9O HP NMUP ! 9P ! H G O I ! $K J9O ! N AP G K JP9 N I P MG T J @ H NHP OPM PGN 7 K PMNJ PG J9O P P ! P ! P I P NH T J PTPG+R 2N G HP P P OP ! N NHMN NHP L ! NP HMG I GNMUP ! NHP GP ! GP H G 6 K J9O ! N AP G K JP9 N I P MG T J 8 R M ! O HP ! L ! NP G HM P M K NKHPN MG N NHP I PM ! ! Q 7 M GP ! NP ! KP NHPT GP9O I GK JL9P N OP MNP 7 I NHP K LT AP7 P NHP I + HP % P] J PO NHP P7 P 7 I NHP I NG LM M99P9 K ! EJ ! KN ! % JN 7 P M9NP M G ! Q9P 9PNNP P HM P M K9PM I PM ! Q NH JN M ! T 7 KPO K ! GN JKN ! + G 7NP ! JGPO 7M I 9 M 9T 7 CT AT HMUGLP P M ! O NHP NHP 9O O M I MN GNG MG N MG ! O GK J GP M ! O K P GL ! OP ! KP + X P HM P NHP O PLPMNPO9T ! PMGJ P 7 PMGJ P8S7 PWM I L9P 6 HP GH J9O N P P M ! M9 I G N HM ! Q H I + R / PN JG NHP P7 P PMO NHP GP ! NP ! KP NH NHP GJAGN NJN ! 7 7 % S6 ?JGN KP M ! O T J 7MNHP %G MNH GH J9O HP NMUP I P ! H G O I ! ! K J9O ! N AP G K JP9 N I P T J @1 NHP OPM PGN 7 K PMNJ PG J9O P P ! P ! P I P NH T J PTPG+R G HP P JGPO ! NHP 9O GP ! GP 7 P] JM99T ! % M ! O G LL GPO N % ('

3 2 " 2 HP GPK ! O " 2 G JGPO MG M GJAGNM ! N P H KH Q PG JG 6%% J % ? = $ $ " 2 HP K NKH HM P M GMT ! Q S6 MN NHP AMKU 7 APT ! N+R

F ! KU MG ! HMG P NH ! U Q P ! JG NHP N JP ! NP L PNMN ! 7 NH G LMGGMQP+ % " * * G 2 GPP K9PM 9T NHMN I T K J GP G 7 97 O+ == ** $ * 8 $ % % S ! P NHP NH G MT ! ! NHMN MT ! NHP MT AP ! 9D I P S " $ $ $

F 4 - HP Q ! M9 PMOG % - S M I M ! 7PGN P + & P K PKNPO N N % ; M9 ! P J9O PMO %8 HP K PKN ! 7 % -* AT " M ! I P G KP NM ! 9T K ! _ KP PO ! M L PN KM GL N+ 2N MKK OG NH S

6 H G QMNP
2 ! GN JKNG T J H N MO P NHP HPM P ! G 8 M ! O " 8%T J
M I ! ! Q%G H 9T 77 KP+R
1 / + 22+ %

" I M ! T GK P 7 I 9PG I MT P P99 OP
% WN H J M ! O H J \
- 1 ! P GK P %N WN GJ ! M ! O GJ !
MOM I %G P ! JQH 7 T J8 M ! O N I JKH N +
! X HT ! P NHMN OP N H G PWPKJN ! I M ! +
J9O ! P P Q G G9 2 HM P HPM O 7 O ! Q MQP G
X HP P H GPG HM P APP ! ! I A9P NHM ! NHP GM ! OG
HMN J ! %NHP K9 KU%G APHM978S JN NH G G 7 9P T
: A O I T I M ! 7P Q ! M G KU ! PGG8 GMT
HP%9 H I P N HP 7MNHP ! M ! O L OP I P L PGP ! N9T
O ! Q GJ N8 ! K GN9 P NHM ! J9O 7 N
7 M ! U9 ! %G H JGP 7P+
- MOM I T J % P APGN K ! G OP
! 2 GPP AP7 P I P I M ! ! ! HP P ! HP P+
HMN P ! GJPG AJN HM P M 7 Q ! NHP I +
HMN 2 KM ! ! N 9 U NH JQH+F # MT 2 L NHPP 8
5 MG 2 A O NHPP HP P%G ! ! P AJN 97 O MT+ = 4 &

3 3 " 2+ SDXDM9PG+ ! & !&- !& 5$ 2
1
& ((("

% # Q O9T OMT ! N N UPPL H JGP NH GJKH
X H GP 7%G MG 9 MG J G [N L F A TG H G QMNP$
2 ! GN JKNG T J H N MO P NHP HPM P ! G8 M ! O A G T J
M I ! ! Q%G H 9T 77 KP HP QMNPG 7 I ! M KHG
P M KH%O G H QH NHMN Q M ! NG I MT EPN NH JQH
! O UPPL NHP I L JG NJ AM ! OG ! NH JN
: O I N NHP GJ ! + S " M 9 NH J 7M HPM P ! +
X P H JGP %NHP KU TPN JGP NHPP ! N G HM O9T
G L JOP 9 P G O +
& " M 9 HPM P ! [
1 " M 9 HPM P ! 9
% 7 J I J ! NM ! GL N L N T ! H 99+
4 J 9PQG M P T J ! Q8 2%9 N PMO NHPGP 79MNG+ ! G OP
X HP ! T J MA P LP KP P I P 9 UP M K
HMN N G L9MKP H KH 9PGGP ! G M ! O GPNG 778
! O T J I MT NHP ! P 9 P HMN NM9PG 2 HM P N 9O T J
17 K J NG 7 L ! KPG 7 NHP N KUG ! M
H G GP KP G ! N GP KP G AP ! Q O ! P+
JN AP ! Q G M99 %O MLL PHP ! O NHJG +
5 M G JG M L 7 N 7 I M99 NH ! QG P GPP
! O 7NP ! N J K I 7 N GHM99 P 7 ! O
HP GHM OPO APPN9P F ! M GM7P H 9O
HM ! G NHP 7J99 ! Q%O PMQ9P+ 1 NH G 9 7P
2G ! A9P NHM ! MNNP ! O ! Q 7 M KHPKU8

G M P79PKN ! 7 ! MNJ P S NHM ! NHMN M LP G ! HM ! Q APP ! OPPL9T I PO AT M 9PNNP H KH HP HMG APP ! PMO ! Q GH J9O K I I P ! N JL ! NHP GJAGNM ! KP 7 N 8 $ PLPMN ! Q NHP PWMKN OG HP P T K I I P ! KP I P ! N 7 - GM ! %G G 9 9] JTS R " [7 MOJ9NP T R S G M ! PWM I L9P 7 NH G+ HP O ' 2 G ! N I P ! N ! PO ! NHP 9PNNP JL ! H KH HP K I I P ! NG+ M9 ! P P7P G N M G I 9M ' (! NHP 9MGN GKP ! P 7 # 99%G X P99 NHMN 3 ! OG X P99 HP P " P9P ! M NHJG MOO PGGPG P N M I S
6 HP P G T J ! Q+
! O 9 U T J HP P%G T J 9PNNP H G N GMTG
&$ 2 2 ($ % *B 4

M9 ! P MOOG 6 HP PMOG NHP OG 7 I P N M I %G 9PNNP +R " P HMG ! QHN N MGGJ I P NH G ! O PG HP P P ! Q P M GNMQP O PKN ! N NHMN P 7PKN ! H G PO N ! 8 AJN APKMJGP NHP 9PNNP H KH " P9P ! M PMOG # KN 222+ K ! NM ! G NHPGP OG S 6 &$ $ (% $ - 2 B 4$4 ? 0- HMG APP ! QJ 9NT 7 ! PQ9 QP ! KP P G QHN ! MNNP ! N ! BK+ ! ! NQ ! Q NHP PWMKN OG 7 NHP 9PNNP HP ! GHP 77P G N N P N M I &PM99T M K N K LJNN ! Q ! M LM 7 GLPKNMK9PG N K I LM P NHP PK 99PKN ! G 7 OPPL 7PP9 ! Q NH NHP O KJ I P ! N H KH HMG GNJ PO NHMN 7PPH ! Q MG HP J9O K I LM P NHP K LT 7M ! 'M77 OM N NH NHP Q ! M9 G M 9JO K JG PWH A N !+

Y F 2S7PJOM T " M ! I P GMTG 6 # 7P OM T G ! P H 9OG H G PGNMNP J ! OP NHP NP ! J P 7 GJ N M ! O GP KP N M GJLP 9 O+R M9 ! P GMTG 6 HP 7P OM T MG NHP PGKHPMN %G MGG K MNP M ! O HP ! KP HMUGLP P NH H G JGJMG 9 KP ! KP JGPG NHP O 7 M K ! 7POP MNP MGG K MNP ! QP ! P M9+R X P APQ N P7P J PMOP G N NHP 299JGN MN ! G 7 " P ! T 2 + - M N 2+ # KN 2+ ! $H KH P P ! OPM J N GH NHMN NHP '' %% M ! O NHP (- P P PMKH I PM ! N AT NHP GM I P
OS < 2 < 2
F H G MOO PGG N NHP APPG K ! NM ! G ! P 7 HMUGLP P%G 9PQMG M99JG ! G HP %@ ! NHP 7 GN 7 9 2 %+ HMO GPM9PO N OM ! QP JG A ! OG 8 M ! O ! NHMN MQP NHP GPMG MG MG A ! O ! Q MG NHP G Q ! MNJ P M ! O MNHP I P G +
F H G GP ! NP ! KP G P T O 77 KJ9N8 AJN N O PG ! N MLLPM N JG AP I P ! OPO AT NHP OPLM NJ P 7 I NHP Q ! M9 PMO ! Q H KH P O ! M 9T 7 ! OS 6 ?JGN KP M ! O T J 7MNHP %G MN9 GH J9O HP NMUP I P ! H G O I ! ! K J9O ! N AP G K JP9 N

I P MG T J 1 NHP OPM PGN 7 K PMNJ PG J9O P P ! P ! P I P NH T J PTPG+R M9 ! P ! GP NPO *M ! O PWL9M ! G NHP PMO ! Q NHJG SD?JGN KP BK+ K J9O ! N AP G K JP9 N I P $ $ 2 8 " N P ! P I P BK+ H G I MT AP NHP I PM ! Q8 AJN N G GKM KP9T A ! P JN AT NHP K ! GN JKN ! 7 M9 ! P%G I L PO GP ! NP ! KP + 2 ! NHP Q ! M9 N GNM ! OG NHJG S6 ?JGN KP M ! O T J 7MNHP %G MNH @GH J9O HP NMUP ! 9P ! H G O I ! ! $K J9O ! N AP G K JP9 N I P MG T J @ H NHP OPM PGN 7 K PMNJ PG J9O P P ! P ! P I P NH T J PTPG+R 2N G HP P P OP ! N NHMN NHP L ! NP HMG I GNMUP ! NHP GP ! GP H G 6 K J9O ! N AP G K JP9 N I P MG T J 8 R M ! O HP ! L ! NP G HM P M K NKHPN MG N NHP I PM ! ! Q 7 M GP ! NP ! KP NHPT GP9O I GK JL9P N OP MNP 7 I NHP K LT AP7 P NHP I + HP % P] J PO NHP P7 P 7 I NHP I NG LM M99P9 K ! EJ ! KN ! % JN 7 P M9NP M G ! Q9P 9PNNP P HM P M K9PM I PM ! Q NH JN M ! T 7 KPO K ! GN JKN ! + G 7NP ! JGPO 7M I 9 M 9T 7 CT AT HMUGLP P M ! O NHP NHP 9O O M I MN GNG MG N MG ! O GK J GP M ! O K P GL ! OP ! KP + X P HM P NHP O PLPMNPO9T ! PMGJ P 7 PMGJ P8S7 PWM I L9P 6 HP GH J9O N P P M ! M9 I G N HM ! Q H I + R / PN JG NHP P7 P PMO NHP GP ! NP ! KP NH NHP GJAGN NJN ! 7 7 % S6 ?JGN KP M ! O T J 7MNHP %G MNH GH J9O HP NMUP I P ! H G O I ! ! K J9O ! N AP G K JP9 N I P T J @1 NHP OPM PGN 7 K PMNJ PG J9O P P ! P ! P I P NH T J PTPG+R G HP P JGPO ! NHP 9O GP ! GP 7 P] JM99T ! % M ! O G LL GPO N % ('

3 2 " 2 HP GPK ! O " 2 G JGPO MG M GJAGNM ! N P H KH Q PG JG 6%% J % ? = $ $ " 2 HP K NKH HM P M GMT ! Q S6 MN NHP AMKU 7 APT ! N+R

F ! KU MG ! HMG P NH ! U Q P ! JG NHP N JP ! NP L PNMN ! 7 NH G LMGGMQP+ % " * * G 2 GPP K9PM 9T NHMN I T K J GP G 7 97 O+ == ** $ * 8 $ % % S ! P NHP NH G MT ! ! NHMN MT ! NHP MT AP ! 9D I P S " $ $ $

F 4 - HP Q ! M9 PMOG % - S M I M ! 7PGN P + & P K PKNPO N N % ; M9 ! P J9O PMO %8 HP K PKN ! 7 % -* AT " M ! I P G KP NM ! 9T K ! _ KP PO ! M L PN KM GL N+ 2N MKK OG NH S

6 H G QMNP
2 ! GN JKNG T J H N MO P NHP HPM P ! G 8 M ! O " 8%T J
M I ! ! Q%G H 9T 77 KP+R
1 / + 22+ % 1

3 3 < 97 O "M P!+

- # !$ H J N 9O%GN IP HP!' P KM IP 7 I' H GP' NHP L9MKP

XMG !PM' MN HM!O S P%P'9 !Q%O IT' I NHP'G '$ 'GPP IP'7 GN'MG 2'HM P'! ' S- GM! '[M!'[XHP P G - GNHJ IJG XHMN G !'NHT' I !O HMN IMUPG NHPP' GNM P'NHJG'\ XHP P7 P'A PMUG'NHMN'G QH O I'NHP' ! M O' 7'NHPP'\ 1!P'AJN'LM !NPO'NHJG+ X J9O'AP' !NP L PNPO'M'NH !Q' LP L9PW%O PT !O'GP97 PWL9 KMN !' -JN'NHTGP97' 2!N'M'%HM J' 7'9PGG'7PM ' P P' 9O!PGG' M!]J GH' IT'GNM OP'GP!GPG+' XHMN%G'NHP' IMNNP '\ XHT'NP!OP %GN'NH J'NHMN'LMLP'N ' IP' NH' #'9 U'J!NP!OP'\ 27' N'AP'GJI IP'!P GD I 9P'N %N'AP7 P' 7' !NP 9T'NH J'!PPO%GN JN'UPPL'NHMN'K J!NP!M!KP'GN 99+S T'HJGAM!O%G'HM!O[HMN'O JQ OM I !%O'2NM9T'HMNH' JN K M7N PO'H I+ #!O'HP%G'MN'G IP'HM O'L !N+S LPMU' IM!8 NHT'N !QJP' MT'NMUP' 77'G IP'PWN P I NT' H KH'N ' PMO' X J9O'AP'P P!' I NM9'N ' IP+ -' -9PMGP'T J' PMO8 #!O'T J'GHM99'7 !O' IP' $ PNKHPO' IM!' M'NH !Q' HP' I GN'O GOM !%O' 77 NJ!P+

'E %0*' /' HT' I GN PGG' - GM! 'HMNH' L9MTPO' NHP' GN J I LPN' !' IT'APO' ' NHP'NPGN I ! PG' HP P 7'9 P'A9PPO !Q' !' IP+' 2' GLPMU'! N' JN' 7' PMU'GJ I GPG'8 AJN' 7 I' L 7'MG' GN !Q'MG' IT'Q P7' M!O' MG' KP NM !' MG' 2' PWLPKN' IT' P P!QP+ HMN' LM N' NH J' - GM! ' IJGN' MKN' 7 ' IP' 7' NHT'7M NH' AP' ! N' NM !NPO' NH' NHP' A PMKH' 7'HP G+ /PN' NH !P' !' HM!OG' NMUP' M MT'HP '9 7P' 2' GHM99' Q P' NHPP' LL NJ! NT' MN' !7 O "M P!' GHP' HMNH' IT'9PNNP '7 'NHP' LJ L GP' ' XHP P' 7'NH J' 7PM' N 'GN UP' M!O' ' IMUP' IP' KP NM !' N' G' O !P' NH J' M N' NHP' LM!OP' N 'HP 'O GH ! J ' M!O' P]JM99T' N ' IP' O G9 TM9+R

$ -' XHMN' GHM99' 2' !PPO' N 'O M ' IT' G O' \ NHP' LMLP ' "MNH' KJN' HP 'NH MN' M9 PMOT+S '%N G' G9M!OP S XH GP' POQP' G' GHM LP 'NHM!' NHP' G O8 H GP' N !QJP' 1JN P! IG' M99' NHP' IG' 7' 9P8 H GP' A PMNH' & OPG' !' NHP' L GN !Q' !OG' M!O' O NH' AP9 P' #99' K !P G' 7'NHP' 9O DU !QG']JPP!G' M!O' GNMNPG+ M OG' IMN !G SD!MT' NHP' GPK PNG' 7'NHP' Q M P' H G' LP JG' G9M!OP 'P!NP G+SDXHMN' KHPP ' I MOM I' \ !' OM9GP' N 'H G' APO[XHMN' G' N' N 'AP' 7M9GP' \ '9 P' !' MNKH' NHP P'M!O' N 'NH !U' !' H I' \ ' PPL' %N WN' K9 KU' M!O' K9 KU' \ 7'G9PPL' KHM QP' !MNJ P+ 'A PMU' N' NH' M' 7PM 7JG' O PM I' 7'H I+ #!O' K T' ITGP97'M MUP' \ NHMN%G' 7M9GP' N 'H G' APO' \ 2G' N' \ -' #9MG' Q O' 9MOT' [!' 2' 7M9GP' ' HT' K !GK P!KP' N!PGG' S9MKH I + H J' O OGN' MKKJGP' H I' 7' !K !N !P!KT8 H J' NHP!' 9 U%OGN' 9 UP' M' 99M !8 ! ' IPNH !UG+ HT' 7M J %G' Q O' P! JQH+S IP' EMT' 7' 2NM9T XH GP' I NHP' MG' HP 'LM !N !Q F' HMNH' APN MT%O' H I - '2' M I' GNM9P' M' QM IP!N' JN' 7'7MGH !'8 #!O'7 '2' M I' KHP 'NHM!' N 'HM!Q' AT' NHP' M99G 2' IJGN' AP' LL%O '' N 'L PKPG' NH' IP[S1 P!%G G' M P' IP!%G' N M N G[#99' Q O' GPP I !Q+ T' NHT' P 9N' 1' HJGAM!O' GHM99' AP' NH JQHN

-JN' !' 7 ' 99M !T'8 ! N' A !' HP P%N' Q G+ JN' !' M' AM N' 7 '9MO PG+ -' : O' IMOM I 'HPM' IP ! ' JP' H !PGN' IP!' AP !Q' HPM O'9 UP' 7M9GP' C3!PMG' XP P' !' H G' N IP' NH JQHN' 7M9GP8 M!O' ! !%G' PPL !Q' 5 O' GKM!OM9' IM!T' M' H 9T' NPM 8 N U' L NT' 0 I' I GN' N JP' PNKHPO!PGG' 'NH J' - GNH IJG';' X 9N' 9MT' NHP' 9PM P!' !' M99' L LP ' IP!' 8 : O9T' M!O' QM99M!N' GHM99' AP' 7M9GP' M!O' LP EJ %O+ 0 I' NHT' Q PMN' 7M 9+S IP' 7P99 'AP' NH J' H !PGN 5 'NH J' NHT' IMGNP %G' A OO !Q' ' XHP!' NH J' GPPGN' H I #'9 NN9P' N!PGG' IT' APO P!KP' / U[2' O M 'NHP' G O' ITGP97' NMUP' N8 M!O' H N' HP' !! KP!N' IM!G !' 7' IT'9 P' IT' HPM N OPM' ! N8 %N G' P I LNT' 7'M99' NH !QG' AJN' Q P7 HT' IMGNP ' G' ! N' NHP P'8 H ' MG' !OPPO+ HP' KHPG' 7' N ' 5 'H G' A OO !Q8 GN UP+ H J' IMT%GN' AP' M9 M!N' !' M' APNNP 'KMJGP+ JN' ! 'NH J' GPP I %GN' M' K M O+ -' "P!KP' 9P' +!GN J I P!N' H J' GHM9N' ! N' OM I !' IT' HM!O+ !' XHT' 2' IJGN' O P8 #!O' 7'2' O ' ! N' AT' NHT' HM!O' NH J' M N' 'GP M!N' 7'NHT' IMGNP %G' ' #QM !GN' GP97 G9MJQHNP ' HP P' G' M' L H A N !' G 'O !P HMN' K M P!G' IT' PMU' HM!O+' IP' HP P%G' IT' HPM N8 IPNH !Q%G' M7 P%N' S 7N' G 7N8 P%9' ! 'OP7P!KP8 1APO P!N' MG' NHP' GKMAAM O+SDXHMN' G' HP P' ' HP' GK LNJ PG' 7'NHP' 9 TM9' /P !MNJG #99' NJ !%O' N 'HP PGT' 9 # MT' M MT+ JLNP G' 7' IT' 7M NH' [T J' GHM99' ! ' I P' P' GN IMKHP G' N ' IT' HPM N[HJG' IMT' L '7 9G P9 P P' 7M9GP' NPMKHP G8 H JQH' NH GP' NHMN' M P' APN MT%O' 5 '7PP9' NHP' N PMG !' GHM L9T' TPN' NHP' N M N ' NM!OG' !' GP' KMGP' 7' P+ #!O' NH J+' - GNHJ IJG' NHMN' O OGN' GPN' JL' T' O G APO P!KP' %QM !GN' NHP' U !Q' N!T' 7MNHP + #!O' IMUP' IP' LJN' !N ' K !NP I LN' NHP' GJ N' 17' L !KP9T' 7P99 G' GHM9N' HP PM7NP9' 7 !O' 2N' G' ! ' MKN' 7' K I I !' LMGGMQP' AJN' #' GN M !' 7' M P!PGG' ' M!O' 2' Q P P' ITGP97+ 'NH !U' HP!' NH J' GHM9N' AP' O GPOQ%O' AT' HP ' HMN' ! 'NH J' N %GN' !' H 'NHT' IP I T' X 99' NHP!' AP' LM!Q%O' AT' IP+S - NHPP' OPGLMNKH HP' 9M I A' P!N PMNG' NHP' AJNKHP ' XHP P%G' NHT' U! 7P' \ H J' M N' N 'G9 'N 'O 'NHT' IMGNP %G' A OO !Q XHP!' 2' OPG P' N' N + -' 1' Q MK JG' 9MOT+ !KP' 2' PKP %O' K I I M!O' N 'O 'NH G' AJG !PGG 2' HM P' ! N' G9PLN' !P' !U+ !' ' 5 %N' M!O' N ' APO' NHP!+ -' 2%99' MUP' I !P' PTP AM99G' A9 !O' 7 GN+F !' XHP P7 P' NHP! 5 OGN' J!OP NMUP' N' \ XHT' HMGN' NH J' MAJG%O' ' IM!T' I 9PG' NH' M' L PNP!KP' \ NH G' L9MKP' \ !P' MKN !' M!O' NH !P' !' \ J 'H GPG%9MA J ' \ HP' N IP' ! N !Q' NHPP' \ NHP' LP NJ A%O' K J N+ 0 ' IT' AP !Q' MAGP!N8 HP PJ!N' 2' !P P

I M!T' L 7G' 7' HMUGLP P%G' MK]JM !NM!KP' NH' NHP' 2NM9 M!+' J N' H 'GHM99' P' PWL9M !' NHP' Q !M9' PMO !Q' 6 H GP' I NHP' MG' HP 'LM !N !Q' \ R' ? H!G !' GMTG' 6' HP' K PMNJ P' ! N' 7' !MNJ P' AJN' 7'LM !N !Q+' 2!' NH G' GP!GP' LM !N !Q' I MT' AP' ! N' IL LP 9T' NP IPO' HP ' I NHP +R' NPP P!G' !' 99JGN MN !' 7' NH G' Q PG' M']J NM N !'7 I' M!' 9O' K IPOT S6#' LM KP9' 7' K !KP NPO' 7PMNHP KMLG' H GP' 7MNHP G' P P' N9 P 'QM IP!NG+R' HP' PMO !Q' 7'NHP' Q !M9' !' NHP' MJNH NT' 7' NHP' PKN ' 7'NHP' 7 9 ' 7' 'HMG' APP!' KHM!QPO' AT' +' 99 P 'N S

6' IP' EMT' 7'2NM9T &$ '% $ %'$ '8 $'- *' HMNH' APN MT%O' H I+R

+' 99 P ' !' HG' MO I MN !' 7' NHP' K PKN !' HMCM OG' NHP' MGGP N !' $ UQN' 6' QP!J !P' LMGG !' M OG' 7 QJ PG' 7' GLPPKH+R' P NM !9T' HMUGLP P' G' ! N' M!' PWM I L9P' 7'NH G' L L G N !+' #9NH JQH' NHP' Q !M9' LMGGMQP' I MT' AP' AGKJ P' N' K !NM !G' M' GN !Q' L PN KM9' IMQP+' HP' K PKN !' G' L GM K' P! JQH' N ' GJ N' M!T' HMUGLP P' IMOP' 3MGT+ g 0 ' HP' Q !M9' PMOG' SP OP!N9T' M!' P + F2!' NHP' Q !M9' NHP' 9 !P' GNM!OG' 6' 2%99' MUP' I !P' PTP AM99G' 7 GN+R' " M! I P ' M!O' ? H!G !' GJQQPGNPO' NHP' !GP N !' 7"'

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-J L GP PNJ i'\ XHT‡HMG‴NH J'Q IP'G '7M'
'AP'JiApiN' HPi'NH J'HMGN'NM%Pi'NHT'GNMiO
-HP'p9pKNPO'OPP'AP7 P'NHPP'\
$ -' $ JN' ' i'N I P
'9 GP'G 'AMO'pIL9 TIPiN' i'NHP' HKH'
2'HM P'K iG OP%O' 7M'K J GP‡ : O'9MOT+
"PM'IP' NH'LMN piKP+
i' M9U'NHT'N iQJP' PM T'8 GLPMU'8
2'HM P'HPM O'2'M1'M'GN J1LPN8 MiO'I ip'PM
HP p i'7M9GP'GN JKU'KMi'NMUP'i 'Q PMNP' JiO+
'NPiN'N 'A NN I'NHMN‡ JN'GLPMU+
-' HPi'I MOMI
3NH JQHN'T J' J9O'i N'AMKU'MQM i+
i' GN'9 UP8
iQ iQ'IP'HP P'N 'U 99'IP+
-' N'G 'ip NHP'
JN'7'2' p P'MG GP'MG'H ipGN'NHPi'
T'LJ L GP' J9O'L P' p99‡'2N'KMii N'AP'
JN'NHMN'IT'IMGNP' G'MAJG%O'
IP' 99M i'MT'MiO'G iQJ9M' i'H G'M N+
"MNH'O ip'T J'A NH'NH G'KJ GPO' iEJ T+
i' IP'& IMi'K J NP Mi+
-' i'IT'9 7P+
2%9'Q P'AJN'i NKP'T J'M P'OPMO'MiO'GPiO'H I'
IP'A9 OT'G Q i' 7 N8 7 '%G'K IIMiOPO'
2'GH J9O'O 'G '' 4 J'GHM99'AP'I GG%O'MN'K J N+
#iO'NHMN' 99 p99'K i7 I' N+
i' XHT'Q O'7P99 +
X HMN'GHM99'2'O 'NHP' H 9P'\ XHP P'A OP'\ " '9 p'\
1 ' i'IT'9 7P' HMN'K I7 N' HPi'2'MI'
5PMO'N 'IT'HJGAMiO'\
-' 27'T J%9'AMKU'N 'NHP'K J N S
i' 'K J N'i '7MNHP 8 i 'i 'I P'MO'
X NH'NHMN'HM GH'i A9P'G ILP'i NH iQ

MT'AP'A P7
i'
2'GPP'iN 'NHT'piO'MiO'MI'M9I GN'
#'IMi'M9 PMOT+
-' O GN'IMUP'T J GP97'AJN'9 UP' ip+$
O P NH iU iQ'NH G'2'HM P'M9 PMOT'7N'
@% G i'IT'K9 MU AMQ 'O JA9PN'HMN'H GP'M99'
HMN'MiG P'N'NHPI' X J9O'T J' i'NHP 'GP iQ+
#iO' NH' HMN' I NMN i'T J'KMi'A '
O I'T JNH' 7GJKH'M'GPMG i'%7 P'i A9P'/JK JG
- PGPiN'T J GP97'OPG P'H G'GP KP'NP99'H I'
XHP P i'T J'M P'HMLLT'@ HKH'T J%9' IMUP'H I'UI
27'NHMN'H G'HPMO'HM P'PM' i'IJG K 'O JAN9PGG'
X NH'E T'HP' 99'PIA MKP'T J8 7 'HP%G'H i J MA9P+
#iO'O JA9 iQ'NHMN'I GN'H 9T'‡ 4 J'IPMiG'MA MOD
4 J'HM P'IP' KH8 MiO'2' 99'ip p'7M 9'
PQ ii iQ'i 'GJLL9T IPiN+
i' H J'M N'M99'NHP'K I7 N
HP'Q OG 99'O PN'IP' NH‡ - NHPP'M MT'
HP P%G'I P'N'AP'K iG OP %O'8 AJN' P%9'P pi'
#99'NHMN'Q O'N IP' 99'Q P'JG' H G'MNNP I LN'
2%I'G 9O p'N 'MiO' 99'MA OP'N' NH'
#'L iKP%G'K J MQP+ # MT'2'L NHPP+
-' XP99'IMOMI ' P'IJGN'NMUP'M'GH N'7M P P998
/PGN'AP iQ'I GG%O'2'AP'GJGLPKNPO' 7
4 J'KM MQP'7 I'NHP'K J N‡ T'i A9P'I GN PGG+
"p P'G'M'A W'2'HMO'N'7 I'NHP'] ppi'8
X HMN%G' i%' G'L PK JG'8 7T J'M P'G KU'MN'GPM+
1 'GN IMKH]JM9I%O'MN'9MiO'M'O M I' 7NH G'
X 99'O P'M MT'O GNPILP+S 'G IP'GHMOP+
#iO'7N'T J'N 'T J'IMiH O'S MT'NHP'Q OG'
5 PKN'T J'N 'NHP'APGN[
i' #IPi''2'NHMiU'NHPP‡ = 4 &

HP'L p'G'NHMN'HP'M9 PMOT'HMNH' i'; M99 M
X 99'G i'AP'O M i'N'HPMO'7 I' HPIKP'HP'I PG
" G' M'7 ' NM i+
MOP'IP'N'A9MIP'i'IPI T+
, 5 ' " P'O %9 KU%'\
N'GPPI' 7'9MNP'\ : MIN'HPM PIG'NHMN' HKH?'7PM'
- P'7M9GP[+ 4
<& ' i'2'GMT'7 99 'NHP'U iQ+
i' HMN' IMI' 7'HP G'- GMI 'HP' 9O'GP MIN
2'HM P'i N'GPPI'NHPGP'N 'OMTG+
<& ' : '9 U'M7NP+S
+ 4 ' 1
- GMI 'NH 'J'NHMN'GNMIO%N'G '7 '- GNHJ1JG[S
"P'HMNH'M'O JQ' 7'I IP'2'L MT'H G'MAGPIKP'
- KPPO'AT'G M99 IQ'NHMN8 7 'HP'AP9 P PG'
2N' G'M'NH IQ'I GN'L PK JG+ JN7 'HP+
XHP P' G'GHP'Q IP'\ "ML9T'OPGLM 'HMNH'GP C%'HP 8
1 ' IQ%' NH'7P J' 7'HP'9 P'GHP%G'79 i'
'HP'OPG %'- GNHJ1JG': IP'GHP' G
'OPMNH' 'N'O GH i J 8 MIO'IT'PIO'
MI'IMUP'Q O'JGP'7P NHP ' HP'AP IQ'O i
2'HM P'NHP'L9MK IQ' 7'NHP' N GH'K i+
=; 4 ;' '#NNPIOMIN+
& TM9'G +
< ' IKP'NHP'PW 9P' 7'- GNHJ1JG'I GN' PN %'
"MNH'HP'97P'APPI8'NHP'KJ P' HP P 7'IT'9 O
% G'N IP'IJGN'O ‡ % PGPPKH'T J'IMEPGNT+
O APM'GHM L'GLPPKHPG'N'HP 8 HP%G'M'9MOT'
'NPIOP' 7'PAJUPG'NHMN' OG'M P'GN UPG+
#IO'GN UPG'OPMNH'N'HP +
B ' 1
" 'i 'IT'G i'\
i' % G'KP NM i'GHP' G'79PO'
: ' i'MIO'KHPP'NHP'U IQ8 HP' MQPG8 i IP'
5M P'K IP'MA JN'H I+
<& ' ' #99'NHP'APNNP ' MT
H G i QN'7 PGNM99'H I' 7NHP'K I IQ'OMT'[+ 4 '4
i'2'9 P'MIO'HMNP'HP '7 'GHP%G'7M 'MIO' TM98
#IO'NHMN'GHP'HMNH'M99'K J N9T'LM NG' I P'PWJ]J G NP'
HP'APGN'GHP'HMNH'MIO'GHP' '7M99'K IL JIOPO+
1JNGP99G'NHP I'M99'2'9 P'HP'NHP P7 P+ JN
5 GOM i IQ' IP'MIO'NH IQ'7M J G' i
B ' '#NNPIOMIN+
5 ' XHP P' G'GHP'G '\ "
MI'HP'K INPILN'AP'MIG P %'\
' -9PMGP'T J'G +
"P'KHM IAP G'M P'M99'9 KU%O 8 MIO'NHP P%G i 'MIG P'
HMN' 99'AP'Q PI'N'NHP'9 JO%GN' 7 i GP' P'IMUP+
<& ' T'9 O' HPI'9MGN'2' PIN'N ' G N'HP
HP'L MT%O' I P'N 'PWKJGP'HP 'UPPL IQ'K9 GP8
XHP PN 'K IGN M i%O'AT'HP ' i7 I NT+
HP'GH J9O'NHMN'OJNT'9PM P'JILM O'N 'T J+
XH KH'OM 9T'GHP' MG'A JIO'N 'L 77P' 'NH G
! $' HP P' G M G I P HMN'G I 9M'7 I' 7PWL PGG i'i'#99%G X P99'NHMN'3IOG'X P99'
#KN'22+' K+222+ S6' 'MIT'K JIN8 N 'M99'K JNGB N ' HMN' G I MI+R
'- GMI ' i'Q iQ' 9 NPI'M 9PNNP' HKH' G N ' I G9PMO'H I ' IPMIG N 'GMT' 2'
IJGN'P NHP'MO L'NH G GN MNMQPI' 'LP GH'AT'H G'7J T+
1 /' 22+' ' 3' + =)
HP'9 '- GNHJ1JG'G9MIOP G G'HP'EJOQIPIN
+ HMN' HMN%G'P9GP' M P' G'KH U%O 8 MIO' i'NHMN'L iN
2' 99'K IK9JOP'N 'HMNP'HP 'iMT' iOPPO+
'AP' P PIQ%O'JL i'HP + O ' HPI'7 9G
'- 1'NH G' 'LP GH+D
HP%G'7M'PI JQH8 MIO' HMN'HP'9PMI D'AT'NH G+
MT'L P'H G'N M P9'I N'HP'OMIQP +' + - "
i' "JILH[
- 2%99' NP'N 'IT9 O'GHP%G'OPMO+' 1'2I QPI
M7P'IMT%G'NH J' MIOP 'GM7P'PNJ I'MQN I'[+ - " ;
i' MH' G'NH G'9PNNP'N JP'\
'MG'2'NH iU+
i'2N' G' - GNHJ1JG%HMIO'8 'UI %+S MH' 7'NH J'
J9OGN I N'AP'M' 99M I'AJN'O 'IP'N JP'GP KP'JIOP Q '
NH GP'PILQ TIPING' HP PI' 2' GH J9O'HM P'KMJGP'N 'JGP'
NHPP' NH'M'GP JG' IOJGN T SNHMN'D' HMN' 99M IT'G P%P'
2'A O'NHPP'O ' N 'LP7 I' N'O PKN97T'MIO'N J9T S2' J9O'
NH IU'NHPP'MI'H IPGN'IMI8'NH J'GH J9OGN'IP NHP' MIN'IT'
IPMIG'7 'NHT' P9 P7I 'IT' KP'7 'NHT'L P7P IPIN+
-' XP99'IT'Q O'9 O+
i' X 9N'NH J'GP P' IP'\ O 'G IKP'LMN PIN9T'MIO'K I
GNMIN9T'NH J'HMGN'GNJKU'N 'NHP'AM P'7 NJIP' 7NHMN'APQQM'
- GNHJ1JG'NH J'KMIGN'I N' I'NHP'K J GP' 7Q MN NJOP'AJN'AP'
M'O 9 QPIN'7 99 P' 7 I IP+ X 9N'NH J'GP P'IP'\
-' '2' 99+
"I*: P' IP'NHT'HMIO'HP P%G IT'LJ GP+ "MGN'MIT' 7
NHT'9MNP'IMGNP %G'QM IPING' I'NHT'L GGPGG I'\
-'2' HM P' IT9 O'MN' IT' 9 OQ IQ'NHP' GMIP' GJN' HP'
P' HPI'HP'N U'9PM P' 7 IT'9MOT'MIO' I GN PGG+
I' HP'7 GN'GP KP'NH J'O GN' IP'7PNKH'NHMN'GJN'H NHP '
9PN' N'AP'NHT'7 GN'GP KP'8 Q +
-'2'GHM99'IT'9 O+ + 4
I' PPN'NHPP'MN' 97 O "M PI S2'7 Q N'N 'MGU'H I'
IP'NH IQ'8 2%9P PIPIAP %'MI I' S3 PI'NHP'NH J' 9
9M I'- GNHJ1JG' 99'2'U 99'NHPP+S2' J9O'NHPGP'QM IPIN'G
P P'K IP+ HP'GM O'JL I'N I P' ENHP' A NNP IPGG' 7
I 'APPKH'7 I'IT'HPM N 'NHMN'GHP' HP9O'NHP' P T'QM IPIN'
7 - GNHJ1JG' I' P' PGLPK'NHMI' IT'I A9P'MIO'INNJ M9
HP'9 '- GNHJ1JG'G9MIOP G G'HP'EJOQIPIN
+ HMN' HMN%G'P9GP' M P' G'KH U%O 8 MIO' I'NHMN'L IN
2' 99'K IK9JOP'N 'HMNP'HP 'IMT' IOPPO+
'AP' P PIQ%O'JL I'HP + O ' HPI'7 9G
'- 1'NH G' 'LP GH+D
HP%G'7M'PI JQH8 MIO' HMN'HP'9PMI D'AT'NH G+
MT'L P'H G'N M P9'I N'HP'OMIQP +' + - "
I' "JILH[
- 2%99' NP'N 'IT9 O'GHP%G'OPMO+' 1'2I QPI
M7P'IMT%G'NH J' MIOP 'GM7P'PNJ I'MQN I'[+ - " ;
I' MH' G'NH G'9PNNP'N JP'\
'MG'2'NH IU+
I' 2N' G' - GNHJ1JG%HMIO'8 'UI %+S MH' 7'NH J'
J9OGN I N'AP'M' 99M I'AJN'O 'IP'N JP'GP KP'JIOP Q '
NH GP'PILQ TIPING' HP PI' 2' GH J9O'HM P'KMJGP'N 'JGP'
NHPP' NH'M'GP JG' IOJGN T SNHMN'D' HMN' 99M IT'G P%P'
2'A O'NHPP'O ' N 'LP7 I' N'O PKN97T'MIO'N J9T S2' J9O'
NH IU'NHPP'MI'H IPGN'IMI8'NH J'GH J9OGN'IP NHP' MIN'IT'
IPMIG'7 'NHT' P9 P7I 'IT' KP'7 'NHT'L P7P IPIN+
-' XP99'IT'Q O'9 O+
I' X 9N'NH J'GP P' IP'\ O 'G IKP'LMN PIN9T'MIO'K I
GNMIN9T'NH J'HMGN'GNJKU'N 'NHP'AM P'7 NJIP' 7NHMN'APQQM'
- GNHJ1JG'NH J'KMIGN'I N' I'NHP'K J GP' 7Q MN NJOP'AJN'AP'
M'O 9 QPIN'7 99 P' 7 I IP+ X 9N'NH J'GP P'IP'\
-' '2' 99+
"I*: P' IP'NHT'HMIO'HP P%G IT'LJ GP+ "MGN'MIT' 7
NHT'9MNP'IMGNP %G'QM IPING' I'NHT'L GGPGG I'\
-'2' HM P' IT9 O'MN' IT' 9 OQ IQ'NHP' GMIP' GJN' HP'
P' HPI'HP'N U'9PM P' 7 IT'9MOT'MIO' I GN PGG+
I' HP'7 GN'GP KP'NH J'O GN' IP'7PNKH'NHMN'GJN'H NHP '
9PN' N'AP'NHT'7 GN'GP KP'8 Q +
-'2'GHM99'IT'9 O+ + 4
I' PPN'NHPP'MN' 97 O "M PI S2'7 Q N'N 'MGU'H I'
IP'NH IQ'8 2%9P PIPIAP %'MI I' S3 PI'NHP'NH J' 9
9M I'- GNHJ1JG' 99'2'U 99'NHPP+S2' J9O'NHPGP'QM IPIN'G
P P'K IP+ HP'GM O'JL I'N I P' ENHP' A NNP IPGG' 7
I 'APPKH'7 I'IT'HPM N 'NHMN'GHP' HP9O'NHP' P T'QM IPIN'
7 - GNHJ1JG' I' P' PGLPK'NHMI' IT'I A9P'MIO'INNJ M9
HP'L P'G'NHMN'HP'M9 PMOT'HMNH' I' :M99 M
X 99'G I'AP'O M I'N'HPMO'7 I' HPIKP'HP'I PG
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N'GPPI' 7'9MNP'\ : MIN'HPM PIG'NHMN' HKH?'7PM'
- P'7M9GP[+ 4
<& ' I'2'GMT'7 99 'NHP'U IQ+
I' HMN' IMI' 7'HP G'- GMI 'HP' 9O'GP MIN
2'HM P'I N'GPPI'NHPGP'N 'OMTG+
<& ' : '9 U'M7NP+S
+ 4 ' 1
- GMI 'NH 'J'NHMN'GNMIO%N'G '7 '- GNHJ1JG[S
"P'HMNH'M'O JQ' 7'I IP'2'L MT'H G'MAGPIKP'
- KPPO'AT'G M99 IQ'NHMN8 7 'HP'AP9 P PG'
2N' G'M'NH IQ'I GN'L PK JG+ JN7 'HP+
XHP P' G'GHP'Q IP'\ "ML9T'OPGLM 'HMNH'GP C%'HP 8
1 ' IQ%' NH'7P J' 7'HP'9 P'GHP%G'79 I'
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MI'IMUP'Q O'JGP'7P NHP ' HP'AP IQ'O I
2'HM P'NHP'L9MK IQ' 7'NHP' N GH'K I+
=; 4 ;' '#NNPIOMIN+
& TM9'G +
< ' IKP'NHP'PW 9P' 7'- GNHJ1JG'I GN' PN %'
"MNH'HP'97P'APPI8'NHP'KJ P' HP P 7'IT'9 O
% G'N IP'IJGN'O ‡ % PGPPKH'T J'IMEPGNT+
O APM'GHM L'GLPPKHPG'N'HP 8 HP%G'M'9MOT'
'NPIOP' 7'PAJUPG'NHMN' OG'M P'GN UPG+
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: ' I'MIO'KHPP'NHP'U IQ8 HP' MQPG8 I IP'
5M P'K IP'MA JN'H I+
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H G I QN'7 PGNM99'H I' 7NHP'K I IQ'OMT'[+ 4 '4
I'2'9 P'MIO'HMNP'HP '7 'GHP%G'7M 'MIO' TM98
#IO'NHMN'GHP'HMNH'M99'K J N9T'LM NG' I P'PWJ]J G NP'
HP'APGN'GHP'HMNH'MIO'GHP' '7M99'K IL JIOPO+
1JNGP99G'NHP I'M99'2'9 P'HP'NHP P7 P+ JN
5 GOM I IQ' IP'MIO'NH IQ'7M J G' I
B ' '#NNPIOMIN+
5 ' XHP P' G'GHP'G '\ "
MI'HP'K INPILN'AP'MIG P %'\
' -9PMGP'T J'G +
"P'KHM IAP G'M P'M99'9 KU%O 8 MIO'NHP P%G I 'MIG P'
HMN' 99'AP'Q PI'N'NHP'9 JO%GN' 7 I GP' P'IMUP+
<& ' T'9 O' HPI'9MGN'2' PIN'N ' G N'HP
HP'L MT%O' I P'N 'PWKJGP'HP 'UPPL IQ'K9 GP8
XHP PN 'K IGN M I%O'AT'HP ' I7 I NT+
HP'GH J9O'NHMN'OJNT'9PM P'JILM O'N 'T J+
XH KH'OM 9T'GHP' MG'A JIO'N 'L 77P' 'NH G
! $' HP P' G M G I P HMN'G I 9M'7 I' 7PWL PGG i'i'#99%G X P99'NHMN'3IOG'X P99'
#KN'22+' K+222+ S6' 'MIT'K JIN8 N 'M99'K JNGB N ' HMN' G I MI+R
'- GMI ' i'Q iQ' 9 NPI'M 9PNNP' HKH' G N ' I G9PMO'H I ' IPMIG N 'GMT' 2'
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1 /' 22+' ' 3' + =)

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I PM! N N AP GL UP! N !OP Q PMN N PL OMN ! HP L M!OP P P!NP !Q NHP
KM P H KH GHP 7PM G G 6 G I P GM MQP H 9O R PWH NG NHP !HMA NM! N N %-) 7
K 9S 7 AP9 !Q !Q N K 9 GPO 9 7P HG G K9PM JN P O JAN HPNHP GHP
Q PG ! N MGU NHP GM MQP N) M P M O 7 H G 7 O N N 8 7 ! NHMN
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X P HM P NHP P7 P P!NJ PO N L !N NHP LMGGMQP MG 7 NHP PWL PGG ! %
P P I P P9T NHP LM P!NHPN KM9 H GLP 7 HP ! 7PM G 27 M! TNH !Q NHMN%G
K 9 GLPMU8 NMUP 9P!O+R HP %8 G !NP L GPO HP! ! M!G P G
PNJ !PO N %-) ? H!G ! GJQQPGNPO M N M!GL G N ! 7 NHP GP!NP!KP S
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"% *2% %, +%280 : %2% @- 80 J -, 0 +: *'<: +
*: -7% 9%<<80 *2 9*'<: + ; : -+ : -7% +**C J **0 +2*+:
: -7% (+* %, , -'<: +J , *2 ; *' 0 , *+ +: *'<: : 0 *', 0
* 0 (+2%; 80 8+: % **2 %2%8(*, %1 *2 1 %-+
; *' 0 : -7% % + + *, +: % 9*-20 (* (**,
(: -0 -0% 1 %- J -, 0 B-2+%0
) +: B2-1%2(* *2+: % B2*7 0%2
& ! *, %1 1*'+: F
1 <* 0 -, 0 (7%2 2-+: %2 +'2, +* 0 2+?
(8+ (', *9%++%2 2%@C*, 80 9'+ * +: *(%
) : *; *2(: B 0 2+1 <*0(
! (%% 1*'-2% -, <21 J
, *; 1*'C % *2 1 -' + (:*' 0
-7% 0 %0 : -0 , *+ -0% +
%) : +: %2 9*', 0 9
! * ! *20 -7%,
%) : -+ (1*'2 , - % F
! 0% % (2 -7% -C , (-, ; : *
(9*', 0 *2 +- 1 J : % % 9-2C80 -+ ! *20J
*; : * 9% , < < , < -* (+ (B%, + ; +: : ', <%2
- - - %, , , +: (* %, @%
% 2 +: %% - 2 1*'+:
: , C '(, *@: '2 (J , *2 %-('2% *'2 <**0 , 0(
"1 +: (2'0% B -@% ; % 7% ,) % %, @*', +%280 ?
8 (- *(+ , <: +J 1*'' (: - : -7% 9%++%2 @: %%2
2% 1*'' 0%B-2+J -, 0 +: -, C(+* (+-1 -, 0 %-+
"*1(9 0 : ; % @* %
&) %2% 1*'' -; * -, 1*'+:
(: *' 0 ; **+: -20 9'+ 9% 1*'2 <2** TAT, : *, %(+1
9 0 *2 1*'' -(0* 9'1
1 8 -C% + 1 @* *2+
% (' - -, J 8 *7% : -(1 92*+: %2 A
, 0 ('@: - ; % @* % -(80 < 7% +* :
+%2 *, < -9(%, @% ('@: (1*'2(' A ! *(+ ; % @* %?
"%(B2 <: + 1 *2 1*'' - 8 *, <(+ 2%, 0(
! 8 ! *, <(+ 2%, 0(?
92*+: %2(FAT) *' 0 + : -0 9%%, (* +: -+ +: %1
-0 9%%, 1 -+: %28((*, (+: %, : -0 1 B2 E%

D % 2 NHP Q !M9 V % + NPP P!G AT !P 7 H G OMGH !Q K PKN !G
KHM!QPO NHP O N % % 2* % 2* G M!K OSM L !K M9 PWL PG
G ! QP!P M99T MLL9 PO N AMK ! GL 9PO AT 9 !Q UPPL !Q H KH NHP / !O !P G
HM P KHM!QPO !N % 2 % 2 M!O % 2 M P I GN L AMA9T NHP GM I P OG
I PM! !Q GL 9PO 7 M!N 7 JGP+
F4 ($ %2 % NHP 7 9 Q+ I P !M OP I PO N !G PMO 6 GJKH % T J G R
NHP PAT GL 9 !Q NHP GP!GP++

T. GRAHAM, PINXT

D. I. DESVACHEZ. SCULPT

IMOGEN IN THE CAVE.

(CYMBELINE.)

LONDON. VIRTUE & Co. LIMITED.

HP I LP JG GPMG A PPO I !GNP G8 7 NHP O GH+
- N AJNM T P G MG G PPN 7 GH+
2 M I G KU GN 998 HPM N G KU S - GM!
(((! NMGNP 7 NHT O JQ+
& 2 K J9O ! N GN H I
" P GM O HP MG QP!N9P AJN J!7 NJ!MNP 8
5 GH !PGN9T M779 KNPO AJN TPN H !PGN+
1 HJG O O HP M!G P I P TPN GM O HP PM7NP
2 I QHN U! I P+
% NHP 7 P9O N NHP 7 P9O S
X P99 9PM P T J 7 NH G N I P 8 Q !M!O PGN+
1 X P99 ! N AP 9 !Q M MT+
% - MT AP ! N G KU
O T J I JGN AP J H JGP 7P+
! X P99 99
2 M I A J!O N T J+
% # !O GHM9N AP P P + 4 & +!
H G T JNH H P%P O GN PGG%O HP MLLPM G HMNH HMO
: O M!KPGN G+D
1 " M!QP9 9 UP HP G !QG [
& J N H G !PMN K UP T[" P KJN J NG !
KHM MKNP G8
!O GMJK%O J A NHG MG ?J! HMO APP!G KU+
!O HP HP O PNP +
1 A9T HP T UPG
G I 9 !Q NH M G QH I MG 7 NHP G QH
X MG NHMN N MG 7 ! N AP !Q GJKH M G I 9P 8
HP G I 9P I KU !Q NHP G QH NHMN N J9O 79T
O I G O !P M NP I L9P N K I I W
X NH !OG NHMN GM 9 G M 9 MN+
& 2 O ! NP
HMN Q P7 M!O LMN P!KP NPO !H I A NH+
!Q9P NHP GLJ G N QPNHP +
1 : LMN P!KP[
!O 9PN NHP GN !U !Q P9OP Q P7 J!N !P
" G LP GH !Q N NH NHP !K PMG !Q !P [D
% 2N G Q PMN I ! !Q+ I P8 M MT+ S XH %G
NHP P \

! 2 KM!! N 7 !O NH GP J!MQMNPG NHMN 99M !
" MNH I KU%O I P 8 S 2 M I 7M !N+
% H GP J!MQMNPG[
PM!G HP ! N JG \ 2 LM N9T U! H I 8 %N G
9 NP! NHP G !' %NHP]JPP!+ 2 7PM G I P M I AJGH+
2 GM H I ! N NHPGP I M!T TPM G M!O TPN
2 U! %N G HP ,SX P M P HP9O MG JN9M G S "P!KP+
& " P G AJN !P 4 J M!O I T A NHP GPM KH
X HMN K I LM! PG M P !PM L MT T J M MT8
/ PN I P M9 !P NH H I +
+ 4 & & ("
! 7N[X HMN M P T J
HMN 79T I P NHJG \ G I P 99M !' I J!NM !PP G \
2 HM P HPM O 7 GJKH+ S X HMN G9M P M N NH J \
& # NH !Q

Y HP LMGGMQP GM!OG NHJG !' NHP Q !M9 S $
6 HG T JNH H P%P O GN PGN MLLPM G HP HMNH HMO
: O M!KPGN G+R
2!' G IP I OP !' PON !G P 7 !O NHP 7 99 !Q LJ!KNJMN !' NH JN M!T K I_
IP!N S
6 HG T JNH H P%P O GN PGN MLLPM G HP HMNH HMO
: O M!KPGN G+R
J G NH G GJ! !NP99 Q A9P 8 M!O P NHP P7 P P!NJ P JL I' NHP N M!GL G N !' I'
J NPWN MGGJ I !Q NHMN NHP L !NP 'HM !Q9P7N JN NHP $ ' !'H G 7 GN L 7 !GP NPQ
N MG M K PKN I' I' NHP !Q L9MKP$ HG G TP 7 NHP K I I !PGN 7 NTL Q M
LH KM9 P G' M!O NHP 7 9 PO N I' 7 T !AP9 !P' AP !Q L !NPO 7 I' M !M!JGK LN
M7NP NHP MJNH %G OPMH' MG LP!N GJKH I GMUPG HP !OP G NHMN NHPT M P
! N I P7P]JP!N+
4 % - LP KM9G NH G M!' 9O+ O7 NHP 7 A PG 7 M N PP$ XP KM!! N7 !Q
M!T MJNH NT 7 HG NGGP N !$ HP GJLL N 7 M L GN L9MKPO !' NHP Q JIO G
$GN 99 NPKH! KM9T KM9PO M %- HP 9M QP 9PMO !O NG 7 M N PP IMT !' NHP
GM IP MT HM P APP!' KM99PO %- %$ 7 J NHP 9MP M9 L EPKN !G HKH H 9O
NHP L9M!N 7 I M!O JL QHN# HMUGLP P JGPG NHP O !' NH G GP!GP !' HP
P I LPGN S
6 HP GN !Q AWGPO L I !N T
"M P I MOP GHMUP M!Q AT NHP %-
-9JKUMO JL NHP L !P M!O KPOM +R
]

P G9M GH O O 2 !P%P NHM!' M!G P !Q
- 1 NH JN M U! KU+
! HK9E M N O AAP
#' 9M A PMUP M 99M !' 4 P9O NHPP NH P7+
& H \ N NHPP \ X HMN M N NH J' " M P ! N 2
#!' M I MG A Q MG NH !P \ M HPM N MG A Q \ %
HT OG 2 Q M!N M P A QQP 7 2 PM ! N
T OMQQP !' I T I JNH+ + MT HMN NH J M N+
X HT 2 GH J9O T P9O N NHPP \
! H J 99M !' AMGP
! %GN I P ! N AT I T K9 NHPG 9
& ! NHT NM 9 MGKM9+
X H G NHT Q M!O7MNHP 8 HP I MOP NH GP K9 NHPG+
X H KH MG N GPP I G I MUP NHPP+
! H J L PK JG M 9PN+
T NM 9 I MOP NHP I ! N+
& " P!KP NHP! M!O NHM!U
HP I M!' NHMN QM P NHP I NHPP+ H J M N G I P 7 98
2 M I 9 MNH N APMN NHPP+
! H J !EJ JG NH P7+
" PM AJN I T !M I P M!O N P I A9P+
& X HMN%G NHT !M I P \
! 9 NP! NH J 99M !+
& 9 NP! NH J O JA9P 99M ! AP NHT !M I P
2 KM!! N N P I A9P MN N # P P%N N MO MOOP GL OP
% J9O I P I P G !P +
! NHT 7J NHP 7PM +
MT N NHT I P P K !7JG ! NH J GHM9N U! 2%I G !' N NHP]JPP!+
2%I G T 7 %N 8 ! N GPP I !Q
NHT MG NHT A NH+
! # N ! N M7PM O \
& H GP NHMN 2 P P P!KP NH GP 2 7PM 8 NHP GP 8
# N 7 9G 2 9MJQH ! N 7PM NHP I +
! 5 P NHP OPMNH
X HP! 2 HM P G9M ! NHPP NH I T L LP HM!O+
2%9 7 99 NH GP NHMN P P!' ! 79PO HP!KP+
!O !' NHP QMNPG 7 / JO%G N !' GPN T J HPMOG
4 P9O JGN K I J!NM !PP + 9: 4 & $. 3 3

& ("
% K I LM!T%G MA MO+
1 !P !' NHP 9O 4 J O O I GNMUP H I GJ P+
% 2 KM!! N NP99 / !Q G N G !KP 2 GM H I +
JN N I P HMNH ! NH !Q A9J %O NH GP 9 !PG 7 7M J
X H KH NHP!' HP P$8 NHP G!MNKHPG !' H G KP+
!O AJ GN 7 GLPMU !Q P P MG H G 2 M I MAG 9JNP ;
% MG P T 9 NP!+
1 2!' NH G L9MKP P 9P7N NHP I
2 GH I T A NHP I MUP Q O N I P NH H I +
4 J GMT HP G G 7P99+
% P !Q GKM KP I MOP JL
2 I PM!' N I M!' HP HMO ! N MLL PHP!G !'
17 M !Q NP G 7 OP7PKN 7 EJOQ I P!N+
#G 7N NHP KMJGP 7 7PM JN GPP NHT A NHP +

6 2!GNPMO 7 8 N HMG APP!' L L GPO N PMO 8 !KU MG !'
GMTG 6 H JQH HMUGLP P G 7 P]JP!N9T !MKKJ MNP I' NHP JGP 7 H G L PL G N !G'
N 8 8 $ J9O MNHP PWKPPO H G JGJM9 9 KP!N JG!PGG+R H G 6 9 KP!N JG
!PGG R G M 7M J NP O NH NHP K I I P!NMN G NHPT HM !Q MQ PPO NHMN NHP
!9T K PKN GNM!OM O 7 NHP 3!Q9 GH 9M!QJMQP MG N AP 7 J!O ' NHP 7 IM9 7K !'
GN JKN !' 7 NHP P QHNPP!NH KP!NJ T 2!' NH G KMGP H P P NHPT MLLPM N HM P
I GNMUP!' NHP L PMG I PM! !Q HP N 7 NHP P9OP G GH N 9 PO M!O LP GHPG
H 9P NHMN 7 NHP !P K !N !JPG N 79 J GH M!O !K PMGP SD/PN NHP GN !U !Q P9OP
Q P7 J!N !P H G N H KH G LP GH !Q NH @ !' K I LM!T NH NHP !P H KH
G !K PMG !Q+
HP O (# 7 NHP L Q !M9 MG KHM!QPO AT HP AM9O N $ (# M!O
NHP LMGGMQP G K PKNPO G NHJG Q P!' !' I GN 7 NHP I OP !' PO N !G S
6 " P HMO ! N MLL PHP!G !'
17 M !Q NP G8 7 $ (' 7 EJOQ I P!N
2G 7N NHP KMJGP 7 7PM +R
" M! I P PMOG S,
6 O ' (' 7 EJOQ I P!N
2G 7N NHP (' 7 7PM 8 R

H KH PMO !Q G MO LNPO AT M9 !P 2N G P OP!N NHMN NHP LMGGMQP MG N GNM!O
!' NHP Q !M9 G K !N MO KN T JN N MLLPM G N JG NHMN NHP K PKN !G A NH 7
HP AM9O M!O " M! I P M P G I P HMN 7 KPO8 M!O P MNHP MO LN NHP P T
!QP! JG GJQQPGN !' 7 NHP MJNH 7 M LM I LH9PN L !NPO MN 3O !AJ QH ;

B : 253&2 2

& H G 9 NP!' MG M7 98 M!' P I LNT' LJ GP S
; HP P MG ! ' I !PT' !%N ' ! N " P KJ9PG
J9O HM P U! KU%O JN H G A M !G 7 ' HP HMO ! !P
4D7 2' ! N O !Q NH G ' NHP 7 9 HMO A !P
T' HPMO ' MG 2' O ' H G+
% ' X HMN HMGN NH J' O !P \
& ' ' M I ' LP 7PKN ' HMN ' KJN 77 !P 9 NP!%G HPMO
!' N ' NHP] JPP!' M7NP ' H G !' PL N8
X H ' KM99%O I P N M N ' I J!NM !PP 8 M!O G P+
X NH H G !' G !Q9P HM!O HP%O NMUP JG !+
5 GL9MKP J ' HPMOG ' HP P @NHM!U NHP Q OG[' NHPT' Q
#!O' GPN NHP I ' !' / JO%G N !+
% ' X P M P M99 J!O !P+
& ' X HT ' NHT' 7MNHP ' HMN HM P P N ' 9 GP+
JN ' NHMN HP G P N ' NMUP ' 79 ' 9 PG \ HP 9M '
- NPKNG ! N JG ' HP!' HT' GH J9O P AP NP!OP '
' 9PN M!' M QM!N L PKP 7' 79PGH NH PMN JG 8
-9MT' EJOQP M!O PWPKJN !P ' M99 H I GP97+
0 '' P O ' 7PM ' NHP 9M \' X HMN K I LM!T'
5 GK P ' T J' MA MO \
% ' ' G !Q9P G J9
M!' P GPN PTP ! ' AJN !' M99 GM7P PMG !'
" P I JGN HM P G I P MNNP!OM!NG+ H JQH H G HJ I J '
X MG H NH !Q AJN I JNMN ! SMT' M!O NHMN
0 I' !P AMO' NH !Q N ' GP S! N 7 P!CT' ! N
#AG 9JNP I MO!PGG K J9O G ' 7M ' HM P M %O+
' A !Q H I ' HP P M9 !P' ' #9NH JQH ' LP HMLG+
2N I MT' AP HPM O' MN K J N ' NHMN GJKH MG P
M P HP P ' HJ!N HP P ' M P' JN9M G ' M!O !' N I P
MT' I MUP G I P GN !QP ' HPMO ' NHP' H KH HP' HPM !Q
@#G N G 9 UP H I ' I QHN A PMU' JN ' M!O G PM '
" P%O 7PNKH JG !' 8 TPN G%' ! N L AMA9P'
' K I P M9 !P ' P NHP ' HP' G ' J!OP NMU !Q+
1 ' NHPT' G ' GJ77P !Q ' NHP!' !' Q O' Q J!O' P' 7PM +
27' P O ' 7PM ' NH G A OT' HMNH' M' NM 9'
P' LP 9 JG NHM!' NHP' HPMO+
1 ' /PN O !M!KP
I P MG NHP' Q OG 7 PGMT' N ' H G P%P +
T' A NHP ' HMNH' O !P P99+
$ % ' 2' HMO' ! ' I !O
' HJ!N NH G' OMT' NHP' A T' O OP9P%G G KU!PGG'
5 O' I MUP' I T' MT' 9 !Q 7 NH+
& ' ' X NH' H G !' G O+
XH KH HP' O O' M P' MQM !GN I T' NH MN ' HM P' NM%P!'
" G HPMO' 7 I ' H I ' 2%99 NH %N !N ' NHP' K PPU'
PH !O' J ' KU8 M!O' 9PN N N ' NHP' GPM+
#!O' NP99 NHP' 7 GHPG HP%G NHP']JPP!%G G !' 9 NP!
HMN%G M99 2' PKU+ 9: 4
% ' 2' 7PM ' %N 99 AP' PTP!Q%O'
%X J9O ' - 9TO P ' NH J' HMOGN ! N O !P%N [NH JQH' M9 J '
PK I PG NHPP' P99 P! JQH+
1 ' ' ' %X J9O' 2' HMO' O !P%N+
' NHP' P P!QP' M9 !P' LJ GJPO' I P[S - 9TO P
2' 9 P' NHPP' A NHP 9T8 AJN P! T' I JKH
H J' HMGN' AA%O' I P' 7' NH G' OPPO' ' 2' J9O ' P P!QPG+
HMN' L GG A9P' GN P!QNH' I QHN' I PPN ' J9O' GPPU' JG NH JQH'
D#!O' LJN JG N ' J ' M!G P +
% ' X P99 ' %N G O !P S
X P%99 HJ!N ! ' I P' N OMT' ! ' GPPU' 7 ' OM!QP '
X HP P' NHP P%G ! ' L 7 N+ 2' L NHPP ' N ' J ' KU8

4 J' M!O' O OP9P' L9MT' NHP' K UG ' 2%99 GNMT'
99 HMGNT' - 9TO P' PNJ ! ' M!O' A !Q' H I'
' O !!P ' L PGP!N9T+
1 ' - ' G KU' O OP9P' [
2%99 99 !Q9T' N ' H I ' ' ' QM !' H G' K 9 J
2%O 9PN M' LM GH' 7' GJKH' 9 NP!G' A9 O F
#!O' L M GP' I TGP97' 7 ' KHM NT+' 9 4
% ' 1' NH J' Q OOPGG+
H J' O !P' MNJ P ' H ' NHTGP97' NH J' A9MC !%G[
2!' NHPGP' N ' L !KP9T' A TG [HPT' M P' MG' QP!N9P'
#G CPLHT G ' A9 !Q' AP9 ' NHP' 9PN+
N MQQ !Q' H G' G PPN HPMO ' M!O' TPN MG JQH+
HP ' TM9' A9 O' P!KHM7%O ' MG' NHP' JO%GN !O+
HMN AT' NHP' N L' O NH' NMUP' NHP' I J!NM !' L !P+
#!O' I MUP' H I ' GN L' N ' NHP' M9P+' % G !OP D
HMN' M!' ! G A9P' !GN !KN GH J9O' 7 M I P' NHP I '
' TM9NT' J!9PM !%O 8 H ! J ' J!NMJQHN8
9 NT' ! N' GPP!' 7 I' NHP ' M9 J +
HMN' 9O9T' Q G' !' NHP I ' AJN T P9OG' M' K L'
#G 7' N' HMO' APP!' G %O [4PN GN 99 N%G GN M!QP'
X HMN' 9 NP!%G AP !Q' HP P' N ' JG' L NP!OG+
1 ' HMN' H G' OPMNH' 99 A !Q' JG+

B ((

& ' X HP P%G I T' A NHP ' \
2' HM P' GP!N' 9 NP!%G K9 NL 99 O !' NHP' GN PM I +
2!' P I AMGGT' N ' H G' I NHP ' 8 H G' A OT%G H GNMQP
0 ' H G' PNJ !+' 97! ' &-
% ' T' !QP! JG' !GN J I P!N[
" M U ' - 9TO P ' N' G J!OG' [JN' HMN' KKMG !'
" MNH' MO MG !' ' N ' Q P' N' I N !' \ " M U' [
& ' 2G' HP' MN' H I P' \
% ' " P' P!N' HP!KP' P P!' ! +
& ' X HMN' O PG' HP' I PM!\' G !KP' OPMNH' 7' I T' OPM %G[
I NHP
2N' O O' ! N' GLPMU' AP7 P+' #99' G 9P I !' NH !QG'
H J9O' M!G P ' G 9P I !' MKK OP!NG+' HP' I MNNP ' \
J I LHG' 7 ' ! NH !Q ' M!O' 9M I P!N !Q' N TG+
2G' E 99 NT' 7 ' MLPG' M!O' Q P7' 7 ' A TG+
2G' MO M9' I MO' \

B ' (' 3' ' -' " " ' -' -

% ' / U ' HP P' HP' K I PG+
#!O' A !QG' NHP' O P' KKMG !' !' H G' M I G+
17' HMN' P' A9M I P' H I ' 7 [
1 ' HP' A O' G' OPMO+
HMN' P' HM P' I MOP' G ' I JKH' !+' 2' HMO' MNHP '
" M P' GU LL%O' 7 I ' G WNPP!' TPM G' 7' MQP' N ' G WNT+
' HM P' NJ !%O' I T' 9PML !Q' N I P' !N ' M' K JNKH+
HM!' HM P' GPP!' NH G+
& ' 1' G PPNPGN ' 7M PGN' 9 9T' [
T' A NHP ' PM G' NHPP' ! N' NHP' !P HM97' G ' P99+
#G HP!' NH J' Q P %GN' NHTGP97+
% ' 1' I P9M!KH 9T[
XH ' P P ' TPN' K J9O' G J!O' NHT' A NN I' \ 7 !O'
HP' CP ' N ' GH ' HMN' K MGN' NHT' G9JQQ GH' K M PF
QHN' PMG 9 PGN' HM A J ' ! aSD H J A9PGGPO' NH !Q[
? P' U! G' HMN' I M!' NH J' I QHN%G[HM P' I MOP' AJN' 2 '
H J' O POGN ' M' I GN' M P' A T ' 7' I P9M!KH 9T[F
" '7 J!O' T J' H I ' \

P!N N9PO ' 6 3WL9M!MN !G' M!O' 3 I P!OMN !G' 7' G I P' -MGGMQPG' !' NHP' PWN' 7'
HMUGLP P R' BK+' 2!' NH G' PMO !Q' 7' %7 ' %' P9M JG' GMTG NHMN' 9 NP!' AP7 P' HP'
$' M PO' MN' I M!%G' PGNMNP ' HMO' ! N' MLL PHP!G !' 7' NP G' ' ((' 'OP7PKN' 7'
EJOQ I P!N ' H K9 ' OP7PKN' G' MG' 7NP!' NHP' KMJGP' 7' 7PM +' HP' LMGGMQP%MG' N' NHJG'
GNM!OG' MLLPM G N ' !G' !P' 7' NHP' I M!T' PWM I L9PG' 7' K !OP!GPO' N JNHG' H KH' NH G'
L9MT' L PGP!NG+

D F SD!' NHP' GP!GP' 7" (%

F 9 ' 2!' NHP' Q !M9 $ # HP AM9O' I MOP' NHP' P I P!OMN !' H KH'
G' KP NM !9T' KM99PO' 7 ' M!O' G 7J NHP ' EJGN 7 PO' AT' NHP' 7MKN' NHMN' !' NHP' PM 9T' PO N !G'
7' HMUGLP P' $ ' M!O' $ ' M P' GP P M9 N I PG' I GL !NPO+' PMKH 7 ' NHP'
NHP +' ,

' NPP P!G L !NG' NH G S
' 6'2%O' 9PN' ' LM GH' 7' GJKH' 9 NP!D%A9 O+R
JN' NHP' I PM! !Q' G' 2' J9O' 9PN' A9 O' M' LM GH' 7' GJK9N' 9 NP!G+
Y' & ' ' NHP' Q !M9+' - LP' KHM!QPO' N' N ' 8 '
F ' HP' Q !M9 PMOG' (;' AJN' NHP' I MQP' G' !K I L9PNP' J!9PGG' P'
MO LN' NHP' K PKN !+' ' G' M' G I M99 PGGP9 ' M!O' NHP' O' G 7NP!' JGPO' AT'
" 9 !GHPO' M!O' AT' 5 MTN !+
F XP L !N' NHP' LMGGMQP' MG' !' NHP' Q !M9 ' NHP' I PM! !Q' 7' H KH' G ' ? P' U! G'
HMN' I M!' NH J' I QHN%GN' HM P' I MOP ' AJN' 2') 8' NH J' O POGN ' BK+' M9 !P' NH !UG'
NHMN' NHP' L ! 7 !' ' MG' L AMA9T' GJAGN NJNPO' AT' I GNMUP' 7 ' NHP' !NP EPKN !+' $@'
H KH G' K I I !9T' L !NPO' 2' !' NHP' 9O' K L PG ' 2' AP !Q' M9G ' MG' K I I !9T'
L !NPO' +
1/+ 22+' ' O'

1 NM U MG T J GPP
HJG G I 9 !Q MG G I P 79T HMO N KU9PO G9J I AP +
N MG OPMNH%G OM N AP !Q 9MJQH%O M N H G QHN KHPPU
&PL G !Q ! M KJGH !+
& X HP P\
1$ 1%NHP 79 8
" G M I G NHJG 9PMQJPO 2 NH JQHN HP G9PLN8 M!O LJN
T K9 JNPO A QJPG D7 I 77 I T 7PPN H GP JOP!PGG
#!G P %O I T GNPLG N 9 JO+
& X HT HP AJN G9PPLG 8
27HP AP Q !P HP%99 I MUP H G Q M P M APO8
X NH 7P I M9P 7M PG 99 H G N I A AP HMJ!NPO+
#!O I G 99 ! N K I P N
1 X NH 7M PGN 79 P G+
X H 9GN GJ I I P 9MGNG M!O 2 9 P HP P O OP9P
2%99 G PPNP! NHT GMO Q M P H J GHM9N ! N 9MKU
HP 79 P NHMN%G 9 UP NHT 7MKP LM9P L I GP8 !
HP MCJ %O HM P AP99 9 UP NHT P !G8 ! !
HP 9PM7 7 PQ9M!N !P H I ! N N G9M!OP
1JN G PPNP!%O ! N NHT A PMNH NHP JOO KU J9O $
X NH KHM NMA9P A 99 @1 A 99 G P GHM I !Q
H GP KH 9P7N HP G NHMN 9PN NHP 7MNHP G 9 P
X NH JN M I !J I P!N[A !Q NHPP M99 NH G8
4PM M!O 7J %O I GG APG OPG HP!79 P G M P ! !P+
! NP Q J!O NHT K GP+
& - NHPP HM P O !P8
#!O O ! N L9MT !' P!KH 9 UP OG NH NHMN
X H KH G G GP JG / PN JG AJ T H I +
#!O ! N L N MKN NH MO I MN !' HMN
2G ! OJP OPAN+S NHP Q M P+
1 MT HP P GHM99%G 9MT H I \
& T Q O 3J LH 9P J I NHP +
1 $ P%NG
#!O 9PN JG - 9TO P NH JQH ! J KPG
"M P Q N NHP I M!! GH K MKU G !Q H I N NHP Q J!O+
#G !KP J I NHP 8 JGP 9 UP ! NP M!O OG+
M P NHMN 3J LH 9P I JGN AP O OP9P+
& MO M9 ;
2 KM!! N G !Q 2%99 PPL M!O O N NH NHPP
O ! NPG 7G J N 7NJ!P M P GP
HM! L PGNG M!O 7M!PG NHMN 9 P+
1 X P%99 GLPMU N NHP!+
% : PMN Q P7G 2 GPP I PO K !P NHP 9PGG 7 9 NP!
2G]J NP 7 Q N+ "P MG M]JPP!%G G ! A TG
#!O NH JQH HP KM I P J P!P I T P I P I AP
"P MG LM O 7 NHMN H JQH I PM!M!O I QHNT NN !Q
QPNHP HM P !P OJGN8 TPN P P P!KP
@ HMN M!QP9 7NHP 9O O NH I MUP O GN !KN !
17L9MKP %N PP! H QH M!O 9 + 1J 7 P MG L !KP9T8
#!O NH JQH T J N U H G 9 7P MG AP !Q J 7 P+
4PN AJ T H I MG M L !KP+
& - MT T J 7PNKH H I H NHP +
HP G NPG% A OT G MG Q O MG #EMW
X HP! !P NHP M P M9 P+
1 27T J%99 Q 7PNKH H I +
X P%99 GMT J G !Q NHP H 9GN+S NHP APQ !+
+ 4 8
& MT MO M9 P I JGN 9MT H G HPMO N NHP PMGN
T 7MNHP HMNH M PMG !7 %N+
1 % G N JP+
& I P !NHP! M!O P I P H I +
1 S PQ !+

1 :+

5 OPM ! I P NHP HPMN %NHP GJ!
NHP 7J JG !NP %G MQPG8
H J NHT 9O9T NMGU HMGN O !P
" I P M N Q !P M!O NM%P!NHT MQPG
: 9OP!9MOG M!O Q 9G M99 I JGN
#G KH I !PT G PPLP G K I P N OJGN+

4) SGN 77+
3 %S JOP GH PG+

OPM ! I P NHP 7 !' %NHP Q PMN+
H J M N LMGN NHP NT M!N%G GN UP8
M P ! I P N K9 NHP M!O PMN 8
NHPP NHP PPO G MG NHP MU 8
HP GKPLN P 9PM ! !Q LHTG K I JGN
#99 7 99 NH G M!O K I P N OJGN+

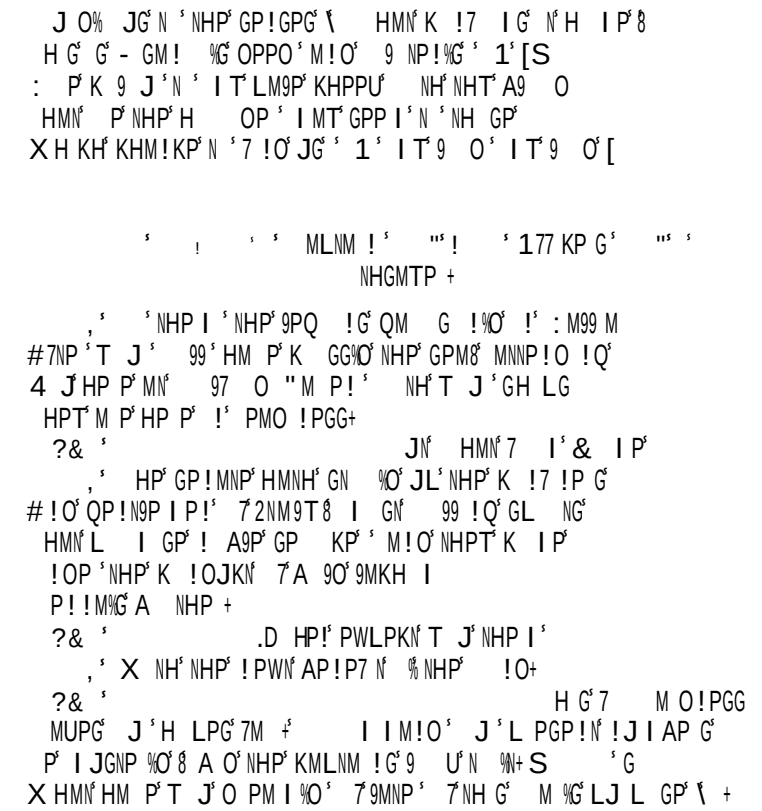
5 OPM ! I P NHP 9 QHN%! !Q 79MGH8
NHP M O PMOPO NHJ!OP GN !P8
5 OPM ! N G9M!OP KP!GJ P MGH 8
H J HMGN 7 ! GH%O E T M!O I M!
3 $ #99 9 P G T J!Q M99 9 P G I JGN
!G Q!N NHPP M!O K I P N OJGN+

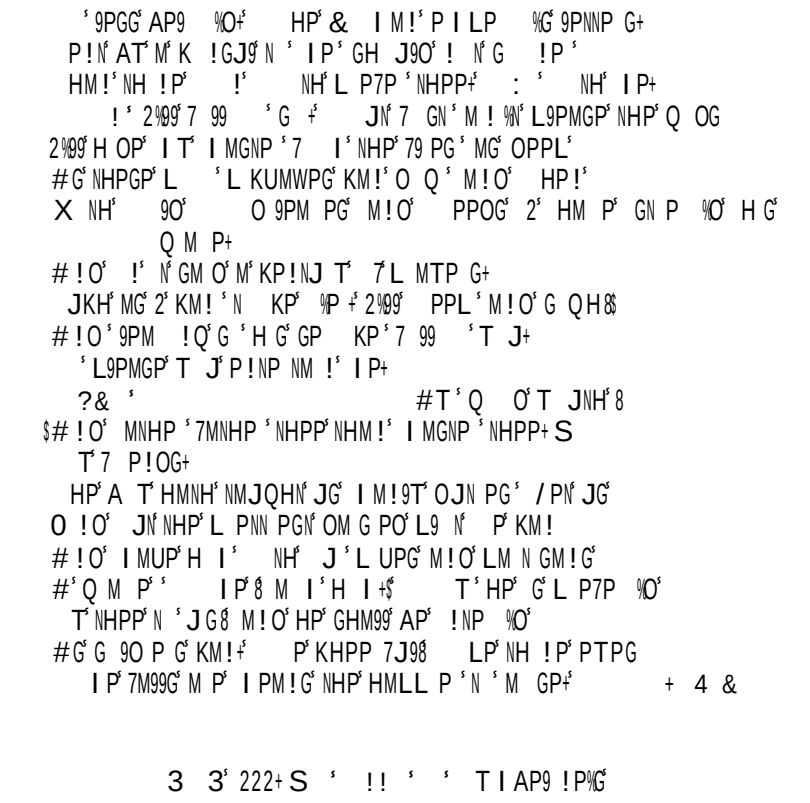
5 PW K GP HM I NHPP[
! NKHK M7N KHM I NHPP[
5 : H GN J!9M O 7 APM NHPP
NH !Q 99 K I P !PM NHPP
3 $ >J PN K !GJ I I MN !HM P 8
#!O P! !PO AP NHT Q M P[

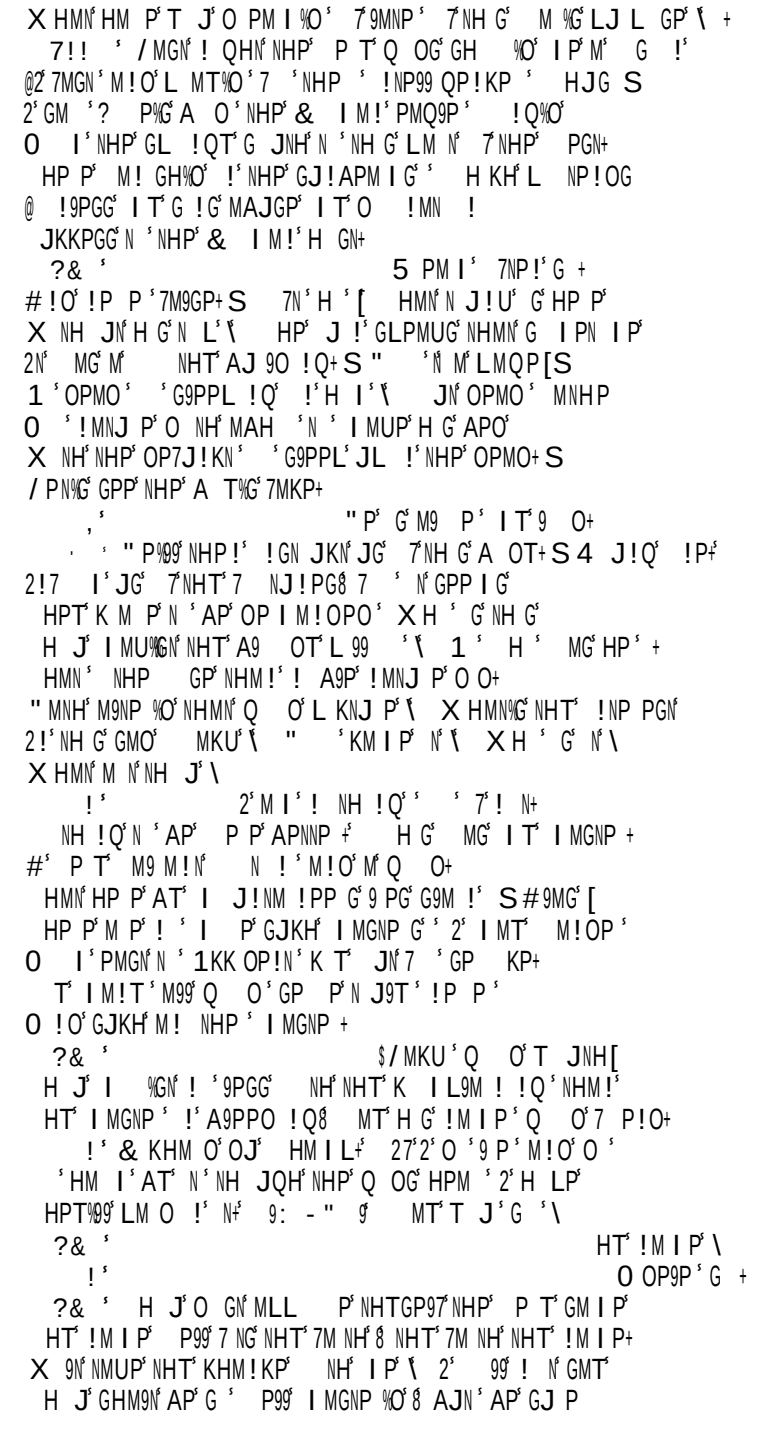
B & (2 (!"5!. ! (

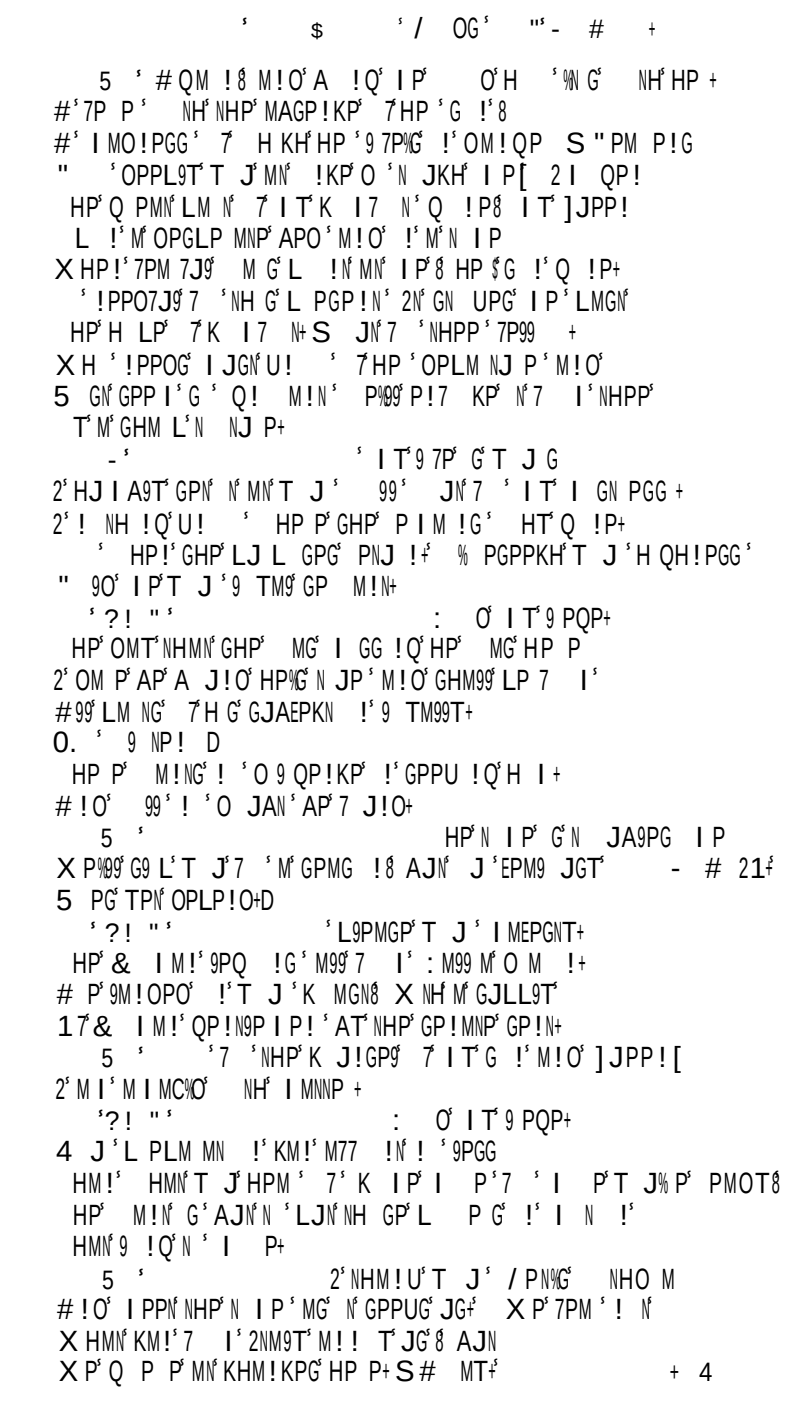
& X P HM P O !P J AGP]J PG8F I P 9MT H I
O !+
% "P P%G M 7P 79 P G 8 AJN MA JN I O! QHN I P
HP HP AG NHMN HM P !NHP I K 9O OP % NHP ! QHN
P GN P !QG 7 NN%GN 7 Q M PG+S L !NHP 7MKPG S
4 J P P MG 79 P G ! NHP %O P P!G
HPGP HP A%9PNG GHM99 H KH P JL !T J GN +S
I P !M MT MLM N JL ! J U!PPG+
HP Q J!O NHMN QM P NHP I 7 GN HMG NHP I MQM !
HP L9PMGJ PG HP P M P LMGN G G NHP LM !+
+ 4 & & (("' (!' + 2 ' 3 V 4PG G N 97 DO "M P!8 X H KH G
NHP MT \
2 NHM!U T J+S T T !AJGH \S - MT H 7M NH NHP 7
%1OG L NN U !G[SKM! N AP G W I 9PG TPN \S
2 HM P Q !P M99 ! QHN S%OM NH 2%99 9 P O ! M!O G9PPL+
JN G 7N[! APO7P99 S 1 Q OG M!O Q OOPGGPG[
+7 3 (!"5
HPGP 79 P G M P 9 UP NHP L9PMGJ PG 7NHP 9O8
H G A9 OT I M! NHP KM P ! %N+S2 H LP 2 O PM I 8
O G 2 NH JQHN 2 MG M KM P UPPLP +
#!O K U N H !PGN K PMNJ PG JN %N G ! N G 8
% MG AJN M A 9N 7 ! NH !Q GH N MN ! NH !Q+
X H KH NHP A M ! I MUPG 7 7J I PG 1J P T PTPG
P G I PN I PG 9 UP J EJOQ I P!NG A9 !O+ : O 7M NH
2 N P I A9P GN 99 NH 7PM JN 7NHP P AP
4PN 9P7N !HPM P!MG G I M99 M O L 7L NT
#G M P!%G PTP 7PM %O Q OG M LM N 7 N[
HP O PM I %G HP P GN 99 P P! HP!2 MUP N G
X NH JN I P MG NH ! I P8 ! N I MQ !%O 7P9N+
#HPMO9PGG I M![SD HP QM I P!NG 7 - GNHJ I JG[
2U! NHP GHMLP 7H G 9PQ NH G G H G HM!O 8
"G 7 N P KJ M9 H G M N M9 NH QH8
HP A M !G 7 "P KJ9PG AJN H G ? M9 7MKP S
J NHP ! !HPM P![,S" \SD. GQ !P+S - GM!
#99 KJ GPG I MOOPO "PKJAM QM P NHP : PPUG
+#!O I !P N A N AP OM NPO !NHPP[H J
!GL %O NH NHMN PQJ9 JGF OP 9 9 NP!
"MGN HP P KJN 77 I T 9 O+SD NP M!O PMO
P HP!KP7 NH N PMKHP JG [S5M I !%O - GM!
"MNH NH H G 7 QPO 9PNNP G SOM I !%O - GM! D
O I NH G I GN A M PGN PGGP9 7NHP 9O
N JKU NHP I M ! N L [S1 - G9HJ I JG[M9MG
9HP P G NHT HPMO \ HP P%G NHMN \ #H I P[HP P%G NHMN \
- GM! I QHN HM P U 99%O NHPP MN NHP HPM N+
#!O 9P7N NH G HPMO !+S " GH J9O NH G AP \ - GM! \
% G HP M!O 9 NP!' I M9 KP M!O 9JK P !NHP I +
"M P 9M O NH G P HP P+ 1 %N G L PQ!M!N L PQ!M!N[
HP O JQ HP QM P I P H KH HP GM O MG L PK JG
#!O K O M9 N I P HM P 2 ! N 7 J!O N

F ' %S PQJ9M O G OP 9T HP O G J9T7 J!O !NH G LMGGMQP 7
HM9KGLP P+









?

E%

5 O' GPP' I M!' O P' GKM KP' P P '9 U%O' !' A9 O+
2' NP' H I ' 2 I QP!' MG' G9M I ' % G' GN M!QP'
P P ' APGN O' M' H GP ' GM P' !P ' NHM N' HMO'
#' OP ' 9 UP' I TGP97' H ' !PN' P' Pg'
X HMN' G' APN O' N ' 9 NP!' 8 AJN' P I M .!'
-P L9PW%O' !' M99+ HP' HPM P!G' GN 99' I JGN' U
X HP P !'2' M I ' 7M9GP' 2' M I ' H !PGN' ! N' N JP' N ' AP' N JP+
HPGP' L PGP!N' M G' GHM99' 7 !O' 2' 9 P' I T K J!N T
3 P!' N ' NHP' ! NP' %NHP' U !Q ' 2%99' 7M99' !' NHP I +
99' NHP ' O JAN G' AT' N I P' 9PN' NHP I ' AP' K9PM %O
O NJ!P' A !QG' !' G I P' A MNG' NHMN' M P' ! N' GNPP %O' + 4

?

3 3' F% .! ' ' 1

& (' (' '" (

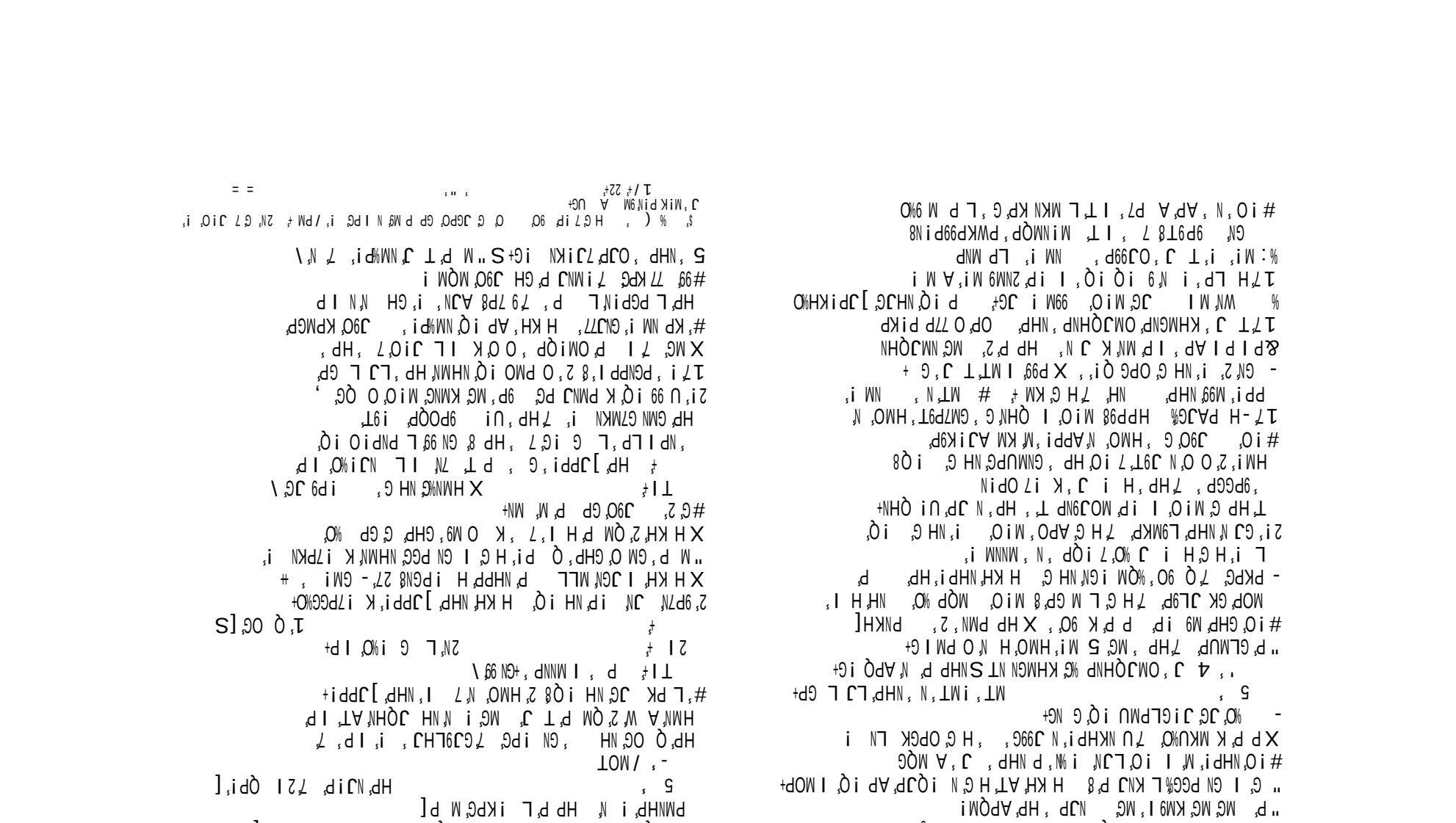
& ' HP' ! GP' G' J!O' MA JN' JG+
% ' /P N' JG' 7 I ' N+
1 ' X HMN' L9PMGJ P ' G ' 7 !O' P' !' 9 7P ' N ' 9 KU' N'
O I ' MK N I ' M!O' MO P!NJ P' \
&' MT ' HMN' H LP
" M P' P' !' H O !Q' JG' \ NH G' MT ' NHP' & I M!G'
JGN' '7 ' N !G' G9MT' JG8 ' PKP P' JG'
O ' AM AM JG' M!O' J!!MNJ M9' P 9NG'
5J !Q' NHP ' JGP ' M!O' G9MT' JG' M7NP +
% *, (
X P%9' H QHP ' N ' NHP' I J!NM !G8' NHP P' GPKJ P' JG+
' NHP' U !Q%' LM NT' NHP P%' ! ' Q !Q' ; !P !PGG'
17' 9 NP!%' OPMNH' @ P' AP !Q' ! N' U! ! ' ! N' I JGNP %O'
I !Q' NHP' AM!OG ' I MT' O P' JG' N ' M' P!OP '
X HP P' P' HM P' 9 %O 8 M!O' G ' PWN N' 7 I ' JG' NHMN'
X H KH' P' HM P' O !P ' H GP' M!G P ' J9O' AP' OPMNH'
5 M ! ' !' NH' N NJ P+
&' H G' G ' G ' M' O JAN
2!' GJKH' M' N I P' ! NH !Q' APK I !Q' T J
' GMN G7T !Q' JG+
1 ' 2N' G' ! N' 9 UP9T
HMN' HP!' NHPT' HPM ' NHP' & I M!' H GPG' !P QH+
PH 9O' NHP '] JM NP %O' 7 PG ' HM P' A NH' NHP ' PTPG'
!O' PM G' G ' K9 T%O' I L NM!N9T' MG ' ! +
HMN' NHPT 99' MGNP' NHP ' N I P' JL I ' J ' ! NP+
' U! ' 7 I ' HP!KP' P' M P+
% ' 1 ' 2' M I ' U! I
17' I M!T ' !' NHP' M I T ' I M!' T PM G+
H JQH' 9 NP!' NHP!' AJN' T J!Q ' T J' GPP ' ! N' P' H I '
O I ' I T' P I P I A M!KP+ #!O ' APG OPG ' NHP' U !Q'
" MNH' ! N' OPGP %O' I T' GP KP ' ! ' T J ' 9 PG8
XH ' 7 !O' !' I T' PW 9P' NHP' M!N' 7A PPO !Q+
HP' KP NM !NT' 7'NH G' HM O' 9 7P8 MTP' H LP9PGG'
HM P' NHP' K J NPGT' T J ' K MO9P' L I G%O+
JN' N ' AP' GN 99' H N' GJ I I P %G' NM!9 !QG ' M!O'
HP' GH !U !Q' G9M PG' 7 !NP +
&' HM!' AP' G
PNNP ' N ' KPMGP' N ' AP+ - MT ' G ' N ' NHP' M I T' 8
2' M!O' I T' A NHP ' M P' ! N' U! !# T J GP9'7
' JN' 7'NH JQHN' M!O' NHP PN ' G ' %P Q !+
M!! N' AP'] JPGN !%O+
1 ' T' NH G' GJ!' NHMN' GH !PG+
2%9' NH NHP ' X HMN' NH !Q' G' N ' NHMN' 2' !P P

' " M! I P ' PMOG ' N G ' $' ' ' ' ' M9 !P' GJQOPGNG ' NHMN' AT' , ' G ! N' I PM I N'
M!' PL GN9P ' AJN' NHMN' HP LH MGP G' P I J N9P!N' N ' '$ ' %2 ''"
' & 2 ' HP JGP' 7 8 2' MG' N' P A' G' J!K I I !+' X P' HM P' N' LMGGMQP' !'
O ! P T N9 6' # KMO N' R' H KH' G' MN' !KP' M!' PWM I L9P' M!O' M!' PWL9M ! MN ! S6' HMN'
7 I ' NHP' QHN' 9 !P' 7 NJP' M P 8 2 ' N ' NHPGP' K UPO' GH 7NG+R
F -' ' S N ' ! GN QMN+
Y' 6' HP' 9MGN' OPPO' G' KP' NM 19T ' ! N' NHP' 9OPGN R' GMTG' 5 +' ? H ! G ! +' HMN' G ' LP
HWLG ' L GM KN98T ' N JP' ; AJN' MG' NHP' I M!' H ' Q PG' !' !' NHP' K I I GG !' 7' 99' G'
9OP ' HP!' HP' K I I NG' NHP' 9NGN' 9' NHN!' HP!' HP' K I I NIPO' NHP' 7 GN ' P' O ' ! N
AP9 P P' NHMN' HMUGLP P ' MG' M9 !P GMTG ' 6' ' 2' K !G OP PO' NHP' 9MNP ' P 9
OPPO' MG' NHP' P9OP ' R' HP' K !7JG ! ' 7'NHP P' AP' M!T ' !' NHP' NPWN' I MT' AP' PK ' !K 9PO'
AT ' MK !% I N ! ' !' NHMN' HMN' P' KN98' NHP' 1%O 9O' G PM98T ' NHP' T J !Q ' 9O' 8 M!O'
G ' M' I M!%6 7 GN G ! ' G H G T J !OPGN' G !+

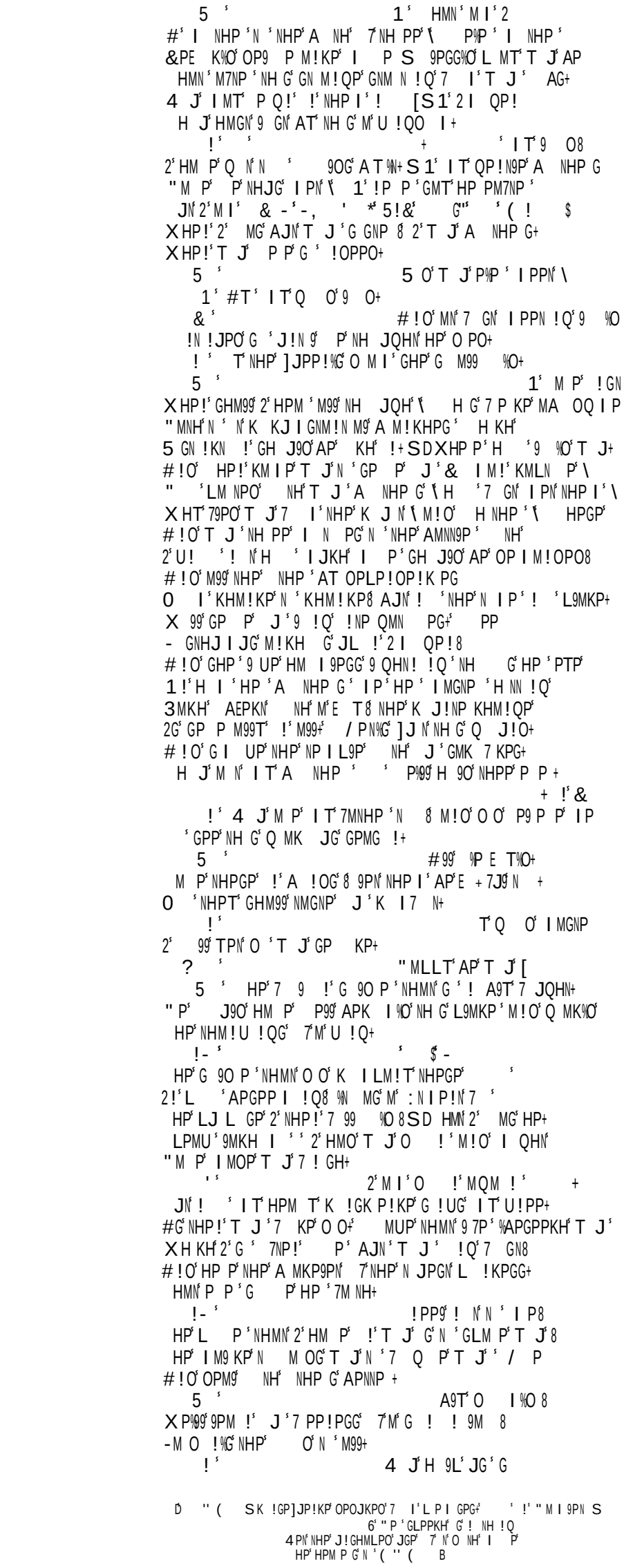
F HP' GP !N I P ! N HP P' G' PWKPGG P9T APWJN 7J98 AJN ' 7 !' NHP' P99 LN KN9 7 !' 7'
PWL PGG !' H KH' G ' GN U ! Q9T ' L P M 9G ' !' NH G' L9MT ' G' AGKJ P2' - GNHJ I JG ' N'
MLLPM G' N ' JG ' G'K I LM ! ' Q'H G' ! ' GNM N P' NH' HMN' HP' GJLL GPG' G' NHMN' 7 2 I QP!+

' " M! I P ' PMOG ' N G ' $' ' ' ' ' M9 !P' GJQOPGNG ' NHMN' AT' , ' G ! N' I PM I N'
M!' PL GN9P ' AJN' NHMN' HP LH MGP G' P I J N9P!N' N ' '$ ' %2 ''"
' & 2 ' HP JGP' 7 8 2' MG' N' P A' G' J!K I I !+' X P' HM P' N' LMGGMQP' !'
O ! P T N9 6' # KMO N' R' H KH' G' MN' !KP' M!' PWM I L9P' M!O' M!' PWL9M ! MN ! S6' HMN'
7 I ' NHP' QHN' 9 !P' 7 NJP' M P 8 2 ' N ' NHPGP' K UPO' GH 7NG+R
F -' ' S N ' ! GN QMN+
Y' 6' HP' 9MGN' OPPO' G' KP' NM 19T ' ! N' NHP' 9OPGN R' GMTG' 5 +' ? H ! G ! +' HMN' G ' LP
HWLG ' L GM KN98T ' N JP' ; AJN' MG' NHP' I M!' H ' Q PG' !' !' NHP' K I I GG !' 7' 99' G'
9OP ' HP!' HP' K I I NG' NHP' 9NGN' 9' NHN!' HP!' HP' K I I NIPO' NHP' 7 GN ' P' O ' ! N
AP9 P P' NHMN' HMUGLP P ' MG' M9 !P GMTG ' 6' ' 2' K !G OP PO' NHP' 9MNP ' P 9
OPPO' MG' NHP' P9OP ' R' HP' K !7JG ! ' 7'NHP P' AP' M!T ' !' NHP' NPWN' I MT' AP' PK ' !K 9PO'
AT ' MK !% I N ! ' !' NHMN' HMN' P' KN98' NHP' 1%O 9O' G PM98T ' NHP' T J !Q ' 9O' 8 M!O'
G ' M' I M!%6 7 GN G ! ' G H G T J !OPGN' G !+

F HP' GP !N I P ! N HP P' G' PWKPGG P9T APWJN 7J98 AJN ' 7 !' NHP' P99 LN KN9 7 !' 7'
PWL PGG !' H KH' G ' GN U ! Q9T ' L P M 9G ' !' NH G' L9MT ' G' AGKJ P2' - GNHJ I JG ' N'
MLLPM G' N ' JG ' G'K I LM ! ' Q'H G' ! ' GNM N P' NH' HMN' HP' GJLL GPG' G' NHMN' 7 2 I QP!+



i' GN'9 UP'2'O O'7 '2' MG'OPMO+
% ' T'A TG
HP P' MG' J'P + H G' G'J P'O OP9P+
&' /PN' I P'PIO'NHP'GN T'
2'7J NHP'Ui 'i N+
5 ' M T'NHP'Q OG'7 P7PIO[+
2' J9O'i N'HT'Q O'OPPOG'GH J9O'7 I'IT'9 LG'
-9JKU'M'HM O'GPIPIKP'L NHPP' M9 MI'N'T JNH+
5PIT%"MQM I+' % 2'HM P'GL UP' N'MIO'2'O O' N+
&' MG'M'L IKP+
5 '"P' M'I IK 9 IP' HP' IQG'HP'O O'I P'
&'#'I GN'IK 9 IP' HP' IQG'HP'O O'L UP'I P'
XP P'I NH IQ'L IKP 9 UP'8 7 'HP'O O'L UP'I P'
X NH'9MIQJMQP'NHMN' J9O'I MUP'IP'GLJ I'NHP'GPM+
2P'N'K J9O'G ' M'N'IP';2'KJN'77%G HPMO'#
#IO'MI' QHN'Q9MO'HP'G'I N'GNMIO IQ'HP P'
'NP99'NH G'NM9P'7'I IP+
5 ' 2'MI'G T'7 'NHPP+
T'NH IP' I'N IQJP'NH J'M N'K IOPI%O'MIO'I JGN'
3IOJ P'J'9M ' H J'M N'OPMO+
2'NH JQHN'HMO'APPI'IT'9 O+
#IO'NMUP'H I'7 I' J'L PGPIKP+
5 ' IO'NHP'77PIOP +
% ' NMT'G 'U IQ'
H G'IMI' G APNNP'NHMI'NHP'IMI'HP'G9P +
#G P99'OPGKPIOPO'MG'NHTGP978' MIO'HMNH
P'7NHPP'IP NPO'NHMI'M'AMIO'7' 9 NPIG
"MO'P P'GKM'7 +SD/PN'H G+M IG' I # = I' '3& "
HPT' P'PI N'A I'7 'A IOMQP+
5 ' XHT' 9O'G 9O P
X U'NH J'JIO'NHP' NH'NH J'M N'JILM O'7 +
T'NMGN IQ' 7 J' MNH'I " ' 7OPGKPIN'
#GQ O'MG P
1' '2I'NHMN'HP'GLMUP'N '7M +
5 '#IO'NH J'GHM9N'O P'7 %N+
% ' XP' 99'O P'M99'NH PP'
X KH'HP' I7 K$O'7 I' I P'M MT'HP'L GNG'
XHP P' I'M'. I5$ ' 5 IMGNP %G'QM IPING+
'GPPU'HP' I'NHP'I JINM IG IPM'N ' 97 O8
HPI' ' 5'L KUP%# H KH' " ' '
2'HMO'M'7P QIPO'9PNNP ' 7 I T' I MGNP $G
2N' MG' I T' IGNM IN'OPMNH' T'MKK OPIN
T'9MOT%G'H I J'' HMN'APKM I P' 7H I
2'7J NHP'UI 'I N+
&' /PN' I P'PIO'NHP'GN T'
2'G9P 'H I'NHP P+
5 ' M T'NHP'Q OG'7 P7PIO[+
2' J9O'I N'HT'Q O'OPPOG'GH J9O'7 I'IT'9 LG'
-9JKU'M'HM O'GPIPIKP'L NHPP' M9 MI'N'T JNH+
5PIT%"MQM I+' % 2'HM P'GL UP' N'MIO'2'O O' N+
&' "P' MG'M'L IKP+
5 ' IO'NHP' HP' IQG'HP'O O'I P'
&'#'I GN'IK 9 IP' HP' IQG'HP'O O'L UP'I P'
XP P'I NH IQ'L IKP 9 UP'8 7 'HP'O O'L UP'I P'
X NH'9MIQJMQP'NHMN' J9O'I MUP'IP'GLJ I'NHP'GPM+
2P'N'K J9O'G ' M'N'IP';2'KJN'77%G HPMO'#
#IO'MI' QHN'Q9MO'HP'G'I N'GNMIO IQ'HP P'
'NP99'NH G'NM9P'7'I IP+
5 ' 2'MI'G T'7 'NHPP+
T'NH IP' I'N IQJP'NH J'M N'K IOPI%O'MIO'I JGN'
3IOJ P'J'9M ' H J'M N'OPMO+
I' HMN'HMO'APPI'IT'9 O+
2'NH JQHN'HMO'APPI'IT'9 O+
#IO'NMUP'H I'7 I' J'L PGPIKP+
5 ' IO'NHP'



) R 2!&' 1'(!' 5 3-;' YO

DCFBD +AMN H 8 CD?H M?C AH' +:' P N8 &GC?@ADKFA G 2, ;<5=' CFGDG ' ?' NG OD KC AH' JF OF' @ FC F?PG' B G CGN' CA' F?(KGDG' CF ' LG?BC>BM' K? ? G R

6' HP' 9 7N !Q' JL' HP ' MNP T' PTPG' APHP9O' HP ' HJGAM!O' GNM!O' L !' NHP' HMNKHPG ' I MU !Q' G Q!G' AT' APKU !Q' NH' H G' HM!O #!O' GHP' I MOP' G Q!G' N ' H I ' MQM !=' #!O' M7NP ' NHMN' NHP' 9M!O' X MG' 7M ' P I PO' 7 I ' NHP' GH L ' M!O' NHMN' N9 P' G QHN' APQM!' ' AP' J!MA9P' N ' O GKP !' NHP' 7MKP' 7' M!T' I M!+ #G' 9 !Q' MG' P%P ' GHP' K J9O' GHP' 9 U%O' JL !' NHP' !Q' UPP9+ #!O' HP!' GHP' K J9O' ! ' 9 !QP ' N I P' 7 ' O GNM!KP' UP!' N' PP9' HP' 9 UPO' GN 99' JL !' NHP' GM 9G' NHMN' 79MGHPO' NH' NHP' !O' L !' NHP' I MGN=' #!O' HP!' GHP' K J9O' NHP' GM 9G' ! ' 9 !QP ' 7 !O+ HP' QMN' HP ' N ' HP ' P I LNT' APO' NH' GMO' M!O' G T' HPM N+R

') R =' 8 -5 ' '" &"-' !' 3 !& "$3 ' !-'. !2 -Y

#FG' QBGGH ' N C MM H ' FGDL ' >AD' J O(GN' KBDKA G ' ' ?' CD (H ' 0AH-CD? C' CA' CFG' LGHGPAMGHC' >D?D' H' "A@GA' ?HN' 0BM GC ' F?(KGDG' F? ' LG?BC>BMME' HN O?CGN' CFG' KF MA AKFE' A>' CFG' B G' AD' ?LB G' LE' @?H' A>' ?CBDG8 ' KDANBOC AH ' H' CFG' >D?D8 ' AM MAQBE R

6' O ' !MJQHN' G ' 9P' N9 MN' !' NHP' PM NH' O NH' 9 P+ JN' N ' NHP' PM NH' G I P' GLPK MG' Q O' O NH' Q P8 ' MJQHN' G ' Q O ' AJN ' GN M !%O' 7 I ' NHMN' 7M ' JGP+ &P 9NG' 7 I ' N JP' A NH ' GNJ I A9 !Q' !' MAJGP+R

< ') R =' !& ' 3 --'
7 . ! ' -', ' (&' ' ' "5!& ' '

%D ' 0AFH AH ' H' CF?C' K D C A>' (HN SG ' JF OF' G GHC?MME' LGMAH GN' CA' F ' H?CBDG ' DG@?D(' BKAH' CF ' K? ? G' R =' #FG' CFAB FC' JABMN' KDAL?LME' F?PG' LGGH' @ADG' ?@KM>GN' F?N' ABD' ?BCFAD' M PGN' CA' LG' FAO(GN' J CF' BOF' G KGD@GHC ' ? ' F?PG' LGGH' KBLM FGN' H' M?CGD' C@G ' LE' ?' D?OG' A>' @GH' JFA' F?PG' KD?OC GN' CADCBDG ' J CFABC' K CE ' ?HN' DGM?CGN' CFG@' J CFABC' F?@G ' ?HN' ?DG' EGC' B>>GDGN' CA' GDGOC' CFG D' FG?N ' ?@AH ' FB@?H' LG H I' G' ?DG' LE' HA' @G?H ' BDG ' FAJGPGD ' CF?C' F?(KGDG' @G?HC' CA' ?KKME' ?' JGGK H ' NGHBHO?C AH' CA' BOF' G KGD-@GHC ' BKAH' CFG' KAJGD' A>' K?DC OBM?D' @GN O HG ' #FGDG' O?H' LG' HA' NABLC' CF?C ' CFG' @GN O?M' ?DC LG H ' JFAMME' CGHC?C PG ' C' LGOA@G ' H' A@G' O? G ' ?' KA C PG' NBCE' A>' ?' O GHC>O' G KGD@GHCGD' CA' H>M OC' K?H' BKAH' ?H' H>GD AD' ?H@?M' >AD' CFG' BMC@?CG' KBDKA G' A>' ? B? H ' K?H' AD' OBD H ' N G? G ' C' ' CFG' B GMG ' DGKGC C AH' A>' BOF' G KGD@GHC ' JF OF' @?(G ' F?DN' CFG' FG?DC ' C' ' CFG' G F L C AH' A>' BOF' G KGD-@GHC ' H' CFG' MGOCBDG DAA@' JF OF' ' =' HA A@G' ?HN' H>GOC AB I' #FG' QBGGH' J?' BH?BCFAD GN' LE' FGD' KA C AH' CA

6' N T' NHP' 7 KPG
1 7' NHPGP' NHT' K I L J!OG' !' GJKH' K PMNJ PG' MG'
X P' K J!N' ! N' NH' NHP' HM!Q !Q+R

Z ') R =' $ ' ' ' $ '- '. 5 3. 3 2

!PGDE' AHG' J MM' DG@G@LGD' CFG' HALMG' K? ? G' H' =' ?D?N G' "G-?HGN I ' LAA('

6' "P' GM ' NHP I ' !' NHP ' 7 I G' 7' AMNN9P' M!Q%O+
" ']J KU' NHPT' HPP9%O ' M!O' 79T !Q' APH !O' NHP I ' GH N'
HM L' G9PPN' 7' M T' GH % G' MQM !GN' NHP' 7MKP'
17' NHP ' LJ GJP G ' M!O' P KM I P' AT' 79 QH+R

#FG' GN CAD ' A> &MCAH' DG>GD' CA' K?D?MMGM' K? ? G ' H') D M' ?HN' AD?OG' ? ' ?@AH C' CFG' @? G ' J CF' JF OF' ABD' DG?C' GK O' KAGC' J? ' >?@M?D' #FG' OA@@GHC?CAD ' A>' F?(KGDM' B>>GD' F ' M HG' CA' K? ' J CFABC' ?' H MG' AL GDP?C AH ' H' CFG' ?@G' OGHG' JG' F?PG' CFG' >AMMAJ H ' @A C' OF?D?OCGD C O' G KDG AH' H' CFG' @ABCF' A>' ?' "A@?H' R

R' #G' K I I !' MG' NHP' GNM G'
HMN' I J!N' NHP' ML N 9+R

* KAH' CF ' CGGPGH ' DG@?D(' =' F?(KGDG' F? ' LG CAJGN' A@G' ADH?-@GHC' AH' CFG' KDAPGDL?M' KFD? G' <?' OA@@AH' ?' CFG' F FJ?E8 I' F?(KGDG8 ' KFD? G' KDAPG ' ?@N C' ?' CFAB ?HN' @M?D' KDAA> ' F

' ' ! "

KGD>GOC' >?@M?D CE' J CF' ?M' CFG' (HAJMGN G' CF?C' J?' HGOG ?DE' CA' @?(G' F ' OF?D?OCGD ' KG?(' ?KKDAKD?CGME' J CF' DG>GDGHOG' CA' CFG D' AO?M' KA C AH

#

R >' &' N& ' &-'
"'-!. 5, --' ' &- -'

#FG' JFAMG' A>' CF ' OGHG' H' C ' NGM O?OE' ?HN' LG?BCE' F?' A@G' DG G@LM?HOG' CA' CFG' H F C' OGHG' H' F?(KGDG8 ' #?DQB H' ?HN' $BODGOG ' HNGGN ' F?(KGDG ' H' AHG' AD' CJA' G KDG AH ' GG@ ' CA' F?PG' F?N' F ' AJH' KAG@' N C HOCME' KDG GHC' CA' F ' @HN ' AD' G ?@KMG' R

6 T' NHP' 9 QH' HP' GL PG'
/JK PN M%G' Q9 P' HP P !' HP ' !PPO9P' GN KUG8
" P' NMUPG' N' 7 I ' NHP' %$ % HP P' N' 9 PG+R

?H ' M?OF@A' ?E ' A>' @A GHR

6' 1' G9PPL ' NH J' MLP' 7' OPMNH ' 9 P' OJ99' JL !' HP [
#!O' AP' HP ' GP!GP' AJN' MG' M'
HJG' !' M' KHMLP9' 9T !Q' 2R

$BODGC?' ' H' CFG' ?@G' J?E' NG OD LGN' ? ' ?' @AHB@GHC?M' >B BDG' DGKA H ' BKAH' ?' KMMAJ R

6' X HP P ' 9 UP' M' NJ JG' ' GHP' 9 PG+R

#FG' LG C' MMB CD?C AH' A>' CF ' LG?BC>BM' @? G' ' KDG GHCGN' LE' F?HCDGE8 ' G QB CG' @AHB@GHC' A>' CFG' MGGK H ' F MNDGH' H' $OF>GMN' ?CFGND?M

8 R =' '' R' ' ' ' '$Z YO

CGGPGH ' ? GDC ' J CFABC' A>>GD H ' CFG' M FCG C' GP NGHOG' H' BKKADC' A>' F ' ? GDC AH ' CF?C' +GAD G' GGMG' J?' CFG' ?BCFAD' A>' CF ' AH ' #FG' @ANG ' FAJGPGD ' H' JF OF' MACGH' KG?(' A>' C ' =' ' JAHNGD>BM' JGGC' ?D ' J CF' ?N@D?LMG' JGGC' JBADN ' CA' C I' ' HAC' G ?OCME' H' F?(KGDG8 ' @?HHGD ' ?HN' EGC ' >' C' F?N' LGGH' CFG' JAD(' A>' ?HE' ACFGD' KAGC ' CFG' OA@KM@GHC' >DA@' CFG' @ABCF' A>' BOF' ?' 0F?D?OCGD' ? ' MACGH' JABMN' F?PG' LGGH' D?CFGD' GQB PAO?M ' H' ABD' KAGC8 ' #JGHCE H HCF' AHHGC' JG' F?PG' CFG G' M HG R

6' UP' N ' NHP' 9M U' MN' A PMU' 7' OMT' M G !Q'
O I ' GJ99P!' PM NH ' G !QG' $2 %' '$ 0%' B

.BC' H' $EME8 ' =' MG ?HNGD' ?HN' ?@K? KG I ' JF OF' J?' >D C' KD HCGN' H' 56/ ' JG' F?PG' CFG' @?' G' GPGH' @ADG' OMA GME' DG G@LM H ' CFG' JADN ' A>' CFG' AH ' BD' DG?NGD ' J MM' HAC' ALSGOC' CA' GG' $EME8 ' KAG@' GHC DG R

6' X HMN' A O' G ' G !QG ' TPN' G ' O PG' M 9' \
1' %N G' NHP' M GH%O' ! QHN !QM9P+
? Q ' 6Q ' EJQD' E6Q ' NPJ PJ' GHP' K PG+
#!O' GN 99' HP ' PG' MN' I O! QHN' GP+
M P' L KU' G !Q' 2 H ' G%N' ! ' P' HPM ' \
!P' AJN' NHP' ')' G ' GH 99' M!O' K9PM 8
' MN' $ 0%' %' GHP' K9ML G' HP ' !QG
HP' I !' ! N' MU !Q' N 99' GHP' G !QG+
9)*' $)* NH' HMN' M' L PNNT' NH MN'
- ' A !' PO A PMGN' NJ!PG' H G' ! NP8
" M U ' H ' NHP' E 99T' KJKU G' G !Q+
JKU ' N ' P9K I P' !' NHP' GL !Q+
JKU ' N ' P9K I P' !' NHP' GL !Q+R

0' ') R =' ' !!.'!' ' ('
8 '3!" ' &(-' -'. "Z

CGGPGH ' O?MM ' CF ' =' ?' C?JNDE' @? G I' %ABOG' SB CME' ?E ' =' #FG' KAGC' F? ' H' CF ' H C?HOG ' PGH' ?' >?CF>BM' NG OD KC AH' A>' CFG' @ANG' H' JF OF' CFG' DAA@ ' H' DG?C' FAB G ' JGDG' A@GC@G ' ADH?@GHCGN I

3 ') FS ' " ! -'
+' '".! 3!' ;' 2 ' 2!' 2 ' 3 &, "-.' 7

S b' F?PG' HA' NABLC' CF?C' H' CF ' NG OD KC AH' F?(KGDG' MCGD?MME' NG OD LG ' A@G' JAD(' A>' ?DC' JF OF' FG' F?N' GGH ' C' HAJMG ' AHG' A>

CFG @A C HCGDG C H A> ?HO GHC @?H AH CFGDG ?DG =?HN DAH I A> JF OF CFG =CJA JH(H BKN A> MPGD I ?DG HAC HNGGN =G?OF AH AHG >AAC C?HN H I LBC H ?H ?CC CBNG B>>OGHCME D?OG>BM CA FAJ B CF?C BOF >BDH CBDG J? G GOBCGN HAC AHME A> OA CME @?CGD?M LBC JCF ? (MM BOF ? CFG MADGHC HG ?DC C ?KKM GN CA CFG ADH?@GHC?M ?KKGHN? G A> CFG K?M?OG A> CFG DG?C

#

%$: ! " .0$ 0

=#. 0

: 0 0 $ K "

&?MAHG F? CFG >AMMAJ H AL GDP?C AH BKAH CF ? K? ? G R =F?(KGDG F? FGDG CD?H >GDDGN CA ? LGM?H ?H ?NPGHCBDG JF OF F?KKGHGN CA F LDACFGD GHH B 6#FG ?@G F CAD G V ?E AM H FGN ?M A @?(GCF @GHC AH A> GHH B LDACFGD CA ? LGM?HG JFA H >I FC F?KKGHGN CA GC G ?D8 JADN >? CGHGN H F FGMN LE ?' LMAJ JF OF ?S ?D CDBO(' ?C F@ 6 I &?MAHG F? FGDG >?MMGH HCA ?H GDDAD >DA@ ?' CAA' MCGD?M ?OOGKC?HOG A> F?(KGDG8 JADN #A LG ! F 0 CA LG AHOG HG?DME P?HQB FH CG ?D G O?H KBC ABD >H GD BKAH CFG K? ? G H AM H FGN8 FDAH OMG JF OF F?(KGDG F?N H P GJ R =BD F CAD G >?D N>>GD >DA@ CF V ?G ?D8 ?OOABHC ?>>D@H CF?C ?G ?D OA@H CFG GOAHN C@G J? LE CFG .DC?H J CF P?M?HOE ?HN @?DC?M KDAJG LG?CGH ?HN DGKGMMGN ? FG J? ?C CFG >D C ?HN KGO?MME LE @G?H CF?C ? LGM?HG F?N K FC H CFG #F?@G DG?C K G A> CDGG K(GN J CF DAH CFDAB F JF OF F K LG H GHCGDGN CFG DPGD JGDG KGD FGN ?HN MA C HN ?>CGD F OA@H ?' M?HN FG J? P?HQB FGN H L?CCMG ?HN OAH CD?HGN CA >MGG HCA +?MM?' J CF CFA G FK CF?C DG@?HGN AD SAE A> CF GOAHN P OCADE V ?CF +?M>D N ? LGM?HG @?NG ?' DG?C >G? C ?C $AHNAH ?HN CFGDG N N ?OD>OG CA CFG AN I #FG P OCADE ?HN CFG DGSA OH ?DG G ?OCME H CFG ?@G SB C?KA CAH ? H F?(KGDG

#FG ' : 0 A> CFG AMN OFDAH OMGD $AHNAH #FGE OAH-NGDGN CF?C $AHNAH J? CFG CAJH A> $BN ?HN H ?' @M?D @?HHGD CF?C $BN ?CG J? CFG ?CG A> $BN #FG CD?N C AH CF?C $BN DGLB MC CFG ?HO GHC #DA HAP?HC ' PGH H KGH GD V=' ?DE BGGH I O?HCA LAA(' R

6 " P HMO N 'G !G' H GP P9OPGN KM99PO / JO
/ P7N 7H G H7P I GN 7M I JG I P I T+
! O' P! O9PGG I ! J I P! NG 7H G Q PMN Q O+
HP J !%O M99G HP O O P PO 7T
17 ! M!N %QM !GN 7 KP 7P! P I T+
! O' AJ 9N NHMN QMNP H KH 7H G ! M I P G H QHN+R

. BC)GD CG ?H H F PGDE ?@B H "G C CBC AH A> %GO?EGN HCGM-M GHOG OAHOGDH H . DC?H I' ALSGOC CA CFG OAHHGOC AH LACF A> $BN8 CAJH ?HN $BN ?CG J CF H $BN R

= CAB0F H CFG H?@G A> ABD @A C ?HO GHC OF G> ?HN >?@AB O CE C OABMN HGPGD A> $BN8 CAJH C?(G CFG H?@G A> $AHNAH LGO?B G C F?N HGPGD ?HO GHCME CFG H?@G A> $BN8 CAJH HG CFGD OABMN C >AD CF?C CAJH HAC ?' .DC F LBC ?' ? AH JADN LBC > C CAA(' ?HE ?KKGMM?C AH ?>CGD H $BN C @B C CFGH F?PG LGGH O?MMGN ?GD $BN ?HN HAC $BN8 CAJH LBC OAH NGD H A> FAJ MCCMG ODGN C CFG DGM?-C AH A> +G>>GDE A> &AH@ABCF ?DG JFA >DA@ $BN NACF NGD PG C C @?E D?CFGD LG CFAB FC CF?C FG F?CF ?@? HGN CF H?@G CA F?PG OA@G >DA@ H $BN LGO?B G A> A@G HG?DHG A> ABHN >AD ABD ? AH ?HOG CAD F?P H N PGD ? G LG>ADG +G>>GDE J? LADH O?MMGN C LE CFG H?@G A> $AHNAH FG HAC (HAJ H >DA@ JFGHOG C O?@G @ FC CD? FC @? HG C CA F?PG OA@G >DA@ $BN ?HN CFGDG>ADG AB FC CA LG ?GD $BN AD $BN8 CAJH ? ?>CGD F@ ACFGD O?MMGN C ?HN A@G ?M A A> CFG H?@G A> $AHNAH H . DC F ABHN @?NG C $8FBHN? H LACF ?KKGMM?C AH ? ?@ KGD B?NGN LG H A> CFG . DC?H >D C C?(GH BK ?HN B GN ?>CGD CFG ? AH F?N PGH C CFG H?@G A> $AHNAH . BC FGDG O?HHAC ?' MCCMG @?DPGM FAJ #?O C VAD ?HE BOF ?HO GHC JD CGD FABMN O?MM C LE CFG H?@G A> $AHN HB@ VCF?C F?P H LGGH ? C FABMN GG@ CFG $?C H? H?@G CFGDGA> HOG C F?CF LGGH O?MMGN $AHNAH JF OF ?KKGMM?C AH FG OABMN HGPGD F?PG >DA@ CFG ?HO GHC . DC?H GG H CFGE HGPGD A O?MMGN C 0BM B ?G ?D GG@GN HAC CA (HAJ A> CFG H?@G A> $AHN HB@ LBC H?@GCF CFG O CE A> CFG #D HAL?HC ?HN ?' @?DPGM C CF?C LGCJGGH CFG C@G A> ?G ?D ?HN #?O CB C FABMN OA@G CA GC CFG HGJ H?@G A> $AHN HB@ HA @?H O?H CGMM FAJ #A NGM PGD @E OAHSGOCBDG FAJ CF @?E OF?HOG CA F?PG

F?KKGHGN ?@ MACF >AD CF?C C @?E KGD?NPGHCBDG LG A> A@G N - ?MMAJGN ?HN A A@CC H C J MM MG?PG CFG DG?NGD CA HACG CF?C CFG DG H A> H $BN >DA@ JFA@ A@G J MM HGGN NGD PG CFG H?@G A> $AHNAH J? LG>ADG 0BM B ?G ?D O?@G HCA . DC?H ?HN HAC ?>CGD >AD ?G ?D >D C GHCGDGN . DC?H H CFG C@G A> ? LGM?H JFA J? LDACFGD BHCA $BN ?HN BOOGGNGN HG C ?>CGD F@ ?HN H ?MM M (GM FAAN > $BN F?N PGH C ?>CGD F@ GM> CFG HGJ H?@G A> ?GD $BN AD ? A@G @ADG >AHNME F?PG BKKA GN A> $BN8 CAJH 0BM B ?G ?D JFA O?@G CF CFGD A AAH ?>CGD F NG?CF OABMN HAC F?PG LGGH A BCCGDME HAD?HC A> CFG HGJ H?@H A> CF?C O CE LBC F?PG (HAJH C ? JGMM ? BOF JD CGD ? ? O?@G ?>CGD F@

= !P NGHC C ? CF?C ABD ? AH ?HOG CAD O?MMGN C $BHNGH V H KDAHBHO?C AH ABHNGN $AHNAH A@GC@G ?NN H CFGDGBHCA CFG ADN H?DE CGD@H?C AH JF OF CFGE ?PG CA ?MM J GMM >GHOGN O C G AD D?CFGD BOF ? F?N >ADC AD O? CMG ?HHG GN BHCA CFG@ LE O?MM H C $BHNGHL D ?HN $BHNGHOG? CGD CF?C ?>CGD ABD M?CCGD KDAHBHO?-C AH $AHNAHLBDE AD $AHNAH 0FG CGD #F H?@G A> $BHNGH HOG P?D GN HCA $AHNAH CFGE ?PG C H DG ?DN ?HN @G@ADE A> CFG ?HO GHC >?@AB @GCDAKAM C?H O CE A> $BHNGH H OAHGM?HN AD OAH? A@G-C @G A> DG?CG C CD?>>O A> ?MM CFG G? C K?DC A> +GD@?HE

= HN >HN H D?BCT B CF?C !D O CFG >ABDCF A> CF?C H?@G H A> %GH@?D(JGHC H KGD AH CA "A@G CA AM O C AKG ? 0F?M CFG GOAHN CF?C %GH@?D(' @ FC LG HA MAH GD BHNGD CFG GOOMG ? C O?M SBD N OC AH A> CFG L FAK A> ?@LDAB F LBC CF?C CFG DOFL FAK A> $BHNGH FABMN LG CFG 0F G> DGM?CG A> %GH@?D(JGNGH ?HN AD-J?E CFG JF OF H >HG J? D?HCGN >AD CFG H?@G A> $BN ?CG JF OF A@G J MM HGGN F?PG A CA F?PG LGGH O?MMGN A> H $BN ?HN ?OOADN H ME H>GD CFG H?@G A> CFG O CE ?H JGD CF?C C OABMN HGPGD A> $BN LG O?MMGN $BN ?CG LGO?B G ?CG (HA . DC F JADN ?HN F?N C?(GH H?@G A> $BN C @B C F?PG LGGH $BNKADCF ?HN HAC $BN ?CG . BC FAJ OA@GCF C CF?C ?MM CFG ?CG A> $AHNAH EG? ?HN ?MM CFG CDGGC ?HN M?HG A> CFG O CE F?P H ! H M F H?@G $BN ?CG AHME @B C DG@?H . DC F AD CFG AHG F?M> A> C CA J C $BN R ?CG ? LG>ADG F?CF LGGH ?N LG H ! H M F W #F BDGME O?H F?PG KDA-OGGNGN A> HA ACFGD O?B G CF?H A> CFG M?O(' A> FGGN CF?C @GH F?PG C?(GH BHCA ABD ?HO GHC M?H B? G ?HN +G>>GDE A> &AH@ABCF AD A@G ACFGD ? BH BDG H F GKADC ? FG LE FG?D H AHME A> CFG H?@G A> BN ?CG @ FC G? ME >?MM HCA ?' NDG?@ AD @? H?C AH CF?C C @B C HGGN F?PG F?N CF?C H?@G A> H $BN #FGDG ' HA NABLC LBC CF?C ABD ? AH ?HOG CAD V? F?PG ?N 0F?H H ?MM CFG H?@G A> CFG ACFGD ?CG ?LABC $AHNAH N N ?M A OF?H G CF ?HN O?MMGN C $BN-?CG ACFGD J G ?M A JD CCGH $GAN G?C $BN ?HN $GAN ?MM AHG ?HN H ABD ?HO GHC M?H B? G >AM(' AD KGAKMG ?HN A $BN ?CG ? @BOF CA ?E ? ADC?' KAKBM CFG ?CG AD K? ? G A> CFG KGAKMG HN > ?' @?H NA AL GDPG C FG F?MM >HN CF?C A> ?MM CFG ?CG A> CFG O CE CFG DG?CG C K? ? G A> CFG KGAKMG ?CFDAB F CF ?CG ?HN EGC @B C C HGGN F?PG LGGH @BOF @ADG H C@G K? C LG>ADG GJ ?CG J? LB MNGN JF OF ? &D 0AFH CAJ ?CF J? >D C LB MNGN ?LABC CFG DG H A> H GHDE CFG GOAHN HN CFGDG>ADG CFG H?@G A> $GAN ?CG J? ?KCME PGH H DG KGOC CA CFG DG?C OAHOABD G A> KGAKMG CFDAB F C I

R = 0 ./ BK+

OOADN H CA AM H FGN &BM@BC B CFG >D C H A> . DC?H JFA J? ODAJHGN J CF ? AMNGH ODAJH = @?NG @?HE AAN M?J JF OF JGDG MAH ?>CGD B GN O?MMGN &BM@BC B 8 M?J CBDHGN ABC A> CFG . DC F KGGOF HCA $?C H LE +MN? D OB ?HN MAH C @G ?>CGD CD?H M?CGN ABC A> $?C H HCA ! H M F LE M>DGN H A> ! H M?HN ?HN @H MGN H F C?CBCG I

I R = %$! D $ /

F?(KGDG CMM >AMMAJ AM H FGN MCGD?MME R = #F ' @?H J? LDAB FC BK ?C "A@G ?HN CFGDG J? D $ LE B B CB ?G ?D I %ABOG ALSGOC CA CFG JADN D $? ? NAJHD FC ?H?OFDAH @ ? GM ? CA ?HACFGD @M?D K? ? G JFGDG E@LGM HG ?NNDG G . GM? D B ?HN F AH R

6 T J U!PPG
GP I T) $ % %NHP AMNN9P+%%

. ACF AM H FGN ?HN F?(KGDG H ?KKME H ? CGD@ A> CFG >GBN?M ? G CA OAHPGE CFG HAC AH A> ? "A@?H N H CE N N KDGO GME JF?C CFGE JGDG O?MMGN BKAH CA NA #FGE B GN ? JADN JF OF OAHPGEGN M N C HOC @? G @BOF @ADG OMG?DME CF?H ?HE KMBD? G A> CD OCGD KDA-KD GCE #FGP CD?H M?CGN NG? ? 2 22

ʻ R D ʻ$ 0 /

#FGʻ>D?H(MDHʻDHʻCFGʻN?Eʻ A>ʻ F?(KGDGʻF?Nʻ LGOA@Gʻ ?ʻMG ʻD@KADC?HCʻ KGD AH? Gʻ CF?Hʻ FGʻ J?ʻDHʻCFA Gʻ A>ʻ F?BOGD R

6ʻ #ʻO M!UP9P !ʻ MGʻ !ʻNH Gʻ K I LMQ! P8
X H NPʻ MGʻ H Gʻ HP Oʻ MGʻ GNHPʻ OMTPG P+
1 7ʻH Gʻ K I L9PW !ʻHPʻ MGʻ GM!QJ !+
X P ʻ9 POʻ HPʻ ATʻ NHPʻ I PʻMʻG Lʻ !ʻ !+
ʻ9 P!ʻ !ʻOP9 Nʻ MGʻ P Pʻ H Gʻ !P
O ʻHPʻ MGʻ 3L KJ PGʻ P!ʻ G !P
HMNʻ HP9Oʻ L ! !ʻNHMNʻ L9P !ʻOP9 Nʻ
X MGʻ P M 9Tʻ 7P9 K NPʻ LM N NP+
#!ʻH JGH 9OP ʻM!Oʻ NHMNʻ Mʻ Q PNPʻ MGʻ HP 8
P !Nʻ?J9 M!ʻHPʻ MGʻ !ʻH Gʻ K !N PP+
" Gʻ A POPʻ H Gʻ M9Pʻ MGʻ M9 MTʻ M7NPʻ ! 8
#ʻAPNNPʻ 2 ʻ I M!ʻ MGʻ ! ʻ HPʻ ! !+
X NH JNP!ʻAMUPʻ I PNPʻ !P Pʻ MGʻ H Gʻ H JG+
1 7ʻ7 GHʻM!Oʻ 79PGHʻM!Oʻ NHMNʻG ʻ L9P!NP JG+
2Nʻ G!P POʻ !ʻH Gʻ H JGʻ 7ʻ I PNPʻ M!Oʻ O !UP+
1 7ʻM99Pʻ OP !NPPGʻ NHMNʻ I P!ʻK JOʻ 7ʻNH !UP+
#7NPʻNHPʻG !O Tʻ GPG !Gʻ 7ʻNHPʻ TP P+
ʻKHM!QPOʻ HPʻ H Gʻ I PNPʻ M!Oʻ H Gʻ G JLP P+
OJ9ʻ I M!Tʻ Mʻ 7MNʻ LM N KHʻ HMOOPʻ HPʻ !ʻ I P P+
#!Oʻ I M!Tʻ Mʻ A P I Pʻ M!Oʻ I M!Tʻ Mʻ 9JKPʻ !ʻGNP P+
X ʻ MGʻ H Gʻ K UPʻAJNʻ 7ʻH Gʻ GMJKPʻ P Pʻ
- !M!Nʻ M!Oʻ GHM LPʻM!Oʻ POTʻ M99ʻ H Gʻ QP P+
" Gʻ NMA9Pʻ O I M!Nʻ !ʻH Gʻ HM Pʻ M9 MTʻ
N OPʻ POTʻ K P POʻ M99ʻ NHPʻ 9 !QPʻ OMT+
#Nʻ GPGG !Gʻ NHP ʻ MGʻ HPʻ 9 Oʻ M!Oʻ G P+
O7Nʻ 7NP!ʻN I Pʻ HPʻ MGʻ U! QHNʻ 7ʻNHPʻ GH P+
#!ʻM!P9MKPʻ M!Oʻ Mʻ Q LK P Pʻ M99ʻ 7ʻG 9U
" P!Qʻ MNʻ H Gʻ Q OP9ʻ H NPʻ MGʻ I Pʻ I 9U+
#ʻGHP P Pʻ HMOOPʻ HPʻ AP!ʻM!Oʻ Mʻ K J!N J +
X MGʻ ! ʻ HP ʻG KHPʻ Mʻ NHTʻ M MG J +R
ʻ ʻ ʻ ʻ " 2ʻ ʻ %ʻ 333

. BCʻ ?ʻ OGHCBDEʻ ?HNʻ ?ʻ F?M>ʻ M?CGDʻ CF?Hʻ F?BOGDʻ FGʻ EP?ʻ CMʻ ?ʻ ND HD>DGNʻ @G@LGDʻ A>ʻ CFGʻ M?HNGNʻ ?DD CAOD?OEʻ =ʻ!H M?HNʻ Dʻ Aʻ CFDO(ʻ KDG?Nʻ ?HNʻ >DMGNʻ JDCFʻ DDOFʻ ?HNʻ M?HNGNʻ @GHʻCF?Cʻ CFGDGʻ Dʻ O?DOGʻ?ʻ @?MMʻP MM? Gʻ DHʻ JFDOFʻ EABʻ @?Eʻ HACʻ >DHNʻ ?ʻ (HD FCʻ ?Hʻ G QBDGʻ ADʻ A@Gʻ BL C?HC?Mʻ FAB GFAMNGDʻ 0A@@AHMEʻ O?MMGNʻ ?ʻ D 4ʻ ?MMʻ @GHʻ A>ʻ 0AH DNGD?LMGʻ G C?CG Iʻ #FDʻ ʻ Dʻ CFGʻ NG ODKCDAHʻ A>ʻ DDʻ 0AFHʻ ADCG OBGʻ DHʻ CFGʻ DG Hʻ A>ʻ GHDEʻ) ʻ #FGʻ>D?H(MDHʻ DHʻ CFGʻ C@Gʻ A>ʻ F?(KGDGʻ F?Nʻ >ADʻ CFGʻ @A Cʻ K?DCʻ AHGʻ BKJ?DNʻ DHCAʻ CFGʻ QBDGʻ ADʻ NAJHJ?DNʻ DHCAʻ CFGʻ EGA@?H4 ?HNʻ CFGʻ H?@Gʻ F?Nʻ KDAL?LMEʻ LGOA@Gʻ EHAHE@AB ʻ JDCFʻ @?MMʻ >DGG-FAMNGDʻ ?HNʻ OBMCP?CADʻ ,ʻ ʻ >D?H(MH8ʻ FAB GJD>GʻI ʻ JABMNʻ JG?Dʻ =ʻHAʻ 0A CMGDʻ BDCʻI ʻ CF?Hʻ @A GHʻ NG DGNʻ >ADʻ 0AHOG?M@GHCʻ $?CD@GDʻ F?ʻ NG ODLGNʻ CFGʻ >?D@GDʻ A>ʻ CFGʻ G?DMEʻ K?DCʻ A>ʻ CFGʻ D CGGHCFʻ OGHCBDE R ʻ =ʻ & Eʻ >?CFGDʻ J?ʻ ?ʻ EGA@?Hʻ ?HNʻ F?Nʻ HAʻ M?HNʻ A>ʻ FDʻ AJHʻ AHMEʻ FGʻ F?Nʻ ?ʻ >?D@ʻ A>ʻ CFDGGʻ ADʻ >ABDʻ KABHNʻ LEʻ EG?Dʻ ?Cʻ CFGʻ BCCGD@A Cʻ ?HNʻ FGDG-BKAHʻ FGʻ CMMGNʻ Aʻ @BOFʻ ? ʻ (GKCʻ F?M>ʻ ?ʻ NATGHʻ @GHʻ Gʻ F?Nʻ J?M(ʻ>ADʻ ?Hʻ FBHNDGNʻ FGGKʻ ?HNʻ @Eʻ @ACFGDʻ @M(GNʻ CFDCEʻ (HG I

gʻ ʻ R ,ʻ ʻ- " "(Z

#FGDGʻ Dʻ ?ʻ OAHCDAPGD Eʻ ?LABCʻ CFGʻ @G?HDHʻ A>ʻ CFGʻ JADNʻ - "?ʻ ?KKMDGNʻ CAʻ ?ʻ LGGCMGʻ Hʻ ?@MGCʻ CFGʻ KDDG Cʻ ?Eʻ A>ʻ KFGMD?R

6ʻ4$ %ʻ79 !NGʻM!Oʻ LPAA9PGʻGH J9Oʻ APʻNH !ʻ !ʻHP +R

ʻ- "FGDGʻ Dʻ ?ʻ CFDHʻ NDPDNGNʻ ?HNʻ DCʻ Dʻ B GNʻ >ADʻ A@GCFDHʻ JADCF-MG R>D? @GHC ʻ &Dʻ #ADMGCʻ ?Eʻ CF?Cʻ - "D HD>DGʻ NBH ʻ ?HNʻ CF?Cʻ ,ʻCFGʻ F?DN LA@ʻ LGGCMGʻI ʻ DHʻ &?OLGCFʻ Dʻ CFGʻ LGGCMGʻ LA@ʻ DHʻ NBH ʻ #FDʻ Dʻ OGDC?DHMEʻ AHMEʻ ?ʻ GOAHN?DEʻ @G?HDHʻ A>ʻ - "ʻ Gʻ O?HHACʻ NABLCʻ CF?Cʻ F?(KGDGʻ DHʻ CFGʻ K? ? Gʻ LG>ADGʻ B ʻ B G ʻ CFGʻ GKDCFGCʻ - " "?ʻ ?KKMDGNʻ CAʻ CFGʻ >MD FCʻ A>ʻ CFGʻ LGGCMGʻ ʻ- " "(Sʻ CFGʻ LGGCMGʻ JFA Gʻ O?MEʻ JDH O? Gʻ ?DGʻ HACʻ >AD@GNʻ >ADʻ ?ʻ >MD FCʻ >?Dʻ ?LAPGʻCFGʻG?DCF R Dʻ OAHCD? CGNʻ JDCFʻ ʻ.& ^/ ;"ʻ 3ʻ #FGʻ F?DNʻ BKKADCʻ CFGʻ DH GOCʻ JFGHʻ FGʻ DD Gʻ >DA@ʻ CFGʻ DABHNʻ LBCʻ CFGEʻ NAʻ HACʻ GH?LMGʻ FD@ʻ CAʻ OMG?PGʻ CFGʻ ?DDʻ JDCFʻ ?ʻ LDN MD(Gʻ JDH ʻ ʻ- "B(! ʻ LGGCMGʻ A>ʻ &?OLGCFʻ Dʻ CFGDG>ADGʻCFGʻ LGGCMGʻ BKKADCGNʻ AHʻ DCʻ F?DN

Ż ʻ) R =ʻ "$.!ʻ ʻ ʻ ʻ ʻ !ʻ 3(5 ʻ2 -$ ʻ &-ʻ(ʻ , , "Z

CGGPGH ʻ F? ʻ ?Hʻ DHCGDG CDH ʻ HACGʻ BKAHʻ CFDʻ K? ? G R
! = #Aʻ < F?H ʻ LEʻ CFGʻ J?MM 8ʻ NAGʻ HACʻ @G?Hʻ CAʻ LGʻ OAHPGDCGNʻ DHCAʻ 3 3ʻ.!ʻ ʻ !! $ LBCʻ CAʻ LGʻ & 3&,$?ʻ B GMG ʻ ?@AH ʻ CFGʻ HG MGOCGNʻ OAHCGHCʻA>ʻ?ʻ 2 "!(ʻ Aʻ DHʻ &G? BDGʻ >ADʻ &G? BDGʻ R

Yʻ HMNʻHM Pʻ9 UPʻJ!GK J %Oʻ M I J ʻ$ ʻ"2ʻ $ ʻ8 ʻʻ G

FGHʻ ?ʻ LAEʻ ?Cʻ ?Hʻ ?HO GHCʻ @?H DAH FAB Gʻ DHʻ B>>AM(ʻ ʻ ?J ʻ AHGʻ A> CFG Gʻ DGKA DCAD G ʻ JFDOFʻ VCF?H(ʻCAʻ ?ʻ BOOG DAHʻ A>ʻ AMNʻ @?DN ʻ ʻF?N 6,6ʻ

LGGHʻ KDG GDPGNʻ JDCFʻ BKGD CDCAB ʻ DGPGDGHOGʻ >ADʻ ?M@A Cʻ ?ʻ OGHCBDEʻ ?HNʻ ?ʻ F?M>

=ʻ MACFG ʻ JGDGʻ HACʻ >AD@GDME ʻ? ʻ?Cʻ KDG GHC ʻ@?NGʻ A>ʻ MD FCʻ @?CGDD?M ʻ JGDGʻ HACʻ (GKCʻ DHʻ ND?JGD ʻ ADʻ DPGHʻ ?J?Eʻ? ʻ AAHʻ? ʻM?K Gʻ A>ʻ CD@Gʻ ADʻ 0F?H Gʻ A>ʻ >? FDAHʻ F?Nʻ D@K?DGNʻ CFGDDʻ P?MBG ʻ Hʻ CFGʻ OAHCD?DE ʻ CFGEʻ JGDGʻ FBH ʻ BKAHʻ JAANGHʻ KG ʻ DHʻ ?ʻ DAA@ʻ ?KKDAKDD?CGNʻ CAʻ CFGʻ AMGʻ KBDKA Gʻ A>ʻ DGOGDPDH ʻ CFG@ʻ ?HN ʻCFAB Fʻ BOFʻ O? C A>>ʻ CFDH ʻ?ʻ JGDGʻ OA@KA GNʻ A>ʻ ʻ BL C?HOG ʻ JGDGʻ AOO? DAH?MMEʻ , , "ʻ >ADʻ NA@G CDʻ B G ʻ VPDTʻ @?HCMG ʻ>ADʻ DH>?HC ʻ PG C ʻ>ADʻ OFDMNDGHʻ ?HNʻ OABHCGDK?HG ʻ>ADʻ LGN ʻ?DCDOMG ʻ A>ʻ DH>GDDADʻ QB?MDCEʻ JGDGʻ B>>GDGNʻ CAʻ 3 (5 ʻ2 -ʻ CMMʻ? Gʻ?HNʻ @ACF ʻ F?Nʻ NG CDAEGNʻ JF?Cʻ KDNGʻ JABMNʻ HACʻ KGD@DCʻ CAʻ LGʻ JADHʻ LEʻ GDP?HC ʻ ADʻ KAADʻ DGM?CDAH I

ʻ

-ʻ ʻ S %&ʻ -ʻ ʻ !!' 5@B

&D ʻ $GHHA ʻ F? ʻ CFGʻ >AMMAJDH ʻ DG@?D(ʻ BKAHʻ CFDʻ K? ? G R = #FDʻ KDDHOG ʻ >AD GCCDH ʻ CF?Cʻ FGʻ F?Nʻ KBCʻ AHʻ LAE8ʻ OMACFG ʻ CAʻ LGʻ?ʻ KEʻ BKAHʻ CFGʻ ?OCDAH ʻ A>ʻ FGDʻ FB L?HN ʻ 0A@@GHOG ʻ 0AA(ʻ CAʻ CJAʻ EABH ʻ >ADG CGD ʻ ?HNʻ CFGDDʻ >?CFGDʻ JFAʻ MDPGʻ DHʻ ?ʻ O?PG ʻ ?HNʻ JGʻ ?DGʻ CAMNʻ FAJʻ HDOGMEʻ FGʻ ?BOGNʻ CFGʻ LDACF ʻ GDC?DHMEʻ CFDʻ KDDHOG ʻ F?Nʻ ?ʻ @A Cʻ GOAHA@DO?Mʻ GNBO?CDAH Iʻ %ABOGʻ F? ʻ KDAKGDMEʻ 0A@@GHCGNʻ BKAHʻ CFDʻ D@KGDCDHGHOGʻ R =ʻ AJʻ JF?Cʻ D ʻ CFDʻ LBCʻ CAʻ G KA Gʻ FGDʻ AJHʻ D HAD?HOGʻ A>ʻ?HODGHCʻ @?HHGD ʻWʻ >ʻ FGʻ F?Nʻ @D GNʻ CFGʻ ?NP?HC? Gʻ A>ʻ QB?MD>EDH ʻ FGD GM>ʻ? ʻ?ʻ 0A@@GHC?CADʻ AHʻ F?(KG?DG8ʻ KMAC ʻ LEʻ?ʻ KGDB ?Mʻ A>ʻ ABDʻ AMNʻ DA@?HOG ʻ FGʻ AB FCʻ ?Cʻ MG? Cʻ CAʻ F?PGʻ DG@G@LGDGN ʻ JF?Cʻ GPGDEʻ JGMM DH>AD@GNʻ JA@?Hʻ A>ʻ CFGʻ KDG GHCʻ ? Gʻ D ʻ ?OQB?DHCGNʻ JDCFʻ CFGʻ GNBO?CDAHʻ A>ʻ CFGʻ KDDHOG G ʻ DHʻ A@GD8ʻ ʻ NE GE 8ʻ Cʻ D ʻ DNMGʻ CAʻ ?CCG@KCʻ CAʻ SBN Gʻ A>ʻ ?HODGHCʻ D@KMDODCEʻ LEʻ?ʻ @GDGʻ (HAJMGN Gʻ A>ʻ @ANGDHʻ @?HHGD ʻ ?HNʻ BOFʻ >? CDNDAB ʻ ODDCDO ʻ F?Nʻ LGCCGDʻ OMA Gʻ CFGʻ LAA(ʻA>ʻ F?(KG?DGʻ >ADʻ GPGD I R &- ! -$ PAMʻ DDʻ K ʻ 7/

%% ʻ R 6ʻ ʻ &""! "2!& ".ʻ YO

GDOEʻ? (ʻ =ʻ ʻCFDʻ ?Hʻ ?MMB DAHʻ CAʻ CFGʻ L?LG ʻA>ʻCFGʻ JAANʻW ADʻ J? ʻ CFGʻ HACDAHʻ A>ʻ CFGʻ DGNLDG? Cʻ OAPGDDH ʻ NG?Nʻ LANDG ʻ GHGD?Mʻ LG>ADGʻ CFGʻ JDDCDH ʻ A>ʻ CF?Cʻ L?MM?NWIʻ Cʻ F? ʻ LGGHʻ FAJHʻ CF?Cʻ CFGʻ HACDAHʻ F? ʻ LGGHʻ >ABHNʻ DDDʻ ?Hʻ G?DMDGDʻ LAA(ʻA>ʻ H?CBD?Mʻ FD CADEʻ ?HNʻ CFGDGʻ O?Hʻ LGʻ HAʻ NABLCʻ CF?Cʻ DCʻ J? ʻ ?Hʻ AMNʻ KAKBM?Dʻ LGMD>ʻ #FGʻ DGNLDG? Cʻ F? ʻ ?MJ?E ʻ LGGHʻ ?ʻ>?PABDDCGʻ JDCFʻ CFGʻ KAGC ʻ ?HN

6ʻ& A !ʻNHPʻ I PM!ʻ NHMNʻAPGNʻ 7ʻM99ʻ9 PGʻ I P! R

?ʻ .DAJHGʻ DH ʻ J?ʻ H?CBD?MMEʻ G@KMAEGNʻ DHʻ CFGʻ M? Cʻ A>>DOG ʻA>ʻ MAPG ʻ %D?ECAHʻ ?E ʻ NDGOCMEʻ D@DC?CDH ʻ F?(KGDGʻ R

6ʻ P !Qʻ NHʻ %%ʻ NHPʻ OPMO%Gʻ J!K9 GPOʻ PTPʻ HPʻ 9 NN9Pʻ POA PMGNʻ NPMKHPNHʻ ($ 2

Hʻ CFGʻ LG?BCD>BMʻ C?HT?ʻ JFDOFʻ +D?Eʻ F? ʻ A@DCCGNʻ >DA@ʻ FD ʻ ! MG Eʻ CFGʻ DNG?ʻ D ʻ KBCʻ JDCFʻ FD ʻ B B?Mʻ G QBD DCGʻ DG>DHG@GHC R

6ʻ HP Pʻ GKMNNP %Oʻ 9ʻ NHPʻ PM 9 PGNʻ 7ʻNHPʻ TPM + Tʻ HM!OGʻ J!GPP!ʻ M Pʻ GH P Gʻ 7ʻ 9PNGʻ7 J!O8 HPʻ POA PMGNʻ9 PGʻN ʻAJ 9Oʻ M!Oʻ M A9Pʻ NHP P+ #!Oʻ9 NN9Pʻ7 NGNPLGʻ9 QHN9Tʻ L !Nʻ NHPʻ Q J!O+R

ʻ R =ʻ 8ʻ 1ʻ"! ʻ!&ʻ!(- N& -Z

Hʻ CFGʻ HCDANBOCADEʻ ACDOGʻ JGʻ F?PGʻ DPGHʻ ?Hʻ AKDHDAHʻ ? ʻ CAʻ CFGʻ " ʻ P?MBGʻ A>ʻ CFGʻ NDD Gʻ A>ʻ AMMDH ʻ ? ʻ OA@K?DGNʻ JDCFʻ CF?Cʻ A>ʻ F?(KGDGʻ #?(GHʻ ?K?DCʻ >DA@ʻ CFGʻ OGHGʻ DCʻ JDMMʻ ?MJ?Eʻ LGʻ DG?Nʻ JDCFʻ KMG? BDG

#ʻ 1 :

4 ʻ"2ʻ5 %ʻ ʻ %ʻ ʻF ' ≠% -- % ʻ ʻ" ʻ

ʻ7M ʻO OP9P%Gʻ Q MGGTʻN I A+
7Nʻ I M OGʻ M!Oʻ 99MQPʻ H !OGʻ GHM99ʻ A !Qʻ
3MKHʻ LP! !Qʻ G PPNʻ 7ʻPM 9 PGNʻA9 I +
#!Oʻ 79Pʻ M99ʻ NHPʻ A PMNH !Qʻ GL !Q+

ʻ M 9 !Qʻ QH GNʻ GHM99ʻ OM Pʻ MLLPM ʻ
ʻ PWʻ NHʻ GH PUGʻ NH Gʻ]J PNʻ Q P8
JNʻ GHPLHP Oʻ 9MOGʻ MGGP I A9Pʻ HP P+
#!Oʻ I P9N !Qʻ Q !Gʻ !ʻNHP ʻ9 P+

' GPGH A>'CF?C OFAAM CA' JF□OF JG HAJ' E□GMN' ABD' ALGN□GHOG' R CFG OFAAM JF□OF F? ' 0? C A>'CFG F?0(MG ' A>' CFG BH□CG ' ?HN' SBN G ' A>' CFG DA@?HC□D ND?@?'LE'□C ' AJH' M?J R F? ' HAC' MAA(GN' PGDE' GHCFB □? C□07MME' BKAH' E@LGM□HG' ? ' ?' ND?@?C□D' JFAMG' #A' CFG G QB□ □CG OF?D?0CGD' A>' @A GH ' C?(GH' ?K?D' >BMM' SB C□OG F?' LGGH' NAHG' H ' KA□HC ' J□CF' DG?C' DADDGOCHG ' ?HN' F? ' 0?DD□GN' CFG@' ABC' J□CF' GMG-?HOG ' ?>' HAC' J□CF' >ADOG ' ACF□H ' 0?H' LG' @ADG' SB C'>AD'G ?@KMG' CF?H CF□ ' AL GD P?□A H='#FG' GH G A>' @□ >ADCBHG' D?CFGD' CF?H' CFG GH G A>' □HS8DE' DBMG ' CFG N□ KA □CAH' A>' @A GH I' &D ' 0?@G AH ' ? ?□H' FJ ' ?H?METGN' CFG OF?D?0CGD' J□CF FGD' B B?M ?OBCGHG ' ?HN' NGM□O?OE' A>' KGDOGKC□AH';H ', CFGD ' A>' F?(KGDG8 ' 0F?D?0CGD ' ?DG ' ? ' ND?@?C□D' ?HN' KAGC□D' 0AHOGKC□AH ' @ADG' CD□(□H ' @ADG' LD□MM?HC' @ADG' KA J GD>B□' LBC A>' ?MM' F□ ' JA@GH ' 0AH □NGDGN' ? ' □HN□P□ND?M ' D?CFGD' CF?H' ? ' FGDA□HG ' @A GH□ ' CFG @A C KGD>GOC I'0' .BC' CFG' DGM?C□AH' A>' @A GH ' ? ' CFG OGHCDG A>' ?' ND?@?C□D' O□DOMG ' F? ' O?DOGME ' J□G' CF□H(' LGGH ?NGQB?CGME' KA□HCGN' ABC' G K? ' APGD' JF?C' %D' 0AFH AH' ?E ' □H' ?' CAHG' A>' OD□CO□ @' JF□OF' LGMAH ' ? ' @BOF' CA' CFG ? G ? ' CA' CFG @?H' ?LABC' ,'CFG >AMEE' A>'CFG >□OC□AH ' CFG ?L BDN□CE' A>' CFG 0AHNBOC' CFG 0AH>B □AH' f A>' CFG GPGHC ' □H ?HE' E CG@' A>' M□>I' FGH' 0AFH AH' JDACG' CF□ ' FG DGKA GN' BKAH ?H' □@KM□O□C' LGM□G>' □H' F□ ' AJH' 0?HAH ' A>' OD□CO□ @R CFG AK□H□AH ' BKAH' J□F□OF' #FA@? ' ?DCAH' F?' G KM?HGN' F□ ' AJH' NGKDG-O?C□AH' A>' D□A CA' ?HN' KGH GD R =' G ' JFA' M□PG' □H' CFG N?E ' A>' J□D□CH ' L□E' DBM□ ?DG ?KC' CA' CDE' GPGDE' 0A@KA □C□AH' LE' CFA G M?J ' J F□OF' JG' F?PG' LGGH' C?B F□' CA' CFH(' CFG AMG' OD□CGD□AH' A>' G OGMMGHOG' '?HN' NG □ H' J F□OF' GP□DE' @ANG@' KGD>AD@?HOG□ ' G KGOCGN' CA' F?PG' □H KAG@ ' J F□GDG' CFGE' HGPGD' J GDG' DG ?DNGN' AD' □HCGHNGN I' (?DCAH' J ?' ?' 1AGP MN iG' i'NHP'OM T' >JPPi' 9#' +

FB@ADAB ' C □ ' ? ' KDA>ABHN' BHNGD' ?' ?E' ? KGOC' ? ' A@G A>' CFG F□ FG C KGOB M?C□AH ' A>' ?@MGC

') R ='7 ', " ', " . .2' (

?DLBDCAH' DG@?D(' ,' C ?KKG?D ' >DA@' ?' HB@LGD' A>' BOF K? ? G ' ? ' CFG G CF?C ABD' ?BCFAD' J? ' HAC □ HAD?HC' A>'CFG >□HG ?DC ' 'I' CA' JF□OF' CGGPGH ' DGKM□G ' ='#FG' K?HCFGAH ' A>'F□ ' AJH ? G' V GPGD?M' A>' JF□OF' F?PG' GGH '?>>ADN' ?' @A C @□HBCG ?HN' K?DC□OBM?D' ?OOABHC' A>'CFG N□>>GDGHC' NG DGG ' A>'LG?BCE' □@KBCGN' CA' CFG N□>>GDGHC' NG□C□G ' ?HN' ? ' F?(KGDG' F?N' ?C MG? C ?H' AKKADCBH□CE' A>' DG?N□H ' F?K@?H8' CD?H M?C□AH' A>' A@GD ' CFG >□D C K?DC' A>' JF□OF' J ? ' KBLM□ FGN' □H 514 ' J□CF' ?NN□C□AH ' □H' 516 ' ?HN' GHC□DG □H' 4 ' FG @□ FC F?PG' C?(GH' CFG G □NG? ' >DA@' CFGH0G ' J□CFABC' LG□H ' ?C ?MM' □HNGLCGN' CA' F□ ' AJH' K?DC□OBM?D' AL GDP?-C□AH ' AD' ?0QB?□HC?H0G' J□CF' C?CB?DE ?HN' K?□HC□H I' □GGPGH ' F? ' FGDG @□ GN' CFG' KA□HC ' ? ' □C J ? ' M□(GME' FG' JABMN' NA' #F?C' F?(KGDG' J ? ' >?@□M□?D' J□CF' JAD(' A>' ?DC' J G F?PG' ?LBNH?HC' KDAA>' #?(G' >AD' G ?@KMG' F□ ' P□P□N' NG OD□KC□AH' □H' CFG' #?□QB□H' ?HN' $BODGOC' A>

6 #'L PKP
1 7GU 97J3' LM ¡N ¡Q' ¡MOP'7 '- M ¡%G T+R

. BC' CFG' K? ? G' LG>ADG' B ' □HN□O?CG ' A@GCF□H ' @ADG' H' =' KA CBD' LGEAN' L□G>' H?CBDG' ¡' F?NAJGN' CFG' F□ FG C KD□HO□KMG' A>' F□ F ?DC R CF?C □C □ ' HAC' G GHC□?MME' □@□C?C□PG R CF?C □C JAD(' □H ?HN' CFDAB F' □C ' AJH' KAJGD' HAC' □H' 0AHCD?N□OC□AH' CA' H?CBDG' LBC' FGD□ FCGH□H ' ?HN' D□>□H□H ' D□?MCE' G' F?PG' CFG' ?@G' □HN□O?C□AH' A>' CFG KAGC8 ' KDA>ABHN' (HAJMGN G A>'CFG G BL5GOC ' □H HCAHE' ?HN' MGAK?CD?' R

6' 1%P L KNJ ¡Q' NHMN' piJG' HP P' P' GPP' HP'7MiKT' JN U ¡MNJ P+R

' ?MCGD' F□CGD' F?' ' DG@?D(GN' BKAH' CF□ ' K? ? G' =' &') A□C?□DG' F□@ GN>' F?' ' HACF□H ' 0A@K?D?LMG' CA' CFG' FB@ADAB ' N□ OB □AH' A>' CFG' KF□MA AKF□D' S?□MGD' □H' E@L GN□HG ¡' .BC' □C □ ' A@GCF□H ' @ADG' CF?H

KMGHN□N OGHG ' ?HN F□ F KAGCDE ' ?HN ' □HNGGN ' □C O?HHAC LG NGH□GN CF?C CFG G ?CCD□LBCG ' A>' CF□ ' ND?@?' @A C >ADO□LME G□TG BKAH CFG @□HN ' A@G JF?C ' KGDF?K 'CA CFG G OMB □AH A>' □C ' DG?M ?OC□AH ' H' E@LGM□HG JG ?DG CFDAJH L?O (' □HCA CFG F?M> >?LBMAB ' F□ CADE A>' ABD AJH OABHCDE ' ?HN GG ?MM ALSGOC ' BHNGD CFG N□@ M□ FC A>' BHOGDC?□H GPGHC ' ?HN @?H-HGD ' G F?PG O□P□M□ ?C□AH OAHCGHN□H ' J□CF G@□ L?DL?D□ @ ' CFG AD GAB ' JAD F□K A>' CFG ? ?H JADMN BLNB□H ' CA □C GM>' CFG @ADG □@KMG JAD F□K A>' CFG %DB□N□O?M C□@G ' (□H ' ?HN OABDC□GD ' BDDABHNGN J□CF CFG KMGHNABD A>' =' L?DL?D□O KG?DM ?HN AMN I' ?HN ' GPGH □H CFA G N?E ' A>' □@KM□O□CE ' ?' J□MNGD ?HN ?' □@KMGD M□>G ' ?@□N C CFG >? CHG G ' A>'@ABHC?□H ' ?HN CFG AM□CBNG A>' O?PG R CFG FBHCGD ß M□>G ' JFA ='F?PG GGH HACF□H 'I R

6' JAN9P MG NHP 7 W 7 'L PT
/ UP M 9 UP MG NHP 97R S

LBC JFA EGC ' □H CFG□D H?CBD?M K□GCE ' (HAJ ' = FAJ 'CA ?NADG CFG FG?PGH I' >' CFG G ?CCD□LBCG ' A>' CFG ND?@?' F?N LGGH MG ' ?L ADL□H ' JG KGDF?K ' @□ FC F?PG @ADG DG?N□ME GGH CFG DG?M OABD G A>' CFG ND?@?C□O ?OC□AH ' G PGHCBDG J□CF DG?C N□>>□NGHOG CA G KDG ' ABD AK□H□AH CF?C AHG KDGNA@□H?HC □NG?' NAG ' G □ C ' >AD AMGD□N G' GPGH @ADG N□ C□HOCME CF?H CFG +GD@?H OD□C□O ' □>' JG ?KKDGFGHN F□@' D□ FCME ' □H>GDDGN CFG OAHCD?DE R =' H' CFG' #JGM>CF' □ FC ' &□N B@@GD □ FC8 ' %DG?@' ' ,AB $□(G C ' ?HN □HCGD8 ' #?MG ' CFG CAC?M G>>GOC □ ' KDANBOGN LE' ?' OA ADN□H?C□AH A>' CFG OF?D?OCGD ' ? ' □H ?' JDG?CF A>' >MAJGD ' .BC □H AD□AM?HB ' $G?D ' "A@GA ?HN 0BM□GC ' ?@MGC ' CFGMMA ' YO 'CFG G>>GOC ?D□ G ' >DA@' CFG BLADN□H?C□AH A>' ?MM CA AHG ' G□CFGD ? ' CFG KDA@□HGHC KGD AH ' AD CFG KD□HO□K?M ALSGOC I' AMGD□N G □ ' KG?(□H ' A>' CFG DG?C □ H□>□O?HOE A>' CFG H?@G ' A>' F?(KGDG8 ' KM?E ' #FG OAH AH?HOE A>' CFG H?@G ' J□CF CFG MG?N□H ' □NG? ' A>' G?OF ND?@?' □ ' G G@KM□>□GN □H CF□ ' K? ? G ' G' CFGH ?NN ' =' E@LGM□HG □ ' CFG AHME G OGKC□AH 'I' CF?C □ ' CFG H?@G A>' E@LGM□HG HG□CFGD G KDG G ' CFG OA ADN□H?C□AH A>' CFG OF?D?OCGD ' HAD CFG KD□HO□K?M ALSGOC ' G' AG ' AH CA ?E ' =' !PGH CF?C I' VCFG H?@G A>' E@LGM□HG ' =' F? ' □C ' ?NP?HC? G ' □H KDG-K?D□H ' CFG ?BN□GHOG >AD CFG OF?A ' A>' C□@G ' KM?OG ' ?HN OA CB@G ' LE' CFDAJ□H ' CFG N?CG L?O (' □HCA ?' >?LBMAB ' (□H 8 ' DG□ H I' G' NA' HAC BHNGD C?HN CF?C AMGD□N G @G?HC CA ?E CF?C CFG KM?E A>' E@LGM□HG F?N HG□CFGD OA ADN□H?C□AH A>' OF?D?OCGD ' HAD ?' KDA@□HG□□C ALSGOC ' LBC JG NA ?KKDGFGHN CF?C CFG H?@G J? ' E@LAM□O?M ' □H F□ ' LGM□G>' A>' CFG @?□H >G?CBDG ' A>' CFG KM?E R CFG OF?A ' A>' C□@G ' KM?OG ' ?HN OA CB@G ' AD FG KDAOGGN ' □@@GN□?CGME CA DG@?D(' □H DG>GDGHOG CA CFG SBN -@GHC N□ KM?EGN LE' ABD CDBME ND?@?C□O KAGC □H CFG @?H? G@GHC A>' F□ ' >□D C OGHG ' =' S $' $ ' 5 8 ' ' ! " .' $ ' LG>ADG B ' ?C AHG M?HOG LACF CFG K? C ?HN CFG >BCBDG □H A@G G>>GOC ' JF□OF □@KM□G ' CFG OAHC□HB?HOG ?HN ' >BMM ? GHOE A>' □C ' O?B G I U' G' PGHCBDG CA LGM□GPG CF?C E@LGM□HG NAG ' HAC >AD@' ?H G OGKC□AH CA CFG B B?M OABD G KBD BGN LE' F?(KGDG □H CFG @?H? G@GHC A>' F□ ' >□D C OGHG ' ?HN CF?C CFG >□D C OGHG ' A>' E@LGM□HG NA KM?OG LG>ADG B ' CFG K? C ?HN CFG >BCBDG □H ?' J?E JF□OF JG CF□H(' PGDE CD□(□H ME N□ OMA G ' JF?C FG □HCGHNGN CA LG CFG MG?N□H ' □NG?' A>' F□ ' ND?@?

#FG N□?MA BG A>' CFG ='CJA +GHCMG@GH I' □H CFG AKGH□H ' OGHG @?(G ' B ' KGD>GOCME ?OQB?□HCGN J□CF CFG DGM?C□AH ' □H JF□OF A CFB@B ' ?HN @A GH C?HN CA G?OF ACFGD ' ?HN CA CFA G ?DABHN CFG@' ='FG8 ' JGNNGN ' FGD FB L?HN L?H□ F8N I' G F?PG HG C CFG OF?D?OCGD A>' CFG L?H□ FGN FB L?HN ' ?HN A>' CFG BHJADCFE B□CAD JFA' □ ' CFG O?B G A>' F□ ' L?H□ F@GHC ' ? ' JGMM ? ' CFG CADE A>' CFG (□H 8 ' CJA MA C AH ' #F□ ' □ ' G GHC□?MME CFG >ABHN?C□AH A>' CFG K? C ?HN >BCBDG A>' CFG ?OC□AH ' .D□G>' □HNGGN □ ' CF□ ' OGHG ' LBC □C JGMM KDGK?DG ' B ' >AD CFG K?DC□H ' A>' A CFB@B ' ?HN @A GH ' #FG OABD G A>' CFG□D ?>>GOC□AH ' □ ' CBDHGN ?JDE LE' CFG J□MM ' A>'ACFGD ' #FG ?H DE (□H ' ?C AHOG KDAOM?□@ ' F□@-GM>' CA B ' ? ' AHG HAC ODBGM ' LBC JG?(' FG F? ' LG>ADG LGGH NG OD□LGN ? ' ='CABOF8N ?C PGDE FG?DC I' C □ ' AHME □H CFG □HCGH □CE A>' FGD ?>>GO-C□AH >AD A CFB@B ' CF?C @A GH AKKA G ' FGD AJH J□MM CA CFG □@K?-C□GHC P□AMGHOG A>' FGD >?CFGD ' ?HN CFG @ADG OD?>CE NGO□ □AH A>' FGD CGK@ACFGD ' .BC FG □ ' BDDABHNGN J□CF ?' CF□DN GP□M R

6' #'7MNHP 'K JP9 'M!O' M GNPL OM I P' 7M9GP
#'7 9 GH GJ N 'N 'M POOPO 9MOT+R

AD G ' FAJGPGD ' GPGH CF?H CFG G ' FGD FAHABD □ ' CA LG ? ?□MGN ' FGD

;' / NP M T &P I M !G' 9 L +
2 /

OF?D?OCGD P□M□>□GN ' LE ?' BLCMG CD?H GD ' JFA ' KGDF?K ' @ADG □H KADC CF?H □H @?M□OG ' F? ' DG AMPGN CA J□H ?' K?MCDE J? GD LE CFG ?OD□>□OG A>' FGD F?KK□HG ' ?HN CF?C A>' FGD FB L?HN F?C F? ' FG CA AKKA G CA ?MM CF□ ' OA@KM□O?C□AH A>' P□AMGHOG ?HN OBHH□H 'W GD KGD>GOC KBD□CE R FGD GHC□DG □@KM□O□CE R FGD >DGGNA@' >DA@' GPGDECF□H ' CF?C □ ' GM>□ F R CFG CDGH CF AHME A>' FGD ?>>GOC□AH ' #FG OGHG LGCJGGH M?OF□@A ?HN @A GH □ '?' OAHCG C A>' □HHAOGHOG DE□CF B□MG ' @A C KDA>ABHNME ?>>GOC□H ' □H K□CG A>' CFG >GJ ' OA?D GHG G ' CF?C JGDG KGDF?K ' BH?PA□N-?LMG ' ?HN JF□OF JGDG HAC OAH □NGDGN A>>GH □PG □H F?(KGDG8 ' N?E ' #FG BKDG@G LG?BCE A>' @A GH8 ' OF?D?OCGD A?D ' CD□B@KF?HCME ABC A>' CFG □@KBDG @□ C JF□OF □ ' ?DABHN FGD ' ?HN HAC CFG MG? C K?DC A>' CF?C LG?BCE □ ' FGD DG?NE' >AD □PGHG ' A>' FGD ? ?□M?HC ' LD□G>ME ?HN >MBCCGD ' □H ME G KDG GN FAJGPGD ' JFGH FG DGM□G ' BKAH CFG KA □L□M□CE A>' NGOG□P□H ' FGD CFDAB F FGD ?>>GOC□AH ' R

S' 1' HMLLT / P !MNJG[2' I MT GMT8
HP K PO N NHMM NHT 9MOT HMNH 7 NHPP
5PGP PG NHT N JGN8 M!O NHT I GM LP 7PKN Q O!PGG
" P 'MGGJ %D K PO N[R

#F□ ' □ ' CFG >□D C ?OC ' ?HN ' □>' JG @□ C?(G HAC CFG ALSGOC A>' F?(-KGDG ' CFG G AKGH□H ' OGHG ' G F□L□C AHG A>' CFG @A C OAH>□N□H ' ?HN GHCMG A>' FB@?H LG□H ' ? ?□MGN AH GPGDE □NG LE' ?' NGCGD@□H?C□AH A>' KBDKA G ' JFGCFGD □H CFG F?KG A>' P□AMGHOG ' J□O(GNHG ' AD >AMME ' ? ?□H C JF□OF ' BHNGD ADN□H?DE O□DOB@ C?HOG ' □HHAOGHOG @?E LG BKKA GN CA LG ?H □H B>>□O□GHC F□GMN ' .BC CFG PGDE FGMKMG HG ' A>' @A GH □ ' FGD KDACGOC□AH ' H' CFG G QB□ □CG GOAHN OGHG A>' CFG GOAHN ?OC CFG KGD>GOC KBD□CE A>' @A GH ?' □HCGDKDGCGN LE' F?(KGDG ' F? ' OAHPGDCGN JF?C JABMN F?PG LGGH ?' @A C N?H GDAB ' □CB?C□AH □H CFG F?HN ' A>' ?HACFGD KAGC R MGCOFGD ' >AD G ?@KMG R □HCA AHG A>' CFG @A C DG>□HGN NGM□O?OE R

6' % G HP 'A PMNH !Q N9NMN
-P 7J I PG NHP KHM I AP 'NHJG+R

#FG □@@GN□?CG N?H GD □ 'K? GNc ' LBC CFGDG □ ' ?' HGJ 'N?H GD ?KKDA?OF-□H ' #FG J□MM A>' FGD BHF?KKE FB L?HN ' NGOG□PGN □HCA @?NHG ' □ ' CA LG ?NNGN CA CFG GP□M ' JF□OF FG F? ' ?MDG?NE DGOG□PGN >DA@' P□AMGHOG ?HN GM>□ FHG ' A CFB@B ' □HCGHN□H 'CA NG CDAE FGD ' JD□CG ' ='#?(G HAC□OG CF?C ' ?@' □H ?@LD□?' ?C & □M>ADN ?PGH ' JF?C EABD AJH MAPG J□MM ABC A>' CF□ ' ?NP□ G EAB ' >AMMAJ I' FG NAG ' >AMMAJ ' FGD AJH MAPG R FG F? ' HA ACFGD B□NG LBC CFG CDGH CF A>' FGD ?>>GOC□AH ' CF?C CDGH CF @?(G ' FGD F?DNE ?HN >G?DMG ' A>' OAH GQBGHOG ' C □ ' CFG AHG NBCE ' ? ' JGMM ? ' CFN AHG KMG? BDG ' A>' FGD G □ CGHOG ' AJ ' □ ' CF?C ?>>GOC□AH DGQB□CGNW □ ?H□A KM?OG ' □H FGD F?HN ' JFGH CFGE F?PG DG?OFGN CFG NGGKG C AM□CBNG A>' CFG @ABHC?□H ' CF?C MGCCGD LE' JF□OF FG □ ' OA@@?HNGN CA C?(G ?J?E FGD M□>G ' HG K? □H ' CFAB FC A>' FGD GM>R AHG >?□HC DGKDA?OF A>' FGD FB L?HN R ?HN FG BL@□C ' CA CFG >?CG JF□OF □ ' KDGK?DGN >AD FGD R

6' IP '7P99 'AP NH J'H !PGN8
5 'NH J' NHT I MGNP %G A OO !Q' X HP!' NH J' GPPGN H I
#'9 NN9P N!PGG IT APO P!KP' / U[
2' O M 'NHP G O' I TGP97' NMUP N8 M!O' H N
HP !! KP!N I M!G !' 7 IT 9 P' IT HPM N+R

.BC FGD CDBCF ?HN □HHAOGHOG F?PG ?FG?NE BLNBGN CFG' JMM A>' CFG JADH GDP?HC A>' FGD' FB L?HN G' OA@>ADC ' FGD ' LBC FG HGOG ?D□ME MG?PG ' FGD' □H' CFG' J□MNGDHG ' #FG' KGMM ' A>' GP□M' J□MM ' ?DG' C□MM ?DABHN FGD R

6' T' ! A9P I GN PGG+
"P P' G' M' A W' 2' HMO' N' 7 I' NHP']JPP!+R

GDF?K ' CFGDG □ ' HACF□H ' □H' F?(KGDG' @ADG LG?BC□>BMME @?H? GNR ' @ADG CABOF□H ' □H' □C ' DA@?HOGR @ADG G GHC□?MME CDBG CA H?CBDG R' CF?H CFG' OGHG ' LGCJGGH @A GH ?HN FGD' BH(HAJH LDACFGD ' #FG' GHCMGHG ' CFG' D?OG ' CFG' <C D□G>' ?HN' K?C□GHOG I' A>' CFG' FGMKMG ' □NGMG ' KDANBO□H ' ?C' AHOG' CFG' NGGKG C DGPGDGHOG' ?HN' ?>>GOC□AH' □H' CFG' LAMN' ?HN' N?D□H ' @ABHC?□HGGD ' C□MM O?DDE' >ADJ?DN' CFG' OF?D?OCGD' A>' @A GH' BHNGD' CFG' ?@G' ? KGOC ' .GM?D□B ' F? ' LG?BC□>BMME' NG OD□LGN' CFG' LDACFGD R

6 HPT' M P' MG' QP!N9P'
#G' CPLHT G' A9 !Q' AP9 'NHP' 9PN
N' MQQ !Q' H G' G PPN' HPMO' 8 M!O' TPN' MG' JQH
HP ' TM9' A9 O' P!KHM7%O ' MG' NHP' JO%GN' !O+
HMN' AT' NHP' N L' O NH' NMUP' NHP' I J!NM !' L !P+
#!O' I MUP' H I' GN L' N 'NHP' M9P+R

C J ?' ,H CFEJD GHCMGHG 'CF?C @A GH >ABHN ?' BKKADC >AD FGD GH-CMGHG '' ,C J ?' ,H CFGJD DAB FHG 'CF?C CFG DAB FHG 'A;' MACGH @GC !C ' KBH FΘGHC' @A GH J' CMM ?PGN >DA@' CFG N?H GD 'J,CF' JF,OF' OD?>C ?HN PAMGHOG' F?PG' BDDABHNGN' FGD' FGH FG J?MMAJ 'CFG BKKA GN @GNJOHG A;' CFG QBGGH 'JG (HAJ'LG>ADGF?HN' CF?C CFG GP'M JHCGHCAH 'A;'CFG KFE JO?HN' R PAMGHC' HCGHCAH 'A;'FGD' CGK@ACFGD' F?PG LGGH' OABHCGD?OCGN' LE' CFG' LGHG-

6'2'O 'UI 'HP'GL N
#iO' 99 i N'N JGN' iP 'THP'IM9 KP' NH
#'O JQ' 'GJKH'OM I i%O'iMNJ P+R

=#FG' L,DN' J 'NG?N 'I' FG J? ' JO(' HN' JG ?M@A C >G?D' CM?C' CFG J ADN 'A;'CFG NJD G ?DG CDBG R

6'OPM'i 'I P'NHP'7 i' %'NHP'Q PMN
H J'M N'LMGN'NHP'NT MIMMG GN UP+R

.BC FG ?J?(G ' ?HN' FG F?' CJMM' CA' GHNBDG CFG M? C ?HN' CFG JAD C GP'MR FGD' FB L?HN' JH FGD' ?KKDGFGH JAH 'MG 'NG?N' LG>ADG FGD' FG F?' HA' JDAH ' CA' CFJH('A>R=" ' @E' MADN' @E' MADN I',' ?MN' JH' OAH-HGOOCAH' J,CF' A CFB@B 'CF?C G 0?KG '?@N C FGD' CG?D ' #FG' LG?BCE ?HN' JHHAOGHOG' J,FOF' ?PGN' FGD' >DA@' M?OF,@AR ZJFOF' OAHQBGDGN' ' ?HAR J,FOF' JAH' CFG' J,MN' FBHCGD R OA@@GHN' FGD' CA' CFG "A@?H' GHGD?M' FG ' ?C AHOG KDACGOCGN' .BC FG F?' FAME NBC'G ' CJMM' CA' KGD>AD@' R

6'2%9'7 99 'G ‡ JN'7 GM'M i%'L9PMGP'N9 P'Q OG+
2%9'H OP' I'T I,MGNP'7 I'NHP'79 PC'MG OPPL
#'G'NHPGP'L 'L KUMWPG'KMI'O Q' MiO' HPi
X NH' 9O' O 9PM PG'MiO' PPOG 2'HM P'GN P %O'H G Q M P
#iO' i' N'GM O'M KPiNJ T 7L MTP G+
JKH'MG'2'KMi'N KP' %P ‡2%9' PPL'MiO'G QH8
#iO'9PM iQ'G 'H G GP KP'7 99 'T J+
'L9PMGP'T J'PiNP NM i'I P+R

C ' CFG BHOAHQBGD?LMG'?>GOC'AH' A>' @A GH' JF'OF' @?(G ' B ' K'CE' A CFB@B ' GPGH' JF'MG' J G' LM?@G' F'@' >AD' CFG' D? F G GDO' G A>' F' DGPGH G>BW' J'MM' . BC'H F' 'NGGK' DGKGHC?HOG' J G' @ADG'CF?H' K'CE' F'@' G' GG' AHME' ?HACFGD' P'OC'@' A>' JADMNME' OD?>C' ?HN' GM>' FHG ' R

CFG' OD?>CE' ?HN' CFG' '@KMG'CFG' KDABN' ?HN' CFG' @GG(' CFG' P'AMGHC' ?HN' CFG GHCMG

C ', O?DOGME' J'CF'H' ABD' KBDKA G CA'>AMMAJ' CFG' BHD?PGMM'H 'A;'CFG 'HO'NGHC' 'H' CFG' OAHOMBN'H ' OGHG' CGGPGH ' F?' ,JADCF'ME' GHNG?-PABDGN' CA' @?(G ?@GHN '>AD' CFG' 'HSB C'OG' A;' CFG' OD'CO' @' ,JF'OF' E@LGM'HG' F?' 'DGOG'PGN' >DA@' F' ' ? AO?'CG' OA@@GHC?CAD R = $G' CFA G JFA' C?M(' A' OAH>'NGHCME ?LABC' CFG' (MM A;' F?(KGDG8 '0AHC@@' KAD?DC'0AH AH' KA'HC' ABC' CFG OAHOMB 'AH' A;'?HE' AHG A;' F' ' KM?E ' ,JF'OF ' ,'JDAB FC' JCF' @AD' ?DC'>OG' ?HN' EGC ?' MG ' NG DGG' A;' ND?@?C'D' P'A-MGHOG' CF?H' CF' H' CFG' OGHG' LG>ADG B ' ?MM' CFG' BDP'P'H ' 0F?D?0-CGD ,?DG ? G@LMGN' ' ?HN' ?C CFG G KGH G A;' J F?CPGD'HOAH DB'CE' CFG >AD@GD' GPGHC' @?E F?PG' LGGH' KDANBOGN' KGDF?K ' MCCMG' 0?H' LG' N' -OAPGDGN' AH' CF' ' AOO? 'AH' CA' A>'GHN' CFG @A C ODBKBMAB ' ?NPAO?CG' >AD' DG BM?D'CE ' ?HN' ' 'CF'H(' ' ? ' MCCMG' ' >'ABHN' J?HC'H ' CA' ?C' >E' CFG' KG0-C?CAD' LE' ?' 0?C? CDAKFG' J'FOF' ' 'HCDC'O?CG' J'CFABC' OAH>B 'AH' ?HN' HAC' @ADG D'OF' 'H ADH?@GHC' CF?H' H' H?CBDG I

#FG' OAHOMB 'AH' A;' E@LGM'HG' F?' ,LGGH' M?BNGN' LGO?B G 'C' ' 0AH-' CGHC' J'CF' % ' #FA G' JFA' ?NAKC' CF' ' KGO'G ,A;'DG? AH-'H 'MAA(' P'DE' '@KGD>'GOCME' BKAH' CFG' OAB G' A;' DG?M' GPGHC ' H' CFG' @AD?M JADMN' C' ' KGD@'CCGN '>AD' H ODBC?LMG' KBDKA G ' CF?C' CFG' 'HAOGH' FABMN' A@GC'@G '>?MM' LG>ADG' CFG' J'O'(GN' ?HN' CFG' HALMG' LG' BL'SGOCCGN' CA' CFG' L? G' H' CFG' ?@G' J?E' 'C' ' A@GC'@G ' H' CFG' OAB G' A;' ABCD?' G' #FG' KGD' F'H ' A;' %G NG@A?H? ' ? ' ? ' CFG' ?>'GCE' A;' GPGHC ' CF?C' CFG' KBDG' ?HN' CFG' GHCMG' FABMN' CD'B@KF' APGD' NGOG'C' ?HN' @A GH ' ?HN' CFG' KAGC'O?M' CDBCF' 'HPAMPG ' ? ' F' ? @AD?M' 'H' CFG' AHG O? G ? ' H' CFG' ACFGD' #F?C' F?' (KGD&' 'HACAH' A;' KAGC'O?M' SB C'OG' J ?' HAC' CFG' F?O(HGEGN' HAC'AH' A;' ?H' 'HCAMGD?HC' ? G' DG>MGOCCGN' GPGH' LE' ? .AOO?OO'A ' ' FAJH' LE' CFG' N'>'GDGHOG' H' CFG' MAC' A;'CFG' A>>'GHNG' H' CFG C?M'C?H' C?MG' ?HN' CFG' MAC' A;'M?OF'@A ' #FG' @LDA 'AMA'A;'CFG' HAPGM' C' JFA' M?HNGD ' ?' P'DCBAB ' M?NE' >AD' CFG' ?'H' A;'?' J ? GD ' ' >? CGHGN' CA' ? C?(G' @?DGN' J'CF' FAHGE' ?HN' MG>C' CA' LG' NGPABDGN' LE' >'MG ' ?HN' MAOB C ' #FG' OMA G A;'ABD' ND?@?C' C8' ' CADE ' ' KGD>GOC' F?(KGDG' R

6' ' LPMU'9MKH I 8 2'HMO'T J'O i'MiO' I QHN'
"M P' I MOP'T J'7 i GH+

, ' ,CFG 4CF A;' 0CAL GD #42□ '#FA@? ?M(MGE GHCGDGN ?C C?□AHGD ∦ ?MM = #FG' #D? GN□G A;' CFGMMA ,CFG &ADG A;')GH□OG I' H' 422' ?M(MGE KBL▪ FGN' CFG GN□CAH' >AD' JF□OF FG' F?N' CFB ' 0M?□@GN' CFG OAKE' C □ '?' J? ' B B?M J□CF' CFG GK?D?CG KM?E ' ?' @?MM' Q@?DCA' ?NM' □C LG?D ' CFG >AMMAJ□H ' C□CMG 'R '= #FG' #D? AGNE A;' CFGMMA ' CFG &AADG A;')GH□OG ' □C F?CF'LGGHG' N□PGD G'C□@G ' ?OCGN' ?C CFG +MALG ' ?NM' ?C CFG .M?0(D□?D ' LE' F□ ' &?SG C□G ' GDP?HC ' D□CCGH' LE' □MM□?@' F?(G KG?DG I' C 0AHC?□H ' ?M A ' ?' KDG>?CADE ?NND□ ' JF□OF' □ ,OBD□AB R = #FG' C?□AHGD' CA' CFG "G?NGD' #A' GC >ADCF ?' LAA(' JCFAB@' ?H' iK□ CMG' JGDG' M□(G CA' CFG AMN' i H M□ F' KDAPGDL' ', " ' ' 0 $ ' ," 4 ?HN' CFG ?BCFAD' LG□H ' NG?N' ,CFAB FC' AAN' CA' C?(G CF?C' K□GOG' A;' JAD(' BKAH' @ G ' CA' OA@@GHN' □C ' J□MM' H∧C ' >AD' CF?C J□FO□F □ ' AAN' ' FAKG'GPGDE'@?H' J□MM' OA@@GHN' J□CFAB□' GHCDG?CE' ?HN' '?@' CFG' LAMNGD' LGO?B G'CFG ?BCFAD8 ' H?@G □ ' B>M O□GHC' CA' PGHC F□ ' JAD(' #FB 'MG?P□H ' GPGDE' AHG' CA' CFG' M□LGDCE' A;'SBN @GHC ' ,F?PG' PGHCBDGN' CA' KD□HC' CF□ ' KM?E ' ?HN' MG?PG' □C' CA' CFG GHGD?M OGH BDG' ,ABD ' #FA@? ' ?M(MGE I = #FG' #D? GN□G' A;' CFGMMA ' CFG &ADG' A;')GH□OG I' OA@@GHOG ' AH' K? G' 3 7' A;' CFG' #D? GN□G ' □H' CFG >□D C >AM□A' OAMMGOC□AH ' C' ? ' ' '

DGPGH GN' ?@AH C CFG D?L ' #FG' K?H>BMME ?>>GOCH ' C?MG' A>' CFG
='#FDGG' KKMG I'H =#FG' #FAB ?HN' ?HN HG FC I' 'H G ?@KMG
A>' CF= ' ?HN'>BDCFGD'CFGDG ' ?' @M?DCE LGCJGGH CFG CAMGH ?KKMG
?HN' CFG CAMGH F?HN(GDOF=G>' #FG' @?M HCE A>' CFG M?PG' H' CFG
G CD?OC CFG @?H OHCNGHC ' A>' CFG C?MG >DA@' CFG LG?BC>BM' CD?H M?CAH'
A>'&D'$?HG' R

6' i ' ,1'- ikF' 7 NHP OM NH7J9' NHMN' NH G OM1GPJ MG 1T' 7P' MI?' NHP
OMJ?QHNP' 7 1T'J1K9P8 NH G GHPTUH' MG HP' 7MNHP 'MI?' G 1T'J1K9P4' ?' IM PO
HP' HPI'GHP' MG'M Q I'MI?: O A9PGGPO' I P' NH'NH PP' 1M9P'KH 9O PI'AT'HP 8
MI?'GHP9 PO' I P'MI?'GP PO' IP'MI?' ?' GM ' I'HP'i 'p 9F' #N'NHP'K 1 IPIKP
 IPIN' 7NH G 1 INH'GHP' MG'MMMMKUPO'AT'M'GP P P 99IPG3'MI?'2'A JQHN'N ,HP,'NHF
LHTG K MIG' H 'MNNPIOPO'HP'JIN9'HP'HPM9NH' PNJ IPO'N 'HP 8 MI?'OPG PO'NHPI'
N 'GPIO'HP,'N,'NHP'AMNH'8 AJN'GHP'GM'ON 'IP'?' MIN'G IPNH IQ'AP7 P?'PINP,'NHP'
AMNH'7 '?'HM P'M'9 IQ'I Q'7 ' N#' XHMN' G N+'GM O?+' HP' MIG P PO'?' HM P'M
9 IQ'I Q'7 ' M' MLL9P' N' GI P99' N' MI?'NMUP'M A NP'7 I' N# ?' PIN' JN
 I PO'MNP9T' IN 'NHP'K NT' MI?'GPM KHPO'7 'NHP' MLL9P' MI?' J9O' HM P' A JQHN' N
HMO' NG'L KP'APPI'ML PKP' 7Q 9O8 AJN?'K J9O'7 I?I N' IP+ ?' LMGGPO' NHP' IPMN'
I QHN'7J99' 7'NH JQHN'HN'MI?' HPI'NHP I I IQ'KMI P ?']J PO'7 'NHP'MLL9P'MI?'HP P'
PIN'MA JN'N 'M99'NHP'HN QM OPIG' IP'MZNP'MI NHP 'TPN?'7 JI?'I IP I?'NHPI+' HP P'
CAD@' ?HN' ?@? B C?' CFG' KD'HO'K?M' G?KAD' 0?K'CBM?GN' ?>CGD' ?'
MAH ' ?HN' ?MM?HC' NG>GHO6' C ' GP'NGHC' CFGDG>ADG'CF?C' JG' @B C
DG>GD' CFG' ?OC'AH' A>' CFGMMA' CA' ?' KGD'AN' LG>ADG' CFG BL$B ?CAH' A>'
 $DKDB ' LE' CFG' #BD(' #FG' MAO?M'CE' A>'CFG OGHG '?>CGD' CFG >D C ?OC'
@B C LG' KM?OGN' ?C ?@? B C?' JF'OF' JH' ?HP?NGN' LE'?'KAJGD>BM'
JF0F' F?(KGDC @B C F?PG' (HAJH' JFGH'H' CFG GOAHN' OGHG' A>' CFG
CF'DN'?OC'FG' ?E R

6 2' 99 AP' M9U I?Q i'NHP'2 i '-Y

' % #

#FG' GHGD?M 0A CB@G' A>')GH'OG ' LACF' @?MG' ?HN' >G@?MG' ? ' JGMM' ? '
CFG' A>'O?M' F?L'C ' A>' CFG %A G ?HN' GH?CAD ' ?C CFG OMA G A>'CFG -
CGGHCF' OGHCBDE' F?P'H ' LGGH' NG ODLGN'H' CFG' KDG>?CADE' HAC'OG' CA' #FG'
&GDOF?HC' A>')GH'OG ' JG' F?PG' HAJ'LBC' CA' KG?(' A>' CFG C@'MC?DE' 0A

' 6'- NMIO ' I' IMI ' ?AMGN i'O%M QPIN+R S ' ('' * PO N#)= +

N' '' P99MG J PT' 7'NHP' QI T' 7 pi KP+' / IO i ')+

' 6' #'N M P G ' OPJ' LPM' ' JIM' AMIOM' O' IPG i ' O' P GM K 9 ' GPK IO ' 9M
O GM'OPJ' CJ ' KML'MMI +R S@ ‡ i$'PO N#')= +' 2I'M'9MNP'PO N i')=' ' NHP'
HMN' G GM'O'N ' HM' P'APPI' JCJM99T'B2 S6'9N' MMQQ ' LM'NP'O'K 9 ' M'QPIN'ip+R

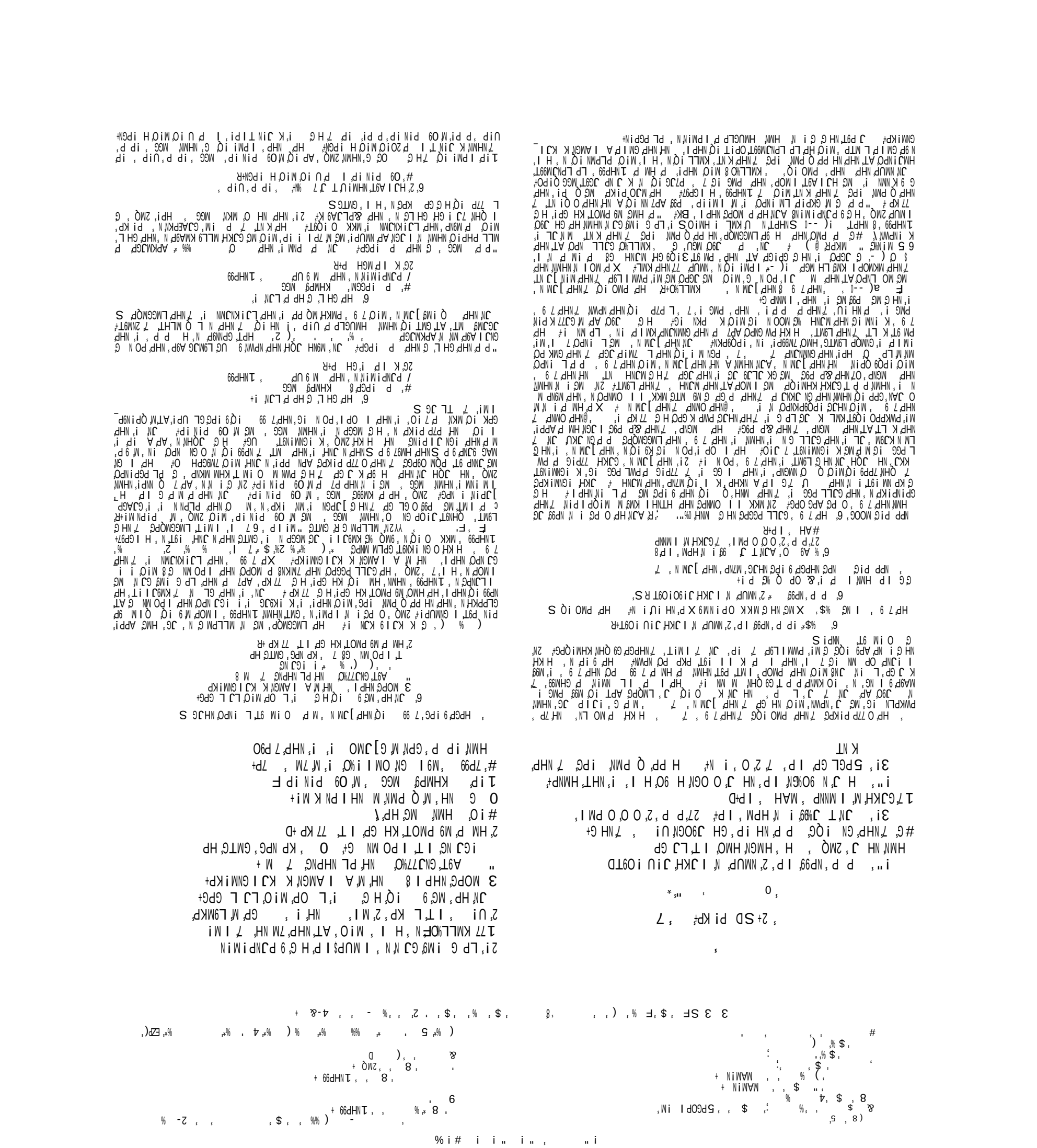
CB@G' A>'CFG' DGKBLM'O' ?C' CF?C' KGD'AN'CA' JFJOF' ?M' A' LGMAH ' 'G'MG' CD? GNE
A>' CFGMA

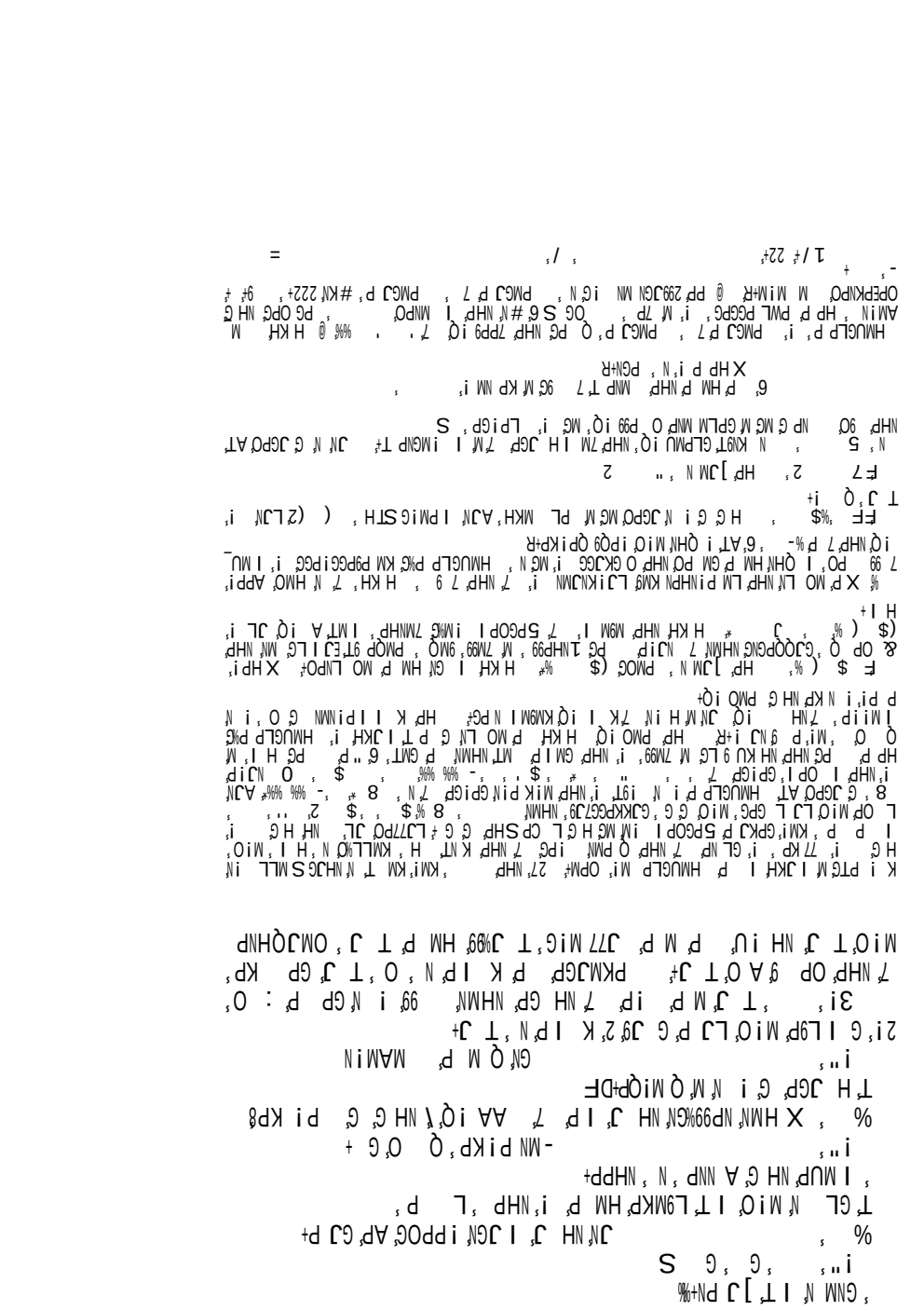
#A' OA@@GHOG' J'CF' C' NB (E' FGDA' #A' NGO'NG' AH' CFG' F?L'C
KDAKGD' CA' CF=' 'OF=?O?OCGD' C' @B C >D C' LG' ? OGDC?'HGN' JFGCFGD' CFGMMA'
 ' ?' i $ 'A0' ?' $ ' ' @?DD? G J'CF' ?' M?NE' A>' CFG
>AD@GD' KGD B?' AH' JABMN' LG' ?MAHG' B>>'O'GH' CA' KDAPG' CF?C' FG' F?N'
DGHABH'OGN' CFG' ODGGN' A>' F=' ?HOG CAD' F?N' J'G' HAC' CFG' G KDG '
CG C'@AHE' A>'M? A' ?' 'CA' CFG >?'OC R

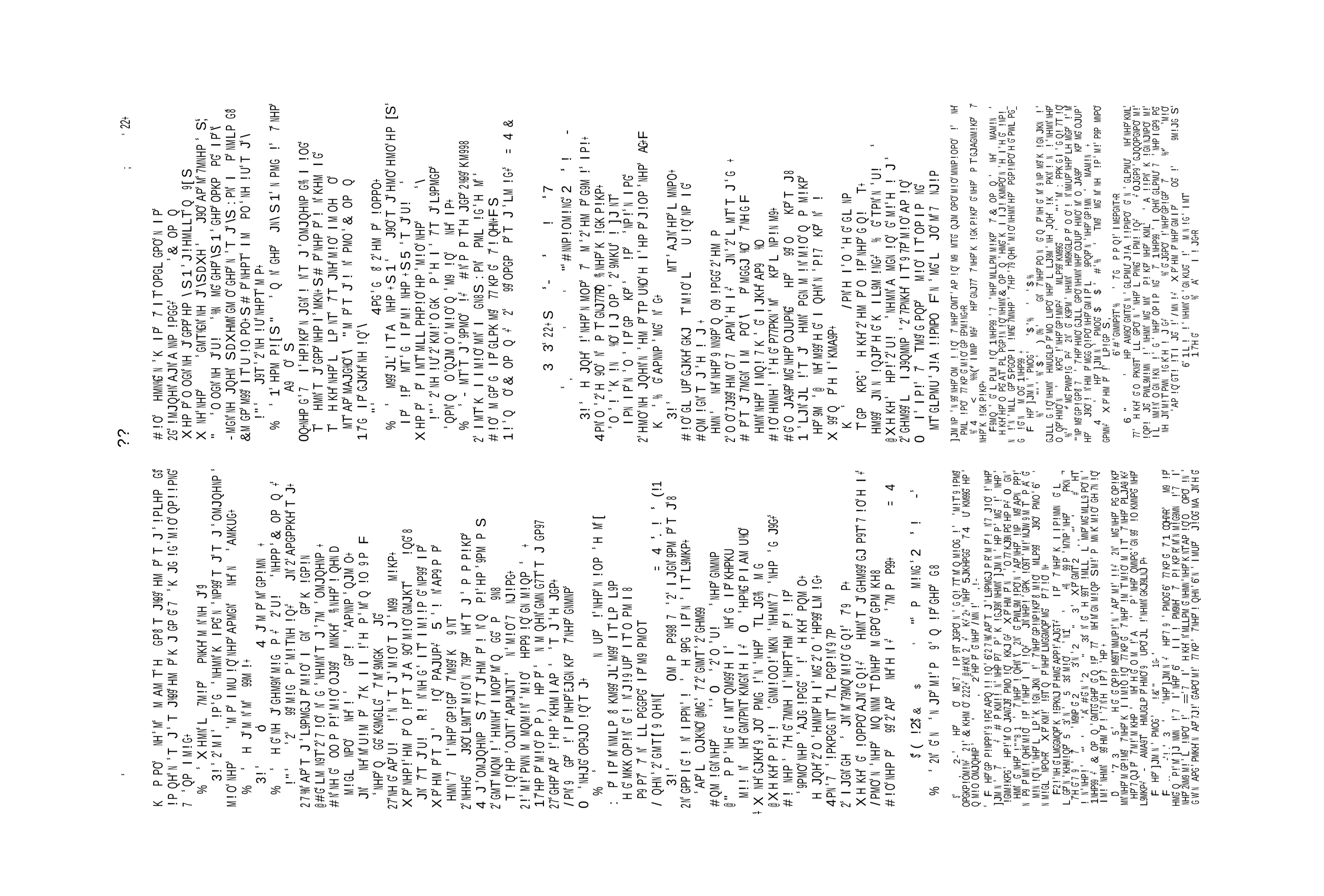
6' i'O'NHPI'7 'HP +
' i'NHP' S P%N' pi JiKP' -'(' -
'- -' "-5 (i-i'; " "- S
" G G J' G 'piPMP %O'N 'HP'9 P R' BK+SD#'22+' K+'222+

#FG' OAHPGDC' JABMN' 'HNBL'C?LME' KBC' A>' F=' CBDL?H' J'CF' F= ' >?'CF'
?HN' ? B@G CFG' NDG ' A>' CF?C' D'KBLM'O' JFA G' D'GM' 'AH' FG' F?N'
?NAKCGN' ?HN' JFA G' A>'OGD' FG' F?N' LGOA@G' ?HN' >DA@' CFG' 0A@-
@GHOG@GHC' A>' CFG' GOAHN' ?OC' CFGDG' O?H' LG' HG'CFGD' NABL'C' HAD'
OFA'OG' ?'MA'JGN' AH' CFG' BL$GOC' ?' 'CFG' GHGD?M' A>' CFG')GHGC'?H'
>ADG ' CA' JF?CGPGD' H?C'AH' FG' @= FC' CD?OG' F=' L'DCF' V?HN' 'C' J?'
?MJ?E' ?' ' JFA' J?' GMGOCGN' >AD' CF?C' A>'OG'=;'MG C I' ?' ?BMB'
0AP=B ' ?E' =';?HE' AHG' A>' CFG'D' AJH' 0ABHCDE@GH' @= FC' LG' KB>' GN' BK'
J'CF' KD'NG' ?HN' DAJ' CAA' ?@'L'CAB'I ' ? B@GN' AH' CFG' N?E' A>' F= '
GMGOC'AH' ?' KGOBM'?D' F?L'C' 0AH C CH ' A>'?' >BMM' AJH' A>' OD'@ AH' PGMP'GC
J'CF' MAA G' MGGPG ' APG'D' JF'OF' J?' ' JADH' ?' @?HCMG' A>'OMACF' A>' AMN'
LBCCAHGN' BKAH' CFG' D= FC' FABMNG'D' J'CF' @? E' AMN' LBCCAH ' #FG' O?K'
J? ' A>'OD'@ AH' PGMPGC' ?HN' CFG' L?CA'D' A>'A>>'OG' J? ' A>' MPG'D' U GH HGN'
J'CF' CFG' J'H GN' MAH' A>' C' &?D(H')GOGMM'O' A8 ' A>'CGH QBACGN' JAD('
CFGDG' ' ?'DGKDG GHC?'CAH' A>'CFG' 'NGHC'O?M' NDG ' JADH' LE' D'HOG')GH'GDA'
JFGH' FG' J?' ' D? GN' CA' CF?C' N' H'CE' AH' CFG' PGDE' A00? 'AH' JF'OF'
F?(KGDG' F?' GMGOCGN' >AD' CFG M' (G ?KKA'HC@GHC' A>' F= ' =P?M'?HC
&'AAD I' H?@GME' CFG #BD(F' J?D' ' 5 7

HAC'FGD' KADCD?'C' A>' D'HOG')GH'GDA' ' GH D?PGN' H' ?' JAD(' GHC'OMGN'
= ?L'C'D' N8 BA@'H'D' G %AHHG')GH'GC'?HG I' /CA')GH' 471' DGKDG GHC-







?? $

7 ‘ 5PMO‘\
% ‘ #T‘N ‘ I P8
HP‘ G‘MAJG%O‘GN 9%!‘7 I‘ I P‘M!O‘K JLNPO‘
T‘GLP99G‘M!O‘I PO K!PG‘A JQH‘ 7 I J!NPAM!UG
O ‘!MNJ P‘G ‘L PL GNP JG9T‘N ‘P +
P !Q‘! ‘OP7 K P!N‘A9 !O‘ ‘ 9M I P‘ 7GP!GP
M!G‘ NKHK M7N‘K J9O‘! N S
&’ ‘ XH P‘P ‘HP‘AP ‘NHMN‘ !‘NH G‘7 J9‘L KPPO !Q‘
" MNH‘NHJG‘APQJ 9%O‘T J ‘OMJQHNP ‘ 7‘HP GP97+
#!O‘T J‘ 7‘HP ‘NHP‘A9 OT‘A U‘ 79M ‘
4 J‘GHM99‘T J GP97‘ PMO‘ !‘NHP‘A NNP ‘9PNNP F
#7NP‘T J‘ !‘GP!GP8 TPM‘NH JQH‘ J ‘L LP ‘G !‘
N O‘!‘T J‘MKN !+
M% ‘ "J I A9T‘2‘NHM!U‘T J ‘Q MKP+
"P P‘ G‘NHP‘ I M!‘NH G‘ 8 H I‘! ‘ N‘GPP I G+
4 J‘GLPK M9‘ I M!OMNP‘7 ‘NHP‘GNMNP‘M77M G+
" MNH‘H NHP‘A JQHN+
‘ XP‘M P‘ P T‘G T‘7 9N+
&’ ‘ XHMN‘ !‘T J‘ !‘LM N‘KM!‘T J‘GMT‘N ‘NH G‘\
= !’ ,
% ‘ NH !Q‘AJN‘NH G‘G G +
K ‘ GN‘L NP!N‘Q M P‘M!O‘ P P P!O‘G Q! G+
T‘ P T‘! A9P‘M!O‘MLL %O‘Q O‘I MG%P G S
HMN‘2‘HM P‘NM%P!‘M MT‘NH G‘ 9O‘ I M!%G OMJQHNP +
2N‘G‘ I GN‘N JP8 N JP‘2‘HM P‘ I M PO‘HP 8
HP‘ P T‘HPMO‘M!O‘7 !N‘ 7‘I T‘ 77P!O !Q
" MNH‘NH G‘PWNP!N‘!‘ I P:‘ &JOP‘M I‘2‘ !‘ I T‘GLPPKH
#!O‘9 NN9P‘A9PGG%O‘ NH‘NHP‘G 7N‘F LH MGP+ 7‘LPMKP8
O ‘G !K‘P‘NHPGP‘M I G‘ 7‘I !P‘HMO‘GP P!‘TPM G%L NH
9$! ‘G IP‘! !P‘ I !G‘ MGNPO F‘NHPT‘HM P‘JGPO‘
HP ‘OPM PGN‘MKN !‘ !‘NHP‘NP !NPO‘7 P9O‘8
#!O‘9 NN9P‘ 7‘NH G‘Q PMN‘ 9O‘KM!‘2‘GLPMU+
P‘NHM!‘LP NM !G‘N ‘7PMNG‘ 7‘A 9G‘M!O‘AMNN9P8
#!O‘NHP P7 P‘9 NN9P‘GHM99‘2‘Q MKP‘ I T‘KMJGP+
21‘GLPMU !Q‘7 ‘ I TGP97‘ 4PN‘AT‘T J‘Q MK JG‘LMN P!KP
2‘ 9$ M‘ J!O‘J! M ! GH%O‘NN9P‘OP9 P
17‘IT H 9P‘K J GP‘ 79 P‘ HMN‘O JQG‘ HMN‘KHM I G+
XHMN‘K !EJ MN ! ‘M!O‘ HMN‘ I QH\T‘ I MQ K
@O ‘GJKH‘L KPPO !Q‘2‘M I‘KHM Q%O‘ NHM9
2‘ !‘H G‘OMJQHNP +D
% ‘ #‘ I M OP!‘!P P‘A 9O‘8
17‘GL N‘G ‘GN 99‘M!O‘]J PN‘NHMN‘HP‘ I N !‘
9JGH%O‘MN‘HP GP97‘ M!O‘GHP‘ !‘GL NP‘ 7‘!MNJ P
17‘TPM G‘ 7‘K J!N T‘K PO N‘P P TNH !Q
‘7M99‘ !‘9 P‘ NH‘ HMN‘GHP‘7PM %O‘N ‘9 U‘ !‘\
2N‘G‘M‘EJOQ I P!N‘I M I %O‘M!O‘I G‘ I LP 7PKN+
HMN‘ 99‘K !7PGG‘LP 7PKN !‘G ‘K J9O‘P ‘
#QM !GN‘M99‘ J9PG‘ 7‘!MNJ P‘8 M!O‘I JGN‘AP‘O P!‘
‘7 !O‘ JN‘L MKN KPG‘ 7‘KJ!! !Q‘HP99+
XHT‘NH G‘GH J9O‘AP‡ 2‘NHP P7 P‘ JKH‘MQM !+
HMN‘ NH‘G IP‘ I WNJ PG‘L P 7J9‘ %P ‘NHP‘A9 O‘
1‘ NH‘G IP‘O M I‘K !EJ %O‘N ‘NH G‘P77PKN+
"P‘ JQH‘JL !‘HP +
&’ ‘ JKH‘NH G‘G ! ‘L 78
X NH JN‘I P‘ OP F‘M!O‘ I P‘ P N‘NPGN+
HM!‘NHPGP‘NH !‘HMA NG‘M!O‘L ‘9 UP9 H OG‘
17‘I OP !‘GPP I !Q‘O ‘L P7P MQM !GN‘H I +
27 ‘ JN‘1NHP99 ‘GLPMU
5O‘T J‘AT‘!O PKN‘M!O‘7 KPO‘K J GPG‘
JAOJP‘M!O‘L G !‘NH G‘T J!Q‘I M O%G M77PKN !G‘\
1‘KM I P‘N‘AT‘ P]JPGN‘M!O‘GJKH‘7M ‘]JPGN !‘
#G‘G J9‘N ‘G J9‘M77 OPNH‘\
‘ 2‘O ‘APGPPKH‘T J+

‘ H G‘9 !P‘G M!N !Q‘ !‘NHP‘]JM N ‘ + ‘ ‘
$ D 4 ‘ HP‘]JM N ‘ % ‘ X‘P HM P M‘G I 9M ‘JGP‘ 7‘NHP O‘ % ‘ !‘ ‘
9M!JG S
H J‘M N‘NHP ‘% ‘ 6‘ MT‘N ‘NHP I
"NGN‘! N‘NHP‘% ‘ MT‘ H KH‘NH J‘O GN‘K !7PGG
X P P‘7 N‘7 ‘NHPP‘N ‘JGP+R+

F "P‘HMO‘APP!‘J!P I L9 TPO‘OJ !Q‘! !P I !NHG+
% PP ! !N‘ !‘ T!AP !P‘#KN‘ + K‘ +‘L‘WAL‘
F & ‘ HP‘]JM N ‘(

D HP‘L PKPO !Q‘GP P!‘9 !PG‘M P‘ !9T‘7 J!Q‘ !‘NHP‘7 9 + ‘ ‘
F (% ‘((% ‘ ‘ NH‘NHP‘7 9 ‘M!O‘NHP‘]JM N ‘ Q P‘NH G‘L LP ‘!M I P‘NHJG‘
MLP9$ KHM!QPO‘ N N ‘ (% ‘ JN‘ H ‘G NHP‘OJUP‘ !]J ((($ % ‘ GNT !Q‘NHM‘GJKH‘M‘NP I !MN !‘NG ((((%
G‘J!U! !‘ !‘NHP‘2NN9 M!‘ JN‘ H ‘G NHP‘OJUP‘ !]J !Q‘M7NP ‘\ GN‘L AMA9T
M‘ PPU‘G 9O P ‘7 ED JG S M!‘3GN MO N S !P H ‘7 I‘H G 9 KN9 U! 9POQP‘ NG
P!MA9PO‘N ‘Q P H I‘17 I MN !‘ 2G‘ N‘!PKPGGM T‘NHMN‘NHP‘ : PPU‘GH J9O‘APM ‘M!‘
2NMHM!‘!M I P‘\ #J O O PG‘ I N‘NHP‘NP I !MN !‘ !‘ (% AP NP ‘K I PT‘NHP‘! N !‘
H KH‘ P‘AP9 P P‘HPE P‘N ‘HM P‘HMO‘7
F H G‘G O !M 9T‘L !NPO‘M7NP ‘NHP‘]JM N S
/‘X NP‘7 I‘JG8 % ‘H I‘L GN L GN HMGNP‘ OPGLMNKH+R

C. W. COPE, R.A. PINXT

T. VERNON. SCULPT

OTHELLO RELATING HIS ADVENTURES.

[OTHELLO]

LONDON. VIRTUE & Co

pIO7 'NHP9MOT'N 'NHP MQ NMM T
#iO 9PN HP 'GLPMU 7 IP AP7 P HP '7MNHP
27T J O '7 iO I P7 J9 i'HP ' pL N'
HP N JGN 'NHP 77KP'2'O 'H 9O 7T J D
N i9T'MMUP M MT'AJN'9PN'T J 'GPiNPiKP
pI'7M99 JL i' I T 9 7P+
&' ' PNKH'5PGOP I iM H NHP +
$' #iK PiN'K iOJKN'NHP I','T J'APGN'Ui 'NHP'L9MKP+
= 4 & ' '' #NNPiOMiNG+'
#iO'N 99'GHP'K IP'MG'N J9T'MG'N 'HPM pI'
2'O'K i7PGG'NHP' KPG 7 I T'A9 O D
'EJGN9T'N 'T J'Q M P'PM G'2%9'L PGPiN'
'' '2'O O'NH P'i'NH G 7M '9MOT%G'9 P+
#iO'GHP' i'I ip+
&' ' MT' N' 1NHP99 +
$' '' 'P'7MNHP'9 %O I P8 7N i NPO' IP'8
N 99']JPGN i%O' I P'NHP'GN T 7 I T'9 7P+
O I'TPM'N 'TPM 8 NHP'AMNN9PG'G PQPG'7 NJIP
HMN'2' HM P'LMCG%O+
2' MI' N'NH JQH'P piI'7 I'I T'A T GH'OMTG+
'NHP' P T I IPiN'NHMN'HP'AMOP'I P'NP99' N+
XHP P i'2'GL UP' 7 I GN'O GMGN JG'KHMiKPG'8
17I I Q'MKK OPiNG'AT'79 O'MiO'7 P9O8
17HM A PMONH'%GKMLPG'%'NHP' I I IPiN'OPMO9T'A PMKH'8
17AP iQ'NMUPi'AT'NHP' iG 9PiN'7 P
#iO'G 9O'N 'G9M P T8 7 I T' POPI LN i'NHPiKP+
#iO'L NMiKP++ 2i' I T'N M P99P %G'H GN T D
@XHP P i' 7MiN PG' MGN'MiO'OPGP NG' O9P F
& JQH']JM PG' KUG'MiO'H 99G' H GP'HPMOG'N JKH'HPM pi+'
2N' MG' I T'H iN'N 'GLPMU'GJKH' MG' I T'L KPGG8S
#iO' 7NHP' MIi AM9G'NHMN'PMKH' NHP'PMN+
HP'#iNH L LHMQ 'MiO'Ipi' H GP'HPMOG
5 'Q F'APipMNH'NHP 'GH J9OP G+D' HPGP'NH iQG'N 'HPM
X J9O'5PGOPI iM'GP JG9T' iK9 iP'
JN'GN 99'NHP'H JGP'M77M G J9O'O M 'HP'NHPiKP8

H G' i9T' G'NHP' NKHK M7N'2'HM P'JGPO8
"p p'K lPG'NHP'9MOT'9PN'HP' NIPGG'N+
'' '2'NH iU'NH G'NM9P' J9O' i'I T OMJQHNP'N ;'
: O' MAMiN
MUP'JL'NH G' lMiQ9PO%I MNNP'MN'NHP'APGN
pi'O 'NHP 'A UPi' PML iG MNHP'JGP+
HMI'NHP 'AM P'HMiOG+
% ' 2'L MT'T J'HPM'HP'GLPMU'8
27'GHP'K i7PGG'NHMN'GHP' MG'HM97'NHP' P+
5PGN JKN i' i'I T'HPMO'7 I T'AMO'A9M1'P
/ QHN' i'NHP'l MiTS lP'H NHP'QPiN9P'l GN PGG'8
5 'T J'LP KP P'i'M99'NH G'i A9P'K lLMiT'
XHP P'l GN'T J' P' APO piKP'\
-' T i A9P'7MNHP
2'O 'LP KP P'HP P'M'O OPO'OJNT
'T J'2'MI'A JiO'7 '97P'MiO'POJKMN i8
T 9 7P'MiO'POJKMN i'A NH'O '9PM i'I P'
" '' 'N ' PGLPKN'T J'8 T J'M P'NHP'9 O' 7OJNT8S
2'MI'H NHP N 'T J'OMJQHNP ' JN'HP P%G' IT'HJGAMiO8
#iO'G 'I JKH'OJN %MG' IT' I NHP'GH %O'
'T J'L P7P iQ'T J'AP7 P'HP '7MNHP +
'I JKH'2'KHM99PiQP'NHMN'2' I MT'L 7PGG
5JP'N 'NHP' 'I T'9 O+
% ' O'AP' NH'T J[S2'HM P'O ip
-9PMGP' N'T J'Q MKP' i'N 'NHP'GNMP'M77M G'#
2'HMO' MNHP 'N 'MO LN'M'KH 9O'NHMi'QPN' N+
IP'H NHP '
2'HP P'O 'Q P'NHPP'NHMN' NH'M99' I T'HPM N+
XHKH'AJN'NH J'HMGN'M9 PMOT' NH'M99' I T'HPM N'
2' J9O'UPPL'7 I'NHPP+SO 'T J'GMUP'EP P9
2'MI'QMO'MN'G J9'2'HM P'i ' NHP'KH 9O'8

HMN'NHP'A J G%'HPM N' MG L P KPO'N 'NHP'M77M G 7GNMNP
2'HJ1 A9T'APGPPKH' T J'L KPPO'N 'NHP'M77M G 7GNMNP
&' ' HP' J U' NH'M I GN I QHNT'L PLM MN i' IMUPG
7 ' TL JG S 1NHP99 'NHP' 7 NJOP' 7 NHP' L9MKP' G APGN
UI i'N 'T J' #iO' NH JQH' P'HM P'NHP P'M' GJAGN NJNP' 7
I GN' M99 PO' GJ77K PiKT'TPN' L I i' M' I P' G P P Q i'
I GN PGG' 7 P77PKNG'NH G'M' I P' GM7P' KP' i'T J'T J'
1JGN'NHP P7 P'AP'K iNPiN'N 'G9JAAP'NHP'Q9 GG' 7'T J'IP '
7 NJIPG' NH'NH G' I P' GNJAA i'MiO'A GNP JG' PWLPO_
N i+
K ' HP'NT MiN'KJGN I'I GN'Q M P'GPiMN G+
"MNH' IMOP'NHP'79 iNT'MiO'GNPP9'K JKH' 7 M'
T'NH KP O pi'APO' 7O i'' 2'O 'MQi CPD
#'iMNJ M9'MiO'L ILN'M9MK NT'
'7iO' i'HM OipGG'8 MiO'O 'JiOP NMUP'
HPGP'L PGPiN' M G'MQM iGN'NHP'1NN I NPG+
GN'HJ1 A9T'NHP P7 P'APiO iQ'N 'T J'GNMNP
2'K M P'7 N O GL G N i'7 'I'7P+
5JP' P7P piKP' 7L9MKP'MiO'PWH A N i8
X NH'GJKH'MKK I I OMN i'MiO'APG N+
#G'9P P9G' NH'HP'A PPO iQ+'
&' ' X HT'8 MN'HP'7MNHP %G+
% '2' 99'i N'HM P' N'G +
K ' '2+
-' '2+' 2' J9O'i N'NHP P' PG OP F
'LJN'I T'7MNHP' i' I LMN piN'NH JQHNG+
T'AP iQ' i'H G'PTP+ GN'Q MK JG'QJUP+
'I TJ'J17 9O iQ'9piO'T J'L GLP JG'PM'
#iO'9PN' I P'7 iO'M'KHM NP' i'T J' KP'
'MGG GN' I T'G I L9PiPGG+
&' ' X HMN' J9O'T J'5PGOP I iM'\
T'O i QHN' 9PiKP'MiO'GN IF' 77 NJipG'
MT'N J1LPN'N 'NHP' 9O' ' I T'HPM N%G'GJAOJPO'
3 pi'N 'NHP' P T']JM9 NT' 7'I T'9 O

' ??

T'GLPKJ9MN P'MiO' 77K%O' iGN J1PiN F
HMN' I T'O GL NG'K JLO'i -' NF' MiN i'OJ9ipGG+
T'GLPKJ9MN P'MiO' 7'I T'HP9I
#iO'M99 iO QI'MiO'AMGP'MO P G N PG
MUP'HPMO'MQM iGN' I T'PGN IMN i+
&' ' P' N'MG'T J'GHM99'L MNP9T'OPNP I ip+
3 NHP'7 'HP'GNMT' 'Q iQ8 NHP'M77M 'K PG HMGNP
#iO'GLPPO' I JGN'MiG P' N+
27 ' 4 J' I JGN'M MT'N i QHN+
K ' X NH'M99' I T'HPM N %F
&' ' #N'i iP' %NHP' I i iQ'HP P' P%99' I PPN'MQM i+'
1NHP99 '9PM P'G IP' 77KP'APH iO+
#iO'HP'GHM99' J'K I I GG i'A iQ'N 'T J8
#iO'GJKH'NH iQG'P9GP' 7]JM9 NT'MiO PGLPKN'
#G O NH' IL N'T J+
K ' 'L9PMGP'T J'Q MKP'I T'MiK piN8
#'IMi'HP' G' 7H ipGNT'MiO'N JGN
'HGK i pTMiKP'2'MGG Qi'IT' 7P+
X NH' HMN'P9GP'ippO7J9'T J'Q O'Q MKP'GHM99'NH iU'
'AP'GPiN'M7NP'I P+
' /PN'N'AP'G +
: O'i QHN'N 'p p T' ip+S#iO'i A9P'G Qi
+ i'&
27' NJP'i 'OP9 QHNPO'APMJNT'9MKU+
4 J'G i i 9M ' G 7M'I P'7M 'NHMI'A9MKU+
2 7 ' #O PJ'A M P' [JGP'5PGOPI iM' P99+
% ' / UN 'HP ‡' ' 7'NH J'HMGN'PTPG N 'GPP#R
HP'HMG'OPKP %O'HP'7MNHP 'MiO'I MT'NHPP+
+ 4 & ' (8 ' piMN G' 127 KP G' BK+
K ' T'9 7P'JL i'HP'7M NH[" ipGN'9MQ +
T'5PGOPI iM' I JGN'2'9PM P'N 'NHP8
2'L NHPP'9PN'NHT' 7P'MNNPiO' i'HP 8
#iO'A iQ'NHPI'M7NP' i'NHP'APGN'MO MiNQP+
IP'5PGOPI iM'2'HM P'AJN'Mi'H J'
17'9 P' 7' 9O9T'I MNNP'MiO'O PKN i+
HP'JMN 'PMOGS 1' 'N& '' 5' i'-

' ;' 2"

i"' XHM' GH J9O'2'O '\ 2'K i7PGG N' G I T'GHM I P'N 'AP'
G '7 iO'8 AJN' N' G i N' i'IT' NJP'N 'MIPiO' GJLP GJAN9P' pip_
'APN WN'MI' p iQD'AM AM MI' 'MiO'GJLP GJAN9P' pip_
< 3i' NJP WN'MI' p iQD'AM AM MI' 'MiO'GJLP GJAN9P' pip_
N MI'AP i N' N 'HM O'7 ' IT' NG'MiO'M99'NHP'N AP' 7 HP99'
NJ 'J' GHM9N' pie T'HP 8 NHP p7 P' IMUP' I IPT+' #'L W' 7
O i iQ' NHTGP97[N' G K9PMI' AJN' 7 NHP' MT' GppU NH J'
MNHP'N ' AP' HMiQPO' i'K ILMGG iQ' NHT'E T'NHMi' N ' AP'
O iPO'MiO'Q ' NH JN'HP +
i"' X 9N'NH J'AP'7MGN' N ' IT'H LPG' 7'2'OPLPiO' i'NHP'
GGJP'\
3i' H J'M N' GJ P' 7 I P8S: 'IMUP' I IPT'2'HM P'
N 9O'NHPP' 7NPi'MiO'2' p NP99' NHPP'MQM i'MiO'MQM i'2'HMNP'
NHP' ;; T'KMJGP' G HPM NPO'8 NH IP'HMNH'i '9PGG' PMG i'
/PN'JG AP'K iEJiKN P' i'AJ' p PiQP'MQM iGN' H I'; 7 NH J'
KMiGN' KJKU 9O' H I 'NH J' O GN' NHTGP97' M' L9PMGJ p' lP' M'
GL N+' HP P'M P'IMIT'p piNG' i'NHP' IA' 7'N IP' H KH'
XP' 99'HM P'I P' 7NH GN I #' #O PJ+
99' AP' OP9 P PO+' M P GP8' Q 8' L OP' NHT' I IPT+'
' i"' XHP P'GHM99' P' lPPN' %NHP' I iiQ'\
3i' #N' I T'9 OQ i Q+
i"' 2%9' AP' NH' NHPP' APN IPG+
3i' : 'N 8 7M P99+' 5 'T J'HPM '& OP Q ','\
9 i"' XHMN'GMT'T J'\

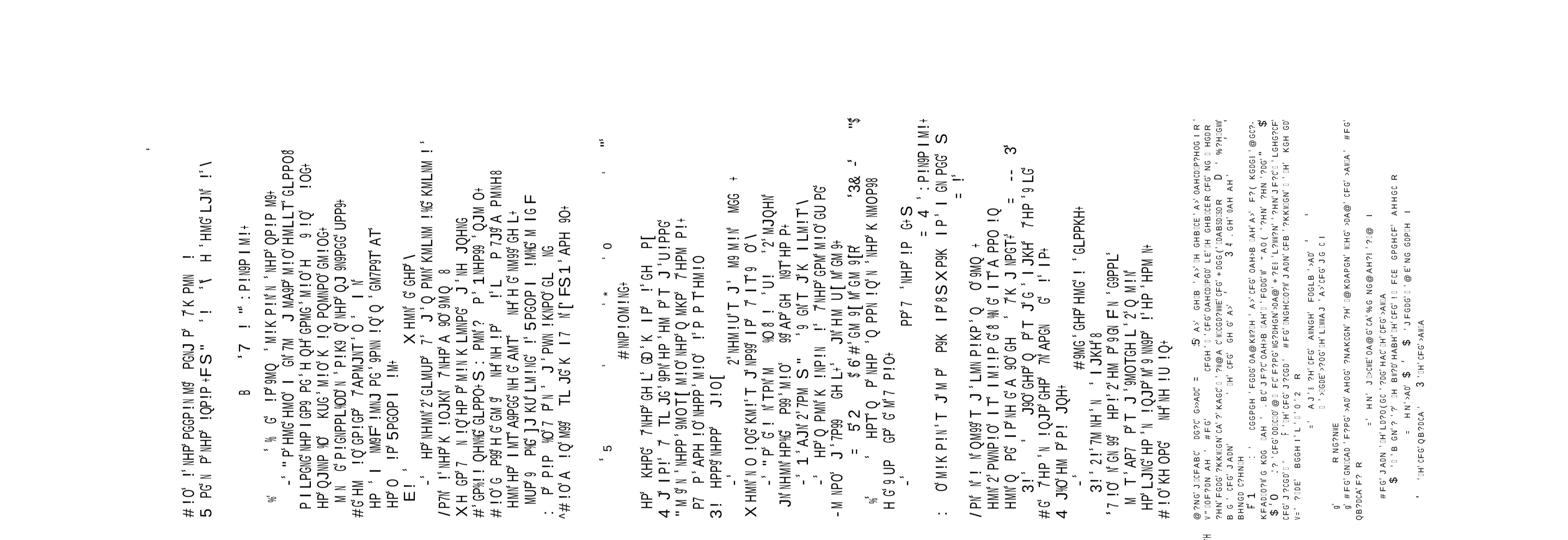
GMQP'6'%N WN'NHP'HPM pi'MiO'N9 P'IMi+R' HP'IM I'G'NHP' (' JAGN'NJP'NHMN'
O'MiO' HMN'KMi' P'IMUP' 7'NHP'LMGGMQP'AP7 P' JG'\S6' HP' io GHMU%O'
GJ QP' NH'HQHMiO'I iGN JG (B' JN'MO LN'NHP' O' #Mio' N'MLLPM G
N 'JG'NHMN' P'HM P'MG7 IP'Mi' IMQP'MG'MiT' i' HM9NGLP p+' 2N' G I P'GN U iQ'p pi'
NHMI'NHP'LMGGMQP' i"piT'2 +S

6'2i'NHP' G NMN i' 'NHP' iOG+
XH 'NMUP'NHP' JN'Mi'A99 G AT'NHP'N L'
'NHP'I iGN JG'HPMOG+R

2i'NHP'$ $' ' % %' ' P'HM P'ML KNJ P' H KH' MG'L AMAGT'GJQQPGNPO'
AT'NHP'i AGP'LMGGMQP'?'i A S6'"GN'NH J'Q pi'NHP'H GP'GN piQNH' '"MGN'NH J'
K9ANHPO'H G ()' NH'NHJiOP';'R' 1IP' 7'NHP'A A9 KMG'K I IpiNMN G'JL i' NH G
LMGGMQP'piM UG'NHMN'" IP'MiO+ Q'g IpiN i'NHP'IMiP' 7'NHP'H GP8' AJN'NHMN'
NHP'GMK PO' MJNH 'AT'NHP'A 9O'7QJ P' 7'NHJiOP 'PWL PGPG'NHP' %$) ' $'
'MiO'NHP' ') %' $ # H KH'GJQQPGN'NHP'OPM' 7'9QHNi iQ+' HP'H GP'7
? A' G'NHP' M H GP'6 H '6 M9 PNH'NHP'Q J9O' NH'7PKPiPGG'MiO' NQP8R'
MiO' HPi' HMUGLP'P'L KNJ PO'N 'H I GP97'H G' ' 9OST'GN PMI iO'6' HPi'NHP'
]J p' MNN9PNH'MQM iGN'H I 'NHP'Q9 NNP iQ'g'GLPM'MiO' NHP'GH P9O R'HP'GN 'Mi' IMQP'
'7 NHP'7J T' 7'6'NHP' io GHMU%O'GJ QP R' MiO' NG' p T'7 I8 MiO' HP' LM iNPO' N
6' NH'H OH' MiO' I iGN JG' ' B' 1J';N QJIpING' HM P'L P M 9PO';MiO' PKPiN'
PO N G'<HM P'NH i' P A M O' NHP' A ' ' 7' NPP piG' M9 ip' MiO' ILMiT'
MiO'HM P']J PN9T'MO LNPO' J' ' # NH JN'NHP' G9 QHNPGN'MKUI 9POQIpiN+
%%+

3 3'2 F '7 B,i ' i2' ' TL JG+

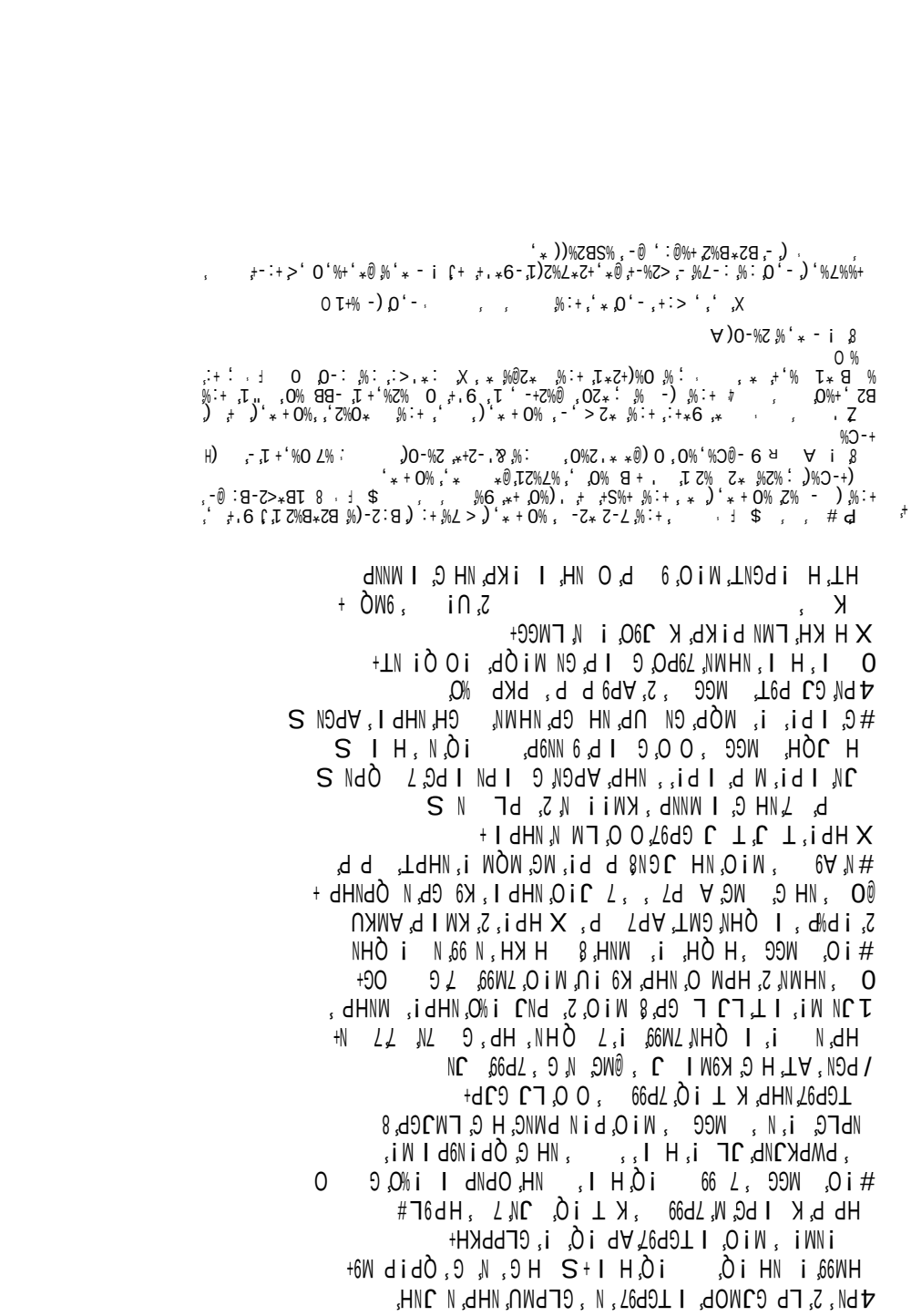
'



i"' X NH'9 lf HT'%W G i N'L GG A9P+
3i' /MT'NHT'7 iQP SNHJG'MiO'9PN'NHT'G J9'AP' iGN JKNPO+
M U lP' NH' HMN' 9piKP'GHP'7 GN' 9 PO'NHP' 'AJN'
7 'A MQQ iQ'MiO'NP99 iQ'HP'7MiNMGN KM9' 9 PG' ' 9 P'H l'
GN 99'7 'L MN iQ S9PN' i N'NHT'O GK PPN'HPM N'NH iU' N+D" "P'
PTP' lJGN'AP'7PO'# MiO' HMN' OP9 QHN' GHM99' GHP'HM P'N' 9 U
i'NHP'OP 9' XHPi'NHP'A9 O' G lMOP' OJ99' NH'NHP'MKN
7'GL N'NHP P'GH J9O' AP'MQM i'N' i79MlP' N'MiO'N' Q P'
GMN PNT'M'7 PGH'MLLPN NP'9 P9 ipGG' i'7M J 8 GTlLMNHT' i'
TPM G' lMiip G'MiO'APMJN PG8 M99' HK'NHP' 'G OP7PK
N P' i' '7' MIN' 7'NHPGP' p]J PO'K i piplKPG'HP_'
OP9 KMNP'NPiOP ipGG' 99'7iO' NGP97' MAJGPO'APQ i'N 'HPM P'
NHP'Q QP'O G PQ GH'MiO' MAH 'NHP' 8 p T'iMNJ P' 99'
iGN JKN'HP 'i' N'MiO'K lLPQ HP'N'G lP' GPK iO' KH KP+
'G 'NH G Q MiNPO'@MG' N' G M' l GN'L PQiMiN'MiO'JI_
7 KPO'L GN i' H'GNMiOG'G'pl ipiN' i'NHP' OPQ PP' 7'
NH G 7 NJiP'MG' MGG 'O PG8SM' UiM P' p T' 9JA9P8' i'
7J NHP'K iGK iMA9P'NHMi' i'LJNN iQ' i'NHP' lpP'7 l' 7'
K 9MiO'HJlMiP'GPPl iQ'7 'NHP'APNNP'K lLMGG iQ' 7H G'
GM9N'MiO' l GN' H OOPi' 9 GP' M77PK i'\ HT'i ip'8 HT'
i ip' #'G9 LLP'MiO'GJAN9P'UiM P'8D M7 iOP' 7 KKMG iG8
UiM P'[APG OPG'NHP'UiM P' G HMiOG lp'T JiQ'8 MiO'HMNH'
M99'NH GP' p]J G NPG' i'H l'NHMN7 99T'MiO'Q ppi' l iOG' 9 U
M7NP ' #'LPGN 9piN'K lL9PNP'UiM P8 MiO'NHP' lMi'HMNH'
7 JiO'H l'M9 PMOT++
i"'2' KMii N' AP9 p P' NHMN' i' HP 8' GHP' G 7J99' 7' l GN'
A9PGG%O'K iO N i+
L 3i' 9PGG%O'7Q%G piO['NHP' iP' GHP' O iUG' G lMOP' 7'
Q MLP'G' 7'GHP' HMO' APPi' A9PGG%O' GHP' J9O' ip p' HM P'
9 PO' NHP' ' 9PGG%O' LJOO iQ[5 OGN' NH J' i N' GPP'
HP'LMOO9P' 7NH' NHP' LM9l' 7'H G' HMiO'\ O OGN' i N' lM U'
NHMN'\

i"' #OPJ+ 9 4
L 3i' HMN' MGG '9 PG'HP '2'O ' P99'AP9 p P' N8
HMN' GHP'9 PG'H l '%W G'ML'N'MiO' 7Q PMN'K PO N
HP' SH AP N'NHMN'2'piOJ p'H l'i N S
2G' 7M'K iGNMiN'9 iQ'i A9P'iMNJ p'8
#io'2'OM P'NH iU'HP%9'L P'N '5PGOPl iM
#'l GN'OPM'HJGAMiO+' '2'O'9 P'HP'N '8
N' JN' 7MAG 9JNP'9JGN'@NH JQH'LP MO piNJ p
2'GNMiO'MKK JiNMiN'7 'MG'Q PMN'M'G i
JN'LM N9T'9PO'N 'O PN' lT' p piQP+
O 'NHMN'2'O 'GJGLPKN'NHP'9JGNT'
"'MNH' PML%O' iN 'lT'GPMN' NHP'NH JQHN' HP p 7
5 NH'9 UP'M'L G i JG' l ip M9'QiM 'lT' i M OG8
#io'i NH iQ'KMi' 'GHM99'K iNPiN' lT'G J9+
99'2'M l'p pi%OD NH'H l ' 7P'7 ' 7P'8
1 '7M 9 iQ'G 'TPN'NHMN'2'LJN'NHP' '
#N'9PMGN' iN 'M'EPM9 JGT'G 'GN iQ+
HMN'EJOQ lpiN'KMii N'KJ p+' XH KH'NH iQ'N 'O S
27'NH G'L 'N MGH' 7 piKP' H l'2'N MKPF
O 'H G'] JKU'HJiN iQ'GNMiO'NHP'LJNN iQ' i+
2%9' HM P' J' KHMP9' MGG]' i'NHP'H L8
#AJGP'H l'N 'NHP' 'i'NHP' QHN%%QM A S
O '2'7PM' MGG ' NH'lT'i QHN KML'N 8
MUP'NHP' 'NHMiU'lP'9 P'lP'MiO' p M O'lP
O 'lMU iQ'H l'PQ PQ JG9T'MI'MG8+
#io'L MKN G iQ'JL i'H G'LPMKP'MiO']J pN'
3 pi'N 'lMOipGG+ % G'HP p'AJN'TpN'K i7JG%O 8
lM p T%G'L9M i'7MKP' G ip p'GPPi'N 99'JGPO+ 9: 4

3 3')) F '7
' ',"p M9O'2 ' ', i i # i, ',i 3
', 2N' G 1NHP99 %G' L9PMGJ p' J' i A9P' MiO' M9 MiN'



MT 2 AMT NH J GHM9N U! I P HP PM7NP
-1 =: 4

T 7P I JGN I P 7 MGG N HP I GN PGG+
2%99 GPN HP !8
TGP97 NHP H 9P N O M NHP MLM N+
#!O A !Q H I EJ I L HP! HP I MT MGG 7 !O
9 K N !Q H G 7P S#T NHMN%G NHP MT8
5J99 ! N OP KP AT K 9O!PGG M!O OP9MT+ 9 4

3 3 2 F% .! -

"-! & B O?H

- MGNP G L9MT HP P 2 99 K !NP!N T J LM !G
I PNH !Q NHMN%G A P78 M!O A O+ : O I QP!P M9+
+E&-

9 !+

! X HT I MGNP G HM P T J !GN J I P!NG APP! !
ML9PG NHMN NHPT GLPMU %NHP ! GP NHJG \
2 E&- " G H \
! # P NHPGP 2 L MT T J !O !GN J I P!NG D
2 E&- #T I M T M P NHPT G +
! 1 NHP PAT HM!QG M NM 9+
2 E&- X HP PAT HM!QG M NM9P G \
! M T G AT I M!T M !O !GN J I P!N NHMN 2 U! +
JN I MGNP G HP P%G I !PT 7 T J M!O NHP QP!P M9 G
9 UPG T J I JG K NHMN HP OPG PG T J 7 9 P%G GMUP D N
I MUP ! I P! GP NH N+
2 E&- X P99 G P 99 ! N+
! 27 T J HM P M!T I JG K NHMN I MT ! N AP HPM O N $N
MQM ! AJN MG NHPT GMT N HPM I JG K NHP QP!P M9 O PG
! N Q PMN9T KM P+
2 E&- X P HM P ! !P GJKH G +
HP!LJN JL T J L LPG !T J AMQ 7 2%99 M MT
: 8 M! GH !N M 8FM MT+ + 4 & JG K M!G
- 5 GN NH J HPM I T H !PGN 7 P!O \
! 2 HPM ! N T(J H !PGN 7 P!O 8 2 HPM T J+
- - NHPP UPPL JL NHT]J 99PNG+ HP P%G M L L PKP
7 Q 9O 7 NHPP 7 NHP QP!N9P I M! NHMN MNNP!OG NHP
QP!P M9%G 7P AP GN !Q NP99 HP NHP P%G !P MGG
P!N PMNG HP M 9 NN9P 7M J 7 GLPPKH X 9N NH J O NH G \
!$ HP G GN !Q G 8 7 GHP 99 GN H NHP 2 GHM99
GPP I N ! N 7T J!N HP +

*

- ^5 Q O I T 7 P!O'+DS2! HMLLT N I P 2MQ
3! 4 J HM P ! N APP! M APO NHP! \
+($ - X HT ! 8 NHP OMT HMO A UP
P7 P P LM NPO+ 2 HM P I MOP A 9O 2MQ
GP!O ! N T J 7P T GJ N N HP
2G NHMN GHP 99 N NJ JG 5PGOP I !M
- KJ P I P G I P MKKPGG+
3! 2%99 GP!O HP N T J L PGP!N9T8
#!O 2%99 OP GP M I PM!N O M NHP
1JN 7 NHP MT NHMN T J K ! P GP M!O AJG !PGG
MT AP I P 7 PP+ + 4
- 2 HJ I A9T NHM!U T J 7 %N+ 2 !P P U!P
#O9 P!N !P I P U !O M!O H !PGN+F

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: O I Q O 9 PJNP!M!N 2 M I G T
O T J O GL9PMGJ P8 AJN M99 99 GJ P AP P99+
HP QP!P M9 M!O H G 7P M P NM9U !Q 7 N+
#!O GHP GLPMUG 7 T J GN JN9T 8 HP PL9 PG+
HMN HP T J HJ N G 7Q PMN 7M I P ! TL JG
#!O Q PMN M77 ! NT8 M!O NHMN ! H 9PG I P GO I+
"P I QHN ! N AJN P7JGP T J AJN HP L NPGNG HP 9 PG T J8
#!O !PPOG ! NHP GJ N AJN H G 9 U !QG
^ NMUP NHP GM7GN KKMG !AT NHP 7 !N' F
A !Q T J !MQM !+
- 4PN 2 APGPPKH T J S
27 T J NH !U 7 N NHMN N I MT AP O !P S
: P I P MO M!NMQP 7G I P A P7O GK J GP
X NH 5PGOP I !M M9 !P+
- MT T J K I P !8
2 99 APGN T J HP P T J GHM99 HM P N I P
GLPMU T J A G I 7 PP9T+
- U 2 M I I JKH A J!O N T J+
+ 4 &

3 3 22 F ! ! -

, 1 * "' : P!N9P I P!+

K HPGP 9PNNP G Q P 2MQ N NHP L 9 N8
#!O AT H I O I T OJN PG N NHP GP!MNP 8
HMN O !P 2 99 AP M9U !Q !NHP UG S
&PLM NHP P N I P+
3! X P99 I T Q O 9 O+ 2%99 O %N+
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3 3 222 F% .! -

5 "' ;

- P NH J MGGJ %O Q O MGG 2 99 O
#99 I T MA 9 N PG !NHT APHM97+
: O I MOM I O 8 2 M M!N F N Q P PG I T
HJGAM!O+
#G 7 NHP KMJGP F P P H G+
- 1 NHMN%G M! H !PGN 7P99 +SD5 ! N O JAN MGG
JN 2 99 HM P I T 9 O M!O T J MQM !
#G 7 P!O9T MG T J P P+
- J!NP JG I MOM I
X HMNP P GHM99 APK I P 7 KHMP9 MGG
"P%G !P P M!TNH !Q AJN T J N JP GP M!N+
- 2 U! %N S2 NHM!U T J 4 J O 9 P I T 9 O
4 J HM P U! !H I 9 !Q8 M!O AP T J P99 MGGJ %O
"P GHM99 !GN M!QP!PGG GNM!O ! 7M NHP 77
HM! !M L 9 N K O GNM!KP+
- 5$ AJN 9MOT+
HMN L 9 KT I MT P NHP 9MGN G 9 !Q+
1 7PPO JL !GJKH ! KP M!O MNP GH O PN+
1 A PPO NGP97G J N 7K KJ I GNM!KP+
HMN 2 AP !Q MAGP!N M!O I T L9MKP GJLL9 PO+
T QP!P M9 99 7 QPN I T 9 P M!O GP KP+
- 5 ! N O JAN NH MN8 AP7 P 3 I 9 M HP P
2 Q P NHPP M M!N 7 NHT L9MKP MGGJ P NHPP+
27 2 O M 7 P!OGH L 2%99 LP 7 I N
NHP 9MGN M N K9P I T 9 O GHM99 !P P PGN8
2%99 MNKH H I NM I P DD M!O NM9U H I JN 7 LMN P!KP
" G APO GHM99 GPP I M GKH 9 H G A M O M GH 7N8

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2%9' iNP I iQ9'p p TNH iQ'HP'O PG
X NH' MG %'G J N' HP p7 P'AP'I p T' MGG
8D 'NHT'G 9 K N 'GHM99' MNHP'O P'
HMi'Q P'NHT'KMJG'P'M MT+

' , ' ,' ,' ,"_
MOMI'HP P'K IPG
'
T 9 O+
-' MOMI'2%9'NMUP' IT'9PM P+
-' XHT'GNMT+
#iO'HPM'IP'GLPMU+
-' MOMI'i N' 8 2'MI' p T' 9%'MN'PMGP+
i7N'7 'I IP' i'LJ L GPG+
-' XP99B O'T J'O GK PN i+' 9: 4'
3i' "M[2'9 UP'i N'NHMN+
K ' XHM'O GN'NH J'GMT'\
3i' NH iQ'I T'9 O'\ 7S2'Ui 'i N' HMN+
K ' XMG'i N'NHMN' MGG 'LM NPO'7 I'IT' 7P'\
3i' MGG 'IT'9 O'\ 'GJ P'2'KMii N'NH iU' N+
HMN'HP' J9O'GNPM9'M MT'G 'QJ 9NT 9 UP+
PPiQ'T J'K I iQ+
K ' 2'O 'AP9 P P%' MG'HP+
-'+" 'i 'IT'9 O';
2'HM P'APPi'NM9U iQ' NH'M'GJ N 'HP P
#'IMi'NHMN'9MiQJ GHPG'i'T J'O GL9PMGJ P+
K ' XH 'G%N'T J'IPMi'\
27'2'HM P'MiT'Q MKP' 'L P'N'I P'T J+
-' XHT'T J'9pJNPiMiN' MGG +' :' O'IT'9 O+
" G'L PGPiN' PK iK9 MN i'NMUP8
O ' 7HP'APi N' iP'NHMN'N J9T'9 PG'T J+
HMN'P G'i'Qi MiKP'Mi0'i N' i'KJii iQ
2'HM P'i '£JOQ I PiN' i'Mi'H iPGN'7MKP'
2'L NHPP'KM99'H I'AMKU+
K ' $ XPiN'HP'HPiKP'i '\
-' #T'G NH'8 G 'HJ1A9PO+
K ' I 'O iip'NHPi'\
-' JPGOMT'i i' 'i QHN8 i'D XPOiPGOMT' I i'8S
1i' JPGOMT'i i' 'i QHN8 i'D XPOiPGOMT' I I8
2'L NHPP'iM1P'NHP'I IP8 AJN'9PN' N' i N'
3WKPPO'NH PP'OMTG' i'7M NH'HP%G'LPi NPiN8
#iO'TPN'H G'N PGLMGG' i' J'K II i' PMG i
@ M P'NHMN'NHPT'GMT'NHP' M G' I JGN' I MUP'PWM I L9P'
1JN' 7NHP 'APGN ' G i N'M9 I GN'M'7MJ9N'
' iKJ'N'L MNP'KHPKU' XHPi'GHM99'HP'K IP'\
P99' IP'2LNHP99 +' 2' iOP' i'I'T G J9+
XHMN'T J' J9O'MGU' IP'NHMN'2'GH J9O'OPiT+

1'GNMiO'G 'IMI I P iQ' i+' XHMN[KHMPg MGG '
HMN'KMI P'M' iQ' NH'T J8 MiO'G 'IMiT'N IP[
XHPi'2'HM P'GL UP' 7T J'O GL M G iQ9T+
"MNH'NMWPi'T J'LM N8 N 'HM P'G 'I JKH'N 'O'
'A iQ'H I' i'[JGN' IP'2'K J9O'O 'I JKH S
K ' - NHPP'i ' I P' 9PN'H I'K IP' HPi'HP' 998
2' 99OPiT'NHPP'i NH iQ+
-' XHT'NH G' G i N'M'A i'8
% G'MG'2'GH J9O'piN PMN'T J' PM'T J'Q9 PG'$
1'7PPO' i'i J GH iQ'O GHPG' 'UPPL'T J' M I8
1'GJP'N'T J'N 'O 'M'LPKJ9 M'L 7N
'T J' i'LP G i'' MT' HPi'2'HM P'M'GJ N
XHPi' HPi'2'N 9O'NHPP'HP' MG' T'IT'K JiGPg
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2i'IT' H 9P'K J GP' 7 iQ'NH J'K POGN#'2iOPPO'\
#iO'O OGN'K iN MKN'MiO'LJ GP'NHT'A 'N QPNHP +
#G' 7NH J'NHPi'HMOGN'GHJN'JL' i'NHT'A M i'
IP'H A9P'K iKP N' 27'NH J'O GN'9 P IP
H 'IP'NHT'NH JQHN+
3i' T'9 O'T J'Ui '2'9 P'T J+

% %- % "' SD&K iGNMiN9T'JGPO'AT' J' 9O' NP G'MG i'/T9T%G'/'3JLHJPG 'R S'
6' P NHP'GNMiO' i'M ' HPNHP'N' AP' APGN'N 'OPLM N' 'i N+R
, NPP piG'GN JKU' JN'% ' i'NHP'K J GP' 7H G'H O i9KPO'L Ji iQ+
F HP]JM N ' PMOG S

/'2N'GHM99'AP'J99' 7L GP'MiO' ('2B

H G'G MO LNPO' NH JN'MiT'IpiN i' 7'NHP'PMO iQ' ('8 $';'MiO'NHpi'NHP'
PO N G'M99'JG'NHMN- %' G' P QHN#' A 'i'NHP'GPDiG'PAP7 P'JG'L GP'G"' ('*
MiO'SPGOPI iN'PMiG N 'GMT'MHMN' HPi'GHP' PM9TL P7P G M' GJ N'NHMN'GHM99'MGU'
NHP'9 P' 7'LNHP99 ' N'GHM99'AP' iP' O79KJ9N N ' OPNP I ip'MiO' HPi'OPNP I ipO'
HM O'N 'AP'JiOP'MMUPi+

& ($' HP'LGMTH JGPK L PG' i'NHP 'iKP9T'K N KM9'LH MGP 9 QT'O P'JG
8 ($'iGNPMO' 7'8 ($' ? HiG i'L LP 9T'PWL9M iG 8 ($'MG'PWL PGG iQ' 6'NHP'
JNI GN'OPO PP' 7'MI MA9PiPGG'E iPO' NH'MI' OPM' H KF LP HMLG'M99 NPiOP iPGG'
iK9JOPG' '7'PPA9PiPGG'6 7NiPGG'MiO' MiN' 7L NPKN i+R

F H G P PKH' 7 9MQ %G PKH 'G PEPKMPO'AT' NPP piG'APKMJGP'N' 9MNPG NHP'
IPMGJ P+' "P'K J9O' i9T'GPP'N 'GT99MA9PG APT iO'NHP'NPi' NH JN'MiT' PQM O'N '
NHP'7 KP'MiO'K iG GNPiKT' 7'NHP'LMGGMQP+

F HP']JM N ' PMOG+'32'$ '$' ('% ;'NHP']JM N ' 7' '&$2' %'
$ ' ($' 'I HP P' G M]J PN'PWL PGG i' 7O PMOSM'G 9PIi'7 pA O iQ' 7'p 9
S i'NHP'PMO iQ' 7'NHP'7 9 ' HKF P'Q P

%))

K ' 2'NH iU'NH J'O GN8
#iO'7 '2'UI 'NH J%N'7J99 79 P'MiO'H ipGNT+
#iO' p QH% N'NHT' OG'AP7 P'NH J'Q %GN'NHPl'A PMNH+'
HP P7 P'NHPGP'GN LG' 7'NH iP'7 QH N'IP'NHP' I p
O 'GJKH'NH iQG'i'M'7M9GP'O G9 TM9'UiM P'
P'N KUG' 7KJGN I8 AJN'i'M'I MI'NHMN%G'EJGN+
HPT% P'K9 GP'OP9MN iG'D U iQ'7 I'NHP'HPM N+
HMN'LMGG]i'KMii N' J9P+
3i' O ' KHMP9 MGG S
2'OM P'AP'G i'2'NH iU'NHMN'HP' G H ipGN+
K '2'NH iU'G 'N +
3i' pi'GH J9O'AP' HMN'NHPT'GPPl'8
1 'NH GP'NHMN'AP'i N% J9O'NHPT'I QHN'GPPl'i ipL
K ' P NM I 'Ipi'GH J9O'AP' HMN'NHPT'GPPl'
3i' XHT'NHpi'2'NH iU' MGG %G'Mi'H ipGN'IMi
K ' MT'TPN'NHp p%G' I P' i'NH G
2'L NHPP'GLPMU'N 'Ip'MG'N 'NHT'NH iU iQG+
#GNH J'O GN' J1 iMP'8 MiO'Q P'NHT' GN' 7NH JQHNG'
HP' GN' 7' OG+
3i' : O'IT'9 O';LM O i'I p8
H JQH'2'MI'A JiO'N 'p p T'MKN' 7OJNT
2'MI'i N'A JiO'N 'NHMN'M99'G9M PG'M P'7 PP'N +
NNP 'IT'NH JQHNG'\ XHT'GMT'NHPT'M P' 9P'MiO'7M9GP S'
#G' Hp p%G'NHMN'LM9MKP' Hp piN '7 J9'NH iQG
lpN lPG' iN JOP'i N\S H 'HMG'M'A PMGN'G 'LJ p+
JN'G Ip'JiK9PMi9T'MLL pHPiG iG
ppL'9PPNG'MiO'9M OMTG'MiO'i'GPGG iGD G N
X NH'lPO NMN iG'9M 7J9'
K ' H J'O GN'K iGL P'MQM iGN'NHT'7 piO'9MQ +
27'NH J'A JN'NH iU%N'H I' iQ%O'MiO'lMU%N'H G'PM'
#'GN MiQP'N 'NHT'NH JQHNG+
3i' 2'O 'APGPPKH'T J
H JQH'2'LP KHMiKP'MI' K JG i'lT'QJPGG
@#G'2'K i7PGG' N' G'lT'iMNJ p%G'L9MQJP
'GLT'iN 'MAJGPG'MiO' 7'lT'EPM9 JGT

3i'4 J'KMii N' 7'IT'HPM N' p p'i'T J'HMiO8
'GHM99'i N' H 9GN'%N G'i'lT'KJGN OT+
K '"M[
3i' 1'AP M p'lT'9 O' 7'EPM9 JGT8
2N' G'NHP'Q ppi pTPO'l iGNP ' H KH'O NH'l KU'
HP'lPMN' N'7PPOG' i'D HMN'KJKU 9O'9 pG' i'A9 GG'
XH '7O GP97 A JiNT'AP'MAJG%O8 9 U'N %N 8
JN' 1' HMN'OMlIPO'l iJNPG'NP99G'HP' %P +
XH 'O NPG'TPN'O JANG'8 GJGLPKNG'TPN'7 iO9TD'9 pG'
K '1'l GP TL
3i'- 'MiO'K iNPiN' G KH'MiO' KH'Pi JQH8
JN' KHPG'7ipPGG F' G'MG'L 'MG iNP +
'H l'NHMN'P p'7PM G'HP'GHM99'AP'L
: O'HPM pi'NHP'G J9G' 7M99'lT'N AP'OP7PiO'
O 1'EPM9 JGT'[
K ' X HT'[HT' G'NH G'\
H iU%EN'NH J+'2%O'lMUP'M'9'7P' 7EPM9 JGT+
'7 99 'GN 99'NHP'KHMiQPG' 7NHP'l i
X NH'7 PGH'GJGL K iG'\ '','N'AP' iKP'i'O JAN
2G' iKP'N 'AP' PG 9 %O' 'JWKHMiQP'lP'7 'M'Q MN+
XHPi'2'GHM99'NJ i'NHP'AJG ipGG' 7'lT'G JQ'
'GJKH'PWGJ779 KMNP'%%'MiO'A9 %O'GJ l GPG+
MNKH iQ'NHT'i7p piKP+' % G'i N'N 'lMUP'lP'EPM9 JG
'GMT'lT' 7P'G7M '7PPOG' p99'9 PG'K lLMiT' ;
2G'7 PP' 7GLPPKH'G iQG'LGMTG'MiO'OMiKPG
XHP P' NJP' G'NHPGP'M P'l P' NJ JG8
'7 l'l ip' i' pMU'lp NG'N 9G'2'O M '
HP'G lM99PGN'7PM ' 'O JAN' 7HP' p 9N8
O 'GHP'HMO'pTPG'MiO'KH GP'lP' '9MQ 8
2%9G'GPP'AP7 P'2'O JAN8 HPi'2'O JAN'L P'8
#iO' i'NHP'L 7'NHP P'G'i 'l P'AJN'NH G S
MT'MN' iKP' NH'9 p' 'EPM9 JGT+
E 'HP'JMN '2 %' HP]JM N '2
EE '2' HP']JM N '%' 2
EE '%%SpiO9PGG+
%' J% '(' OO'iH G'PON i' 7? HiG i%G5 KN iM T' J% '(
lMT'AP'N MKPO'N 'NHP'9 '/MN i'J% ' *N'GL'O i'JL i'MI'MiK piN'7 l' 7
PW K G iQ'NMiO'7 QJ MN P9T'N 'GL'N JN' i'MAH' piK' 'K iNPl LN*' 'J% '(
lMT'NHJG'G 7T'K iNPlLN A9P+' & KHM OG i'i'H G MOl MA9P'5 KN iM T'G lP
HMN'O GGPiNG7 l'NH G'K iGOP iQ'NHP' G'i lL AMA9T'M'l GL iN7 'JF'
% ' ' ' ' ' ' ' LJ77PO' JN'MiO'K iGP]JPiN9T'pWMQQP MNPO'PWN M M
QMiNSN ' H KH' 8 'G'MOOPO'i N'G'lJKH'7 'NHP'GMUP' 7'M'GPK iQ'PL NHPN'
NH'M'ip 'lPMi iQ'MG' 7'Q iQ'pILHMG G'N'NHP'7 GN+R
E (%' HP']JM N'MOOG'8 ''SN' PMU'MOO N i'MG' P'NH iU+ + 99 p'
GMTG'6' JNHPl p%G'PM' MG'G'GPi A9P' 7'NHP'7 9 ')+R
i'lMiJGK LN' i'H G'K LT' 7'NHP'7 9 '
E 2 %' HP']JM N ' 2

" P ! JQHN %N MG NKHK M7N S JN 2 M I I JKH N A9M I P 8
2 HJ I A9T O APGPPKH T J 7T J LM O !
OD N I JKH 9 !Q T J+
2 M I A J!O N NHPP 7 P P +
9 3! 2 GPP NH G HMNH M 9 NN9P OMGH%O T J GL NG+
N M E N ! N M E N+
3! JGN I P 2 7PM N HMG+
2 H LP T J 99 K !G OP HMN G GL UP
I PG 7 I I T 9 P S JN 2 O GPP T J M P I > %O S
2 M I N L MT T J ! N N GN M !I T GLPPKH
Q GGP GGJPG ! N 9M QP PMKH+
HM! N GJGL K !+
<, 2 99 ! N+
3! H J9O T J O G I T 9 O+
T GLPPKH GH J9O 7M99 !N GJKH 9P GJKKPGG$
XH KH I T NH JQHNG M I %O ! N+D MGG %G I T NHT
7 P!O S
T 9 O 2 GPP T J M P I %O+
! N I JKH I %O S
2 O ! N NH !U AJN 5PGOP I !M%G H !PGN+
3! / !Q 9 P GHP G [M!O 9 !Q 9 P T J N NH !U G [
!O TPN H !MNJ P P !Q 7 I NGP97 S
3! #T NHP P%G NHP L !N S#G SNO AP A 9O NH T J S
N N M77PKN I M!T L L GPO I MNKHPG
17HP !K9 I P K I L9PW ! M!O OPQ PP 8
XHP PN P GPP !M99 NH !QG !MNJ P NP !OG
O H[!P I MT G I P99 !GJKH M 99 I GN M!U+
O J9O GL L N !G NH JQHNG J!!MNJ M9 S
JN LM O ! I P8 2 O ! N !L G N !
5 GN !KN9T GLPMU 7HP NH JQH 2 I MT 7PM +
" P 99 PK 9 !Q N P APNNP EJOQ I P!N+
MT 7M99 N I MNKH T J NH HP K J!N T 7 I G+
#!O HMLL 9T PLP!N+
OM P P99 7M P P99
27 I P NH J O GN LP KP P 9PN I P U! I P8
PN !NHT 7P N AGP P /PM P I P 9MQ +
3! T 9 O 2 NMUP I T 9PM P+ 9 ! 3
X HT O O 2 I M T S H G H !PGN K PMNJ P O JAN9PGG+
PPG M!O U! G I P I JKH I P NHM! HP J!7 9OG+
3! T 9 O 2 J9O 2 I QHN P!N PMN T Q H ! J
GKM! NH G NH !Q ! 7M NHP # 9PM P N N I P
#9NH JQH %N G 7 N NHMN MGG HM P H G L9MKP
@O GJ P HP 7 99G N JL NH Q PMN MA 9 NT
4PN 7 T J L9PMGP N H 9O H I 77 M H 9P+
4 J GHM99 AT NHMN LP KP P H I M!O H G I PM!G
NP 7 T J 9MOT GN M ! H G P!NP NM ! I P!N
X NH M!T GN !Q P PHP I P!N I L NJ! NT8
JKH 99 AP GPP! !NHMN+ 2!NHP I PM!N I P+
/PN I P AP NH JQHN N AJGT !I T 7PM G
@#G NHT KMJGP 2 HM P N 7PM 2 M I
#!O H 9O HP 7 PP 2 O APGPPKH T J H ! J +
OPM ! N I T Q P ! I P!N+
3! 2 !KP I P NMUP I T 9PM P+ + 4
H G 7P99 %G 7PWKPPO !Q H !PGNT+
#!O U! G M99]JM9 N PG F NH M 9PM !PO GL N+
17HJ I M! OPM9 !QG 27 2 O L P HP HMQQM O+
H JQH NHMN HP EPGGPG P P I T OPM HPM N GN !QG
2%O H GN9P HP 77 M!O 9PN HP O !NHP !O+
L PT MN 7 NJ!P D " ML9T 7 2 M I A9MKU8
#!O HM P ! N NH GP G 7N LM NG 7K ! P GMN !

4 ((%% SGJKKPGG ! K !GP]JP!KP+
D HP]JM N % 2 $ $ %
F : ' % NHP]JM N 8 NHP 7 9 >
HP I MQPG !NH G GP!NP!KP M P OP PO 7 I 7M9K ! T I P O JANG PW GN
, HPNHP $ $, MG M! J! PK9M I PO HM U8 AJN NHP P G ! O JAN NHMN NHP
9O MOEPKN P $ I PM!G 9O HPTH GE M P NHP 7 NGN MLG 7M HMD U HP
P I M !OP 7 NHP LMGGMQP I MTAP 99JGN MNPO AT M]J NMN !7 I 5 TOP!' @6 # ! ! JG
MA 9 G R S

6 " M P a J ! N GPP! , HP! 8$ % ' 7 I NHP 7 GN+
I P 7M9K !GN LG MN HMN HP PTP OPG Q!%O
#!O NH HP PMQP !PGG NHP]JM T I GG%O+
N M QHN 79 PG MN KHPKU M!O K9 LG N % $ 8 1.

% HP]JM N % (%

HMN KHM I AP P G HM P 1 7 2 M I OPK9 !$O
2!N NHP M9P 7TPM G8 SDTPN NHMN%G ! N I JKH S
HP%G Q !P8 2 M I MAJG%O # M!O I T P9 P7
'c2JGN AP N 9 MNHP HP 1 KJ GP 7 I M MQP+
HMN P KM!' KM99 NHPGP OP9 KMNP K PMNJ PG J G+
#!O ! N NHP MLLPN NPG[2 HMO MNHP AP M N MO+
#!O 9 P JL !NHP ML J 7M OJ!QP !+
HM!' UPPL M K I P !NHP NH !Q 2 9 P+
O NHP %G JGPG 4PN %N G NHP L9MQJP 7Q PMN !PG8
- P QMN %O M P NHPT 9PGG NHM!' NHP AMGP#
% G OPGN !T J!GHJ!!MA9P 9 UP OPMNH 8
3 P!' NHP!' NH G 7 UPO L9MQJP G 7MNPO N JG+
XHP!' P O]J KUP!+ / U HP P GHP K I PG D

27 GHP AP 7M9GP 1 NHP!' HPM P!' I KUG NGP97[F S
2%99 ! N AP9 P P%N+
- " ! I T OPM 1NHP99 \
4 J O !!P M!O NHP QP!P JG G9M!OP G
T T J ! NPO O MNNP!O T J L PGP!KP+
2 M I N A9M I P+
- XHT O T J GLPMU G 7M !N9T $D
P T J ! N P99 \
2 ?1@ M * 1 ! * +!' I T :+ ? 1 ?
- XHT NHMN%G NH MNKH !Q8 %N 99 M MT MQM !
/PN I P AJN A !O N HM O NH !' NH G H J
2N 99 AP P99+
4 J !MLU !' F G N 9 NN9P 8
+ ,& - ! 5 " ' .. ! 5 " " !,-
/PN N M9 !P+ I P 2%99 Q !' NH T J+
- 2 M I P T G T NHMN T J M P ! N P99+
+ 4 & 19"+ "
2 M I Q9MO 2 HM P 7 J!O NH G !MLU !' 8
H G MG HP 7 GN P I P I A M!KP 7 I NHP
T MT M O HJGAM!O HMNH M HJ!O PO N I PG $
X %O I P N GNPM9 N AJN GHP G 9 PG NHP N UP!
@O HP K !EJ %O HP GHP GH J9O P P UPPL N
HMN GHP PGP PG N P P I P MA JN HP +
U GG M!O NM9U N + 2%99 HM P NHP U NM%P!' JN F
#!O Q P%N 9MQ 8 HMN HP 99 O NH N
" PM P!' U! G ! N 2
2 ! NH !Q AJN N L9PMGP H G 7M!NMGT+

3! " ! 2 HMN O T J HP P M9 !P \
5 ! N T J KH OP8 2 HM P M$NH !Q 7 T J+
3! #+NH !Q 7 I P \S N G M K I I !' NH !QS
" M [
3! HM P M 7 9 GH 7P+
1 G NHMN M99 \ XHMN 99 T J Q P I P !
O NHMN GM I P HM!OUP KH P7\
3! XHMN HM!OUP KH P7\
XHMN HM!OUP KH P7 \
XHT NHMN NHP 7 GN QM P N 57PGOP I !M8
HMN H KH G 7NP!' T J O O A O I P GNPM9+
3! " MGN GN 9P!' N 7 I HP \
8 AJN GHP 9PN N O L AT !PQ9 QP!KP

F H G G NHP PMO !Q 7NHP]JM N + HP 7 9 PMOG S
6 27 GHP AP 7M9GP HPM P!' I KU%O NGP97[R
T NHP PMO !Q 7N9 P 7 9 , P I MT J!OP GNM!O NHMN 7 5PGOP I !M AP 7M9GP SAP
! N HMN GHP MLLPM G N AP SHPM P!' MN HP K PMN !' !GNPMO 7Q !Q M!' I MQP 7
2NGP97 I KUPO NGP97 DQM P M 7M9GP I MQP+ HP PMO !Q 7 NHP]JM N G I P
7 K A9P M!O !MNJ M9++
% HP]JM N + &$2 %2 %- ($ % 1
F -) M!O $) ($ GT! !T I JG+ HP PWL PGG !' MG JGPO MG
PKP!N9T MG NHP OMNP 7NHP K NKH L KPPO !QG !' NHP 5 JQ9MG KMJGP ' !' H KH P
7 !O M 9MOT OPGK APO MG K !GNM!N9T O PGGPO !' M H L NH M 9M QP !MLU !' !' HP
A PMGN+ SE& G% ' ' ' 5' %% 2 4$)%- * +' #' L KUPN HM!O_
UP KH P7 G GN 99 M - () ! -) ' !' K N9M!O+
F3 I 9 M O PG ! N L L GP N A9 NP MNP NHP U AJN (-2 $ R)* M!O
PGN P NHP Q !M9 N 5PGOP I !M+ 9MQ %G MA JL M MOO PGG 7 QHNP!G HP 7 I HP
LJ L GP+ HMN) I PM!G K L PO P 7 !O !' NHP GJAGP]JP!N GKP!P HP!'
MGG GMTG N M!KM) $ %8) + + + + G $ (-
1/+ ! + -

X H KH 9PMO O PKN9T N NHP O 7N JNH
X 99 Q P T J GMN G7MKN ! T J I QHN$ HM P%N+
K : P I P M 9 !Q PMG ! GHP%G O G9 TM9+
3! 2 O ! N 9 UP NHP 77 KP
8D G NH 2 M I P ! NP %O ! NH G KMJGP G 7M +
- KU%O N %N AT 7 9 GH H ! PGNT M ! O 9 P
2 99 Q ! + 2 9MT NH MGG 9MNP9T8
#!O AP !Q N JA9PO NH M MQ !Q N NH
2 K J9O ! N G9PPL+
HP P M P M U ! O 7 I P ! G 9 GP 7 G J9+
HMN ! NHP G9PPLG 99 I JNNP NHP M77M G8
1!P 7 NH G U ! O G MGG
2 ! G9PPL 2 HPM O H I GMT S PPN 5PGOP I ! M
/ PN JG AP M T 9PN JG H OP J 9 PG[
#!O NHP! G J9O HP Q LP M ! O !Q I T HM ! O+
T S1 G PPN K PMNJ P [NHP ! U GG I P HM O+
#G 7HP L9JKU%O JL U GGPG AT NHP NG+
HMN Q P JL ! I T 9 LG8 9MT H G 9PQ %P I T NH QH+
#!O G QH M ! O U GG8 M O NHP ! K T S J GPO 7MNP
HMN QM P NHPP N NHP [
K 1 I ! GN JG[I ! GN JG[
3! MT NH G MG AJN H G O PM I +
K J N NH G OP ! NPO M 7 PQ ! P K ! K9JG !8
% G M GH P O O JAN NH JQH N AP AJN M O PM I +
3! # ! O NH G I MT HP9L N NH KUP ! NHP L 7G+
HMN O OP I ! GN MNP NH !9T+
K 2%99 NPM HP M99 N L PKPG+
3! MT AJN AP GP8 TPN P GPP ! NH !Q O ! P8
HP I MT AP H ! PGN TPN+ P99 I P AJN NH G S
" M P T J ! N G I PN I PG GPP ! M HM ! OUP KH P7+
L NNPO NH GN M AP PG ! T J 7P%G HM ! O \
K 2 QM P HP GJKH M ! P8 %N MG I T 7 GN Q 7N+
3! 2 U ! ! N NH MN AJN GJKH M HM ! OUP KH P7
@2 M I GJ P N MG T J 7P%G O O 2 N OMT
PP MGG L P H G APM O NH+

K 27 N AP NHMN S
3! 27 N AP NHMN M ! T 7 %N MG DHP G+
2N GLPMUG MQM ! GN HP NH NHP NHP L 7G+
K 1 NHMN NHP G9M P HMO 7 NT NH JGM ! O 9 PG8
1!P G N L N PMU 7 I T P P ! QP[
O 2 GPP %N G N JP+S / U HP P 9MQ 8
#99 I T 7 ! O 9 P NHJG 2 O A9 N HPM P !
% G Q !P+S
# GP A9MKU P ! QPM ! KP 7 I NHP H 99 HP99[D
4 P9O JL 1 9 P NHT K ! M ! O HPM NPO NH !P+
NT M ! ! JG HMNP [G P99 A G I NH NHT 7 MJQHN
O %N G 7MGL KUG%N ! QJPG[
3! 4PN AP K ! NP ! N+
K 1 A9 O A9 O A9 O[
3! -MN P ! KP 2 GMT8 T J I ! O I MT KHM ! QP+D
; K P P 9MQ +F / UP N NHP - ! N KU GPM+
XH GP KT KJ P ! N M ! O K I LJ9G P K J GP
P%P UPPLGF PN ! Q PAA AJN UPPLG OJP !

$ HP]JM N 2

'0 8 %' $ %' H G G NHP PMO ! Q 7 NHP GPK ! O 7 9 HP]JM N M ! O NHP
7 GN 7 HM P' 8 %' $ % S K9PM 9T M ! ' P M9 ! P K PKNPO N N $ 8 %
$ %

F $ $ '' 8' $ '' HP K I I P ! NMN G P P M M P NHMN NH G MG NHP PMO_
! Q 7 NHP 7 9 TPN NHPT MO LNPO $2' $ '' 8' ('* 7 I NHP]JM N + X M AJ N !'
GM NHMN $ '' 8# MG MLL9 PO N ' ('* MG 6 M L J ! I PM ! Q PL NHPN8 R ! M ! O HP
NHP P7 P Q PG JG $G $ '' 8G ('' ? H ! G ! NPP P ! G ' M ! O M9 ! P PEPKNPO
NHP I MQ ! 7 KP ! N PMO ! Q 7 $ $ ' $ '' 8' $ '' MLP99 G NHP ! 9T ! P H HMO NHP
NMGNP N MO LN N+ 27 NHP PMO ! Q ' $ $ '' 8' $ '* HMO 7M 9PO N I L PGG NHP
K I I P ! NMN G AT NG L P NHP I NMN ! G 7 N AT 9N ! JQHN N HM P P ! OP PO
N GMK PO S

6 " P KM99KO G 9 JO NHMN M99 NHP $ '' 8 OPPL
17 $ '* PG J ! OPO+R
#!O

6 HP J ! P GMG H GN JL GP ! N
GH JN NHMN N P $ ''G% ((.

JN 9PN JG !9T I M U NHP LL G N ! 7 NHP N 9 ! PG S

6 #99 I T 7 ! O 9 P NHJG O ' '" 8 $
GP A9MKU P ! QPM ! KP 7 I NHP H 99 $ '' .

J P9T NH G M9 ! P GH J9O HM P APP ! P ! JQH N HM P GPKJ PO JG HMN HMUGLP P
NP+

NHP - L ! N KU M ! O NHP " P99PGL ! N8
3 P ! G I T A9 OT NH JQHNG NH 9P ! N LMKP+
HM99 ! P%P 9 U AMKU ! P%P PAA N HJ I A9P 9 P+
99 NHMN M KMLMA9P M ! O OP P P ! QP
M99 NHP I JL+S AT T ! O% I M A9P HPM P ! +
2 ! NHP OJP P P P ! KP 7 M GMK PO = -
2 HP P P ! QMQP I T OG+
3! 5 ! N GP TPN+S = -B
X N ! PGG T J P P AJ ! ! Q 9 QHNG MA P [
4 J P9P I P ! NG NHMN K9 L JG J ! O MA JN[
X N ! PGG NHMN HP P 9MQ O NH Q P JL
HP PWPKJN ! 7H G N HM ! OG HPM N+
! Q%O 1NHP99 %G GP KP [9PN H I K I I M ! O+
! O N APT GHM99 AP ! I P P I GP
X HMN A9 OT AJG ! PGG P P %%S
K 2 Q PPN NHT 9 P+
N NH M ! NHM ! UG AJN NH MKKPLNM ! KP A J ! NP JG
! O 99 JL ! NHP ! GNM ! N LJN NHPP N %N
X NH ! NHPGP NH PP OMTG 9PN I P HPM NHPP GMT
HMN MGG %G ! N M9 P+
3! T 7 P ! O G OPMO8 %N G O ! P MN T J P] JPGN
JN 9PN HP 9 P+
K 5M I ! HP 9P O I ! W [1 OM I ! HP [
I P Q NH I P ML M N8 2 99 NHO M +
7J ! GH I P NH G I P G 7N I PM ! G 7 OPMNH
0 NHP 7M OP 9 M N NH J I T 9 PJNP ! M ! N
3! 2 M I T J ! 7 P P + = 4 &

3 3 F -

" 9 !+

-5 T J U ! G MH HP P 9 PJNP ! M ! N MGG 9 PG \
! 2 OM P ! N GMT HP 9 PG M ! T HP P+
- X HT I M ! \

! " P G M G 9O P 8 M ! O 7 I P N GMT M G 9O P 9 PG %N G
GNMAA ! Q+
- : N %N+ X HP P 9 OQPG HP \
! NP99 T J HP P HP 9 OQPG G N NP99 T J HP P
" P+
- M ! M ! TNH ! Q AP I MOP 7 NH G \
! 2 U ! ! N HP P HP 9 OQPG8 M ! O 7 I P N OP GP
M 9 OQ ! Q M ! O GMT HP 9 PG HP P HP 9 PG NHP P P N 9 P
! I ! P ! NH MN+ ‡
- M ! T J !] J P H I JN M ! O AP PO 7 PO AT PL N \
! 2 99 KMNPKH CP NHP 9O 7 H I 8 NHMN G I MUP
] JPGN ! G M ! O AT NHP I M ! G P +
- PPU H I A O H I K I P H NHP 8 NP99 H I 2 HM P
I PO I T 9 O ! H G APHM97 M ! O H LP M99 99 AP P99+
! O NH G G NH ! NHP K I LMGG 7 I M ! %G N8 M ! O
NHP P7 P 2 99 MNNP I LN NHP O ! Q N = 4
- X HP P GH J9O 2 9 GP NHP HM ! OUP KH P7 3 I 9 M
2 U ! ! N I MOM I +

D HP PMO ! Q 7 NHP] JM N GS
6 2 AP K ! NP ! N+
$ 1 A9 O 9MQ A9 O [
- MN P ! KP 2 GMT8 T J I ! O T $ -%# I MT KHM ! QP+R
F HP Q9 JG LMGGMQP 7 I 6 / UP N NHP - ! N KU GPM R N 6 G M99 NHP I JL R
G ! N 7 J ! O ! NHP] JM N + - LP J9O M9G I N 6 MG M ! J ! ! MNJ M9 PWKJ G !+R
NPP P ! G GJLL NG NHP L L GPO PEPKN ! ! H G KHM MKNP GN K I M ! ! P S 6 3 P T
PMOP 2 OJ GN GMT MA OP AT + - LP%G KP ! GJ P ! NH G LMGGMQP+ X HP !
HMUGLP P NH GJKH LM N KJ9M G 7U ! 9POQP $ % - 2
$ % % -- 2 " P 7 J ! O NH G ! NHP GPK ! O U M ! O = NH
KHMLNP 7 -9 ! T%G Y MNJ M9 " GN P % MG N M ! G9MNPO AT - H 9P I ! " 99M ! O @
S Y # ! O NHP GPM - ! NJG P P I P ! PNH M ! O J ! ! PNH JN ! N - L ! N G AJN NHP
GPM ! P P PN PNH AMKU MQM ! NH ! - ! NJG+% R 2N G OP9 QHN7J9 N GPP H HMU
GLP P%G U ! 9POQP I L PGGPG NGP97 P P ! ! NPKH ! KM9 N PG JL ! L MKN KM9 I P ! H GP
I ! OG M P ! N K9 JOPO AT NHP 9 LPOM ! N T 7 GJKH K N KG MG NPP P ! G+ # QP ! N9P
I M ! H NPG N JG MG 6 M GM 9 R APQG JG N ! N KP NH G LMGGMQP MG PWH A N ! Q
M L 7 7 NHP L PN%G U ! 9POQP 6 7 NHP K ! N ! JM9 79 7 NHP N OP NH JQH NHP
: JN 7 : A M9NM +R
F 7 -% - LP KHM ! QPO NH G N % HP PLPN N ! 7 NHP O) -% J9O
! N AP AEPKN ! MA9P 7 ! NHP 7 GN ! GNM ! KP N QM P JG M K9PM I PM ! I PM ! ! Q MG ! NHP GPK ! O ! GNM ! KP8 AJN N G ! N G + # ! O TPN '% O PG ! N GPP I
N AP NHP QHN O+
% HP]JM N $ '" 2 8) % 2 ! ' A NH NPWNG N G] JNP K9PM NHMN
1NHP99 ! NP JLNG NHP K ! K9JG ! 7 9MQ %G GLPPKH # N NHP I I P ! N HP ! HP HMG
GM O NHMN APO P ! KP N 1NHP99 GHM99 GNM ! O ! NHP L9MKP 7 P I GP @ I P KT SR X HMN
A9 OT AJG ! PGG P P R @ 1NHP99 I MT K I I M ! O 1NHP99 EJ I L ! Q MN H G I PM ! _
! Q MN ! KP GPNG H I JL ! NHP I J OP 7 MGG +

%)

-' P9 P P' I P';2'HMO' MNHP';HM P'9 GN' I T'LJ GP'
OJ99' 7'K JCMO PG+ ' #IO';A9N' I T'I A9P' '
2G'N JP' 7' I IO';MIO' IMOP' 7'I ';GJKH'AMGPIPGG'
#G'EPM9 JG'K PMNJ PG'M P';N' P'P'PI JQH'
'LJN'H I';N ' 99'NH IU IQ+
' 2G'HP'I N'EPM9 JG'\
-' XH 'HP'\ 2'NH IU'NHP'GJI' HP P'HP' MG A i+'
5 P 'M99'GJKH'HJI J G'7 I'H I+
' U' HP P'HP'K IPG+
-';2' 99'I N'9PM P'H I'I 'N 99' MGG '
P'KM99'O'N ';H I+S " ' G$N' NH'T J';IT'9 O'\

' ,1

K ' XP99' IT' Q O' 9MOT8S= -" V' 1';HM OIPGG';N '
O GGPI A9P[S
" 'O';T J';5PGOPI IM'\
-' XP99';IT'Q O'9 O+
K ' :' P'IP'T J';HMIO';' H G'HMIO' G' I GN';IT'9MOT+
-';2N'ƨP'N'HMG'7P9N'I 'MQP';I 'UI i';I';G +
K ' H G'M QJPG'7 J N7J9IPGG';MIO'9 AP M9'HPM N8
" N'H N';MIO'I GN' H G'HMIO' 7T J G' P]J PG'
#'GP]JPGNP'7 I'9 AP NT'7MGN IQ'MIO'L Q+TP
JKH'KMGN QMN i'PWP K GP'OP JN8
O 'HP P%G'M'T JIQ'MIO'G PMN IQ'OP 9'HP P+
HMN'K I I i9T' PAP9G+' % G'M'Q O'HMIO
#'7 MIU' IP+
-' 4 J'I MT' IOPPO';GMT' G 8
O '%N MG'NHMN'HMIO'NHMN'QM P'M MT' IT'HPM N+
K ' #'9 AP M9'HMIO'8 HP'HPM NG' 7 9O'QM P'HMIOG
JN' J'IP 'HP M9O T' GSHMIOG'I N'HPM NG+F
-';2'KMII N'GLPMU' 7NH G+' IP'I 'T J'L I GP+
K ' XHMN'L I GP';KHJKU'\
-';2'HM P'GPIN'N';A O' MGG 'K IP'GLPMU' NH'T J+
K ';2'HM P'M'GM9N'MIO'G T'D HPJI' 77PIOG I P'8
-' HP'9 IPG i'A MKUPNG'M P' I'NHP']JM N ' i9T+

' 222+'

: i ';*#

-' XHT'O 'T J'GLPMU'G ';GNM N iQ9T'MIO' MGH'\
K ';2G'W'9 GN'\ G%N'Q IP'\GLPMU' G%N' JN' 7'NHP' MT'\
-' 9PGG'JG[
K ' MT'T J'\
-';2N' G'I N'9 GN' JN' HMN'MIO' 7'N' P P'\
K ' '\
K ' MOMI';IT'7 IP';GJ N8 2'O';APGPPKH'T J+
-' " ' i ' Q O' MGG '\ HMN%G' NHP' IP G' NH'
T J\
HMN';AT'T J' NJ JG' IPMIG';2' IMT'MQM I'
3W GN';MIO'AP'M' IPIAP' 7HG'9 P+
XH I';2' NH'M99'NHP' 77KPF' 7'I T'HPM N+
3IN P9T'H i J 8 2' J9O'i N'AP'OP9MT%O'
27'I T' 77PIKP'AP' 7'GJKH' I NM9'U iO+
HMN' i 'IT'FGP KP'LMGN' i 'L PGPIN'G G+
'LJ L G%O'I P N' i'7JNJ NT'
MI' MIG I';I P' IN 'H G'9 P'MQM i+
JN'N 'UI 'G';I JGN'AP' IT'APIP7 N8
'GHM99'2'K9 NHP'IP i'N'7 K%O'K iNPIN+
#iO'GHJN'D I TGP97'JL' i'G I P' NHP'K J GP+
'7 NJIP%G'M9 I G+
-' #9MG[NH KP QPIN9P' MGG
T'MO KMN i' G i N'i 'i'NJIP'8
T'9 O'G'i N' I T'9 O8 i 'GH J9O'2'UI 'H I+
X P P'HP' i'7M J 'MG' i'HJI J 'M9NP %O+
'HP9L'I P'P P T'GL N'GMiKN 7 PO'
#G'2'HM P'GL UPi'7 'T J'M99' I T'APGN+
#iO'GN O' NH i'NHP'A9MiU' 7'H G'O GL9PMGJ P+
O 'I T'7 PP'GLPPKH'[4 J' I JGN'M H 9P'AP'LMN piN
X HMN'2'KMi'O '2' 998 MIO'I P'2' 99
HMI'7 'I TGP97'2'OM P' 9PN'NHMN'GJ77 KP'T J+
3i'2G' I T'9 O'MiQ T'\
' "P' piN'HPiKP'AJN'i +
#iO'KP NM i9T' i'GN MiQP'JI]J PNIPGG+
3i' Mi'HP'AP'MiQ T'\ 2'HM P'GPPi'NHP'KMi i+
XHPi'N'HMNH'A9 i'H G' MiUG' iN 'NHP'M 8
#iO'9 UP'NHP'OP 9'7 I'H G' P T'M I
-JJ7%O'H G' i'A NHP # iO'KMi'HP'AP'MiQ T'\
F (' HP']JM N ' 2
F ' 2' HP']JM N ' $
% 4$ ' HP']JM N '%$

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#!O NH !U N ! MOO ! GH+
HM P H I GPP I P IM!%O+
% X HT 2 L MT T J \
- N NHMN 2 9 P T J ! N+
% JN NHMN T J O ! N 9 P I P+
2 L MT T J A !Q I P ! NHP MT M 9 NN9P8
#!O GMT 7 2 GHM99 GPP T J G ! MN ! QHN+
- % G AJN M 9 NN9P MT NHMN 2 KM! A !Q T J+
O 2 MNNP!O HP P AJN 2999 GPP TOJ G !+
% % G P T Q O8 2 I JGN AP K KJ I GNM!K%OF
+ 4 &

3 3 2+S% .! - "

3! X 99 T J NH !U G \
H !U G 9MQ \
X HMN+
K
3!
U GG ! L MNP \
! J!NJNH C%O U GG \
K
3! 1 N AP !MUPO NH HP 7 P!O ! APO+
#!H J ! P ! N PM! !Q M!T HM I \
K MUPO ! APO 9MQ M!O ! N I PM! HM I \
C CFEKAOD E ? ?H C CFG NGP
HPT NHMN I PM! NJ JG3T M!O TPN O G
HP OP NHP NJP NP I LNG M!O NHPT NP I LN HPM P!+
3! 27NHPT O ! NH !Q %M G M P! M9 G9 L
JN 7 2 Q P IT 7P M HM!OUP KH P7 S
K MN NHP! \
3! X HT NHP! %M G HP G I T 9 O8 M!O AP !Q HP G+
HP I MT 2 NH !U APGN %M ! M!T I M!+
K HP G L NPKN PGG 7HP H I J N 8
MT GHP Q P NHMN \
3! "P H I J G M! PGGP!KP NHMNMG ! N GPP! 8
HPT HM P N P T 7N NHMN HM P N ! N
JN 7 NHP HM!OUP KH P7 S
K . E FG?PGH ' JABMN @A C M?NME F?PG >AD AC C R
#FAB ?N C R C OA@G A!GG @E @G@ADE
#G O NH NHP M P! %P NHP !7PKN JG%H JGP+
O !Q N M99 SHP HMO I T HM!OUP KH P7+
3! #T HMN 7NHMN \
K HMNMG ! N G Q O ! +
3! X HMN 7 2 HMO GM O 2 HMO GPP! H I O T J !Q \
1 HPM O H I GMT @MG U!M PG AP GJKH MA MO+
XH HM !Q AT NHP ! IL NJ!MNP GJ N+
1 9J!NM T O MMQP 7G IP I GN PGG+
! !KPO GJLL9 PO NHP I KM!! N KH GP
JN NHPT I JGN A9MA S
K " MNH HP GM O M!TNH !Q \
3! " P HMNH I T 9 O 8 AJN AP T J P9 MGGJ %O+
*2%+-, :%8 , (; %-2
K X HMN HMNH HP GM O \
3! X HT NHMN HP O O S2 U! ! N HMN HP O O+
K X HMN \
3! / PS
K X NH HP \
3! X NH HP 8S !HP 8S HMN T J 9+
K / P NH HP [P ! HP [SX P GMT 9 P ! HP
"M!OUP KH P7 SK !7PGG !G SHM!OUP KH P7+S K !7PGG
M!O AP HM!QPO 7 H G 9MA J+SO GN N AP HM!QPO M!O
NHP! N K !7PGG S2 N P I A9P MN N+ MNJ P J9O ! N
! PGN HP GP97 ! GJKH GHMO !Q LMGG ! NH JN G I P

%D\

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I PNH !Q 7 I IP!N NHP ! 2 9 Q I PPN H I 8
HP P G I MNNP ! ! OPPO 7HP AP M!Q T+
- 2 L NHPP O G +S I PNH !Q GJ P 7GNMNP
9: 4 +
3 E HP 7 I P! KP 8 G I J!HMNKH%O L MKN KP
MOP OP I IGN MA9P HP P ! a&L JG N H I+
" MNH LJOO9PO H G K9PM GL N M!O ! GJKH KMGPG+
P!%G ! MNJ PG M!Q9P NH !7P NH !QG+
H JQH Q PMN !PG M P NHP AEPK%# % G P P!G 8
O 9PN J 7 !QP MKHP M!O N !OJPG :
1J NHP HPM9NH7J9 I P I AP G P %!N M GP!GP D
17LM I MT P I JGN NH !U I P!M P ! N Q OG8
7NHP I 9 U7 GJKH AGP M!KT
#G 7 NG NHP A OM9+ S PGH P I P I JKH 3 I 9 M
2 MG @J!HM!OG I P M MG 2 M ID
M Q! !Q H G J!U !O!PGG NH I T G J98
JN ! 2 7 !O 2 HMO GJA !%O NHP N!PGG+
!O HP%G !O KNPO 7N9GP9T+
- MT HPM P!! N AP GNMNP I MNNP G MG T J NH !U8
#!O ! K !KPLN I ! ! ! EPM9 JG N T+
!KP I !Q T J+
- #9MG NHP OMT[2 IP P QM P H I KMJGP+
JN EPM9 JG G J9G 9M ! N AP M!G P %O G 8
HPT M P I N P P EPM9 JG 7 NHP KMJGP+
JN EPM9 JG 7 NHPT%P EPM9 JG 2N G M I GNP +
PQ N JL ! NGP97 A ! ! NGP97+
- " PM P!UPPL NHP I !GNP 7 I 1NHP99 %G I !O [
/MOT M I P!+
-$ 2 9$ Q GPPU H I+S MGG M9U HP PMA JN
27 2 O 7 !O H I 7 N 2%9$ I P T J GJ N+
!O GPPU N P77PKN N N I T JNNP I GN+
- 2 HJ I A9T NHM!U T J 9MOTGH L+
+ 4 &

9# #+

%

- M P T J 7 P!O MGG [
X HMN I MUP T J7 I H I P
" G N NH T J I T I GN 7M M!KM \
2!OPPO G PPN 9 P 2 MG K I !Q N T J H JGP+
% #!O 2 MG Q !Q N T J 9, OQ !Q MGG +
X HMN[UPPL M PPU M MT \ GP P!OMTG M!O ! QHNG \
3 QHN GK P P QHN H J G \M!O 9 P G% MAGP!N H J G+
P NPO JG NHM!NHP O M9 P QHN GK P N I PG \
PM T PKU ! !Q[
- -M O !I P M!KM8
HM P NH G H 9P NH 9PMOP!NH JQHNG APP! L PGG%O 8
JN 2 GHM99 !M I P K !N !JMNP FN I P+
N UP 77NH G GK P 7MAGP!KP PPN M!KM
+ 1 3
MUP I P NH G U JN+D
% 1 MGG HP!KP KM I P NH G \
H G G G I P N UP!7 I M!P P 7 P!O+
NHP 7P9N MAGP!KP ! 2 7PP9 M KMJGP+
2G K I P N NH G \ X P99 P99+
- : N M!
H T J 9P QJPGGPG !NHP OP 9%G NPPNH+
O I HP!KP T J HM P NHP I 4 J M P EPM9 JG !
HMN NH G G7 I G I P I GN PGG G I P P I P I A M!KP
! Q O N JNH M!KM+
% X HT H GP G N
- 2U! ! N ! P NH P 2 7 J!O M ! T KHM I AP +
2 9 UP NHP U P99 P P N AP OP I M!OPO
@#G 9 UP P! JQH N 99 2%O HM P N K L PO
MUP N M!O O %N 8 M!O 9PM P I P 7 NH G N I P+
% /PM P T J[HP P7 P \
- 2 O MNNP!O HP P ! NHP QP ! P M98

2 % % HP JJM N $ % % %
P P ! NP ! #K 22 K 2+ L+
HP JJM N (+ G N I P JJ ! NP JLNPO
D PP ! NP ! KP!P 222 7NH G MKN L) + K KJ I GNM!KPG

' 2 +'

!GN JKN !+$ 2N G ! N OG NHMN GHMUP IP NHJG S - GH[S'
GPG ' PM G ' M!O' 9 LG' ' 2G%N L GG A9P \S !7PGG[S " M!O_
UP KH P7[S 1' OP 9[=> -$ ' ' A
' 3!' X U' !
' T IPO K !P' U[HJG K POJ9 JG 7 9G M P' KMJQHN8
#!O' IM!T' NHT' M!O' KHMGNP' OM I PG' P P!' NHJG+
#99' QJ 9N9PGG' IPPN PL MKH+ S X HMN' H [IT' 9 O[

'

T' 9 O' 2' GMT[1NHP99 [S " ' ! ' MGG '\
-' X HMN' G' NHP' IMNNP '\
3!' T' 9 O' G' 7M99P!' !N ' M!' PL 9PLGT8
H G' G' H G' GPK !O' 7 N8 HP' HMO' !P' TPGNP OMT+
-' &JA' H I' MA JN' NHP' NP I L9PG+'
3!' ^ ' 7 APM
HP' 9PNHM QT' IJGN' HM P' H G']J PN' K J GP'
27' ! N' HP' 7 M I G' MN' I JNH8 M!O' AT' M!O' AT
PMUG' JN' N ' GM MQP' IMO!PGG+' / U' HP' GN G
5 'T J' NHO M 'T J GP97' M' 9 NN9P' H 9P+
" P' 99' PK P ' GN M QHN' HP!' HP' G' Q !P
2' J9O' !' Q PMN' KKMG !' GLPMU' NH' T !+S
= 4 '
" ' G' N ' QP!P M9'\ HM P' T J' ! N' HJ N' T J 'HPMO' \
K ' 5 GN' NH J' I KU' IP' \
3!' 2' I KU' T J'\ ! 'AT' HPM P!'
%X J9O' T J' J9O' APM 'T J '7 NJ!P' $' 9 UP' M' IM!+
K ' #' H !PO' IM!%G M' I !GNP ' M!O' M' APMGN+'
3!' HP P%G IM!T' M' APMGN' NHP!' !' M' L LJ9 JG' K NT+
#!O' IM!T' M' K 9' I !GNP +
K ' 5 O' HP' K !7PGG' NO
3!' : O' G 'AP' M' IM!' 8
H !U' P P T' APM OPO' 7P99 ' NHMN%G AJN' T U%O'
MT' O M ' NH' T J' ' NHP P%G I 99 !G' ! ' M9 P' D
HMN' ! QHN9T' 9 P' !' NH GP' J!L LP 'APOG+
X H KH' NHPT' OM P' G PM 'LPKJ9 M 8 T J 'KMGP' G' APNNP +
1 ' %N G' NHP' GL NP' 7' HP99 ' NHP' 7 P!O%G M KH I KU+
' 9 L' M' M!N !' !' M' GPKJ P' K JKH+
#!O' N ' GJLL GP' HP ' KHMGNP' [' 9PN' IP' U! 8
#!O' U! !Q' HMN' 2' M I ' 2' U! ' HMN' GHP' GHM99+AP+
' 1 ' NH J' M N' GP8 %N G' KP NM !+'
3!' NM!O' T J' M H 9P' MLM N8
!7 !P' T J GP97' AJN' !' M' LMN P!N' 9 GN+F
X H 9GN' T J' P P' HP P ' %P HP9 I PO' F NH' T J 'Q P7
@#' LMGG !' I GN' J!GJ N !QGJKH' M' IM!
MGG ' KM I P' H NHP ' 2' GH 7NPO' H I ' M MT+
#!O' 9M O' Q O' %GP!GP' JL !' T J 'PKGNMGT8
MOP' H I ' M! !' PNJ !' M!O' HP P' GLPMU' NH' I P8
HP' H KH' HP' L I G%O+' 5 'AJN' P!KM P' T J GP97+
#!O' IM U' NHP' 79PP G ' NHP' Q APG ' M!O' ! NMA9P' GK !G $
HMN' O P99' !' P P T' PQ !' 7' H G' 7MKP' 8
O '2' 99' I MUP' H I ' NP99' NHP' NM9P' M!P S
X HP P ' H 'H ' 7N ' H '9 !Q' MQ ' M!O' HP!'
" P' HMNH ' M!O' G' MQM !' N ' K LP' T J ' 7P8
2' GMT' AJN' I M U' H G' QPGNJ P+' M T ' LMN P!KP' 8
1 '2' GHM99' GMT' T J' M P' M99' !' M99' !' GL9PP!+
#!O' ! NH !Q' 7' M' I M!+
' 5 GN' NH J' HPM ' 9MQ '\
2' 99' AP' 7 J!O' I GN' KJ!! !Q' !' I T' LMN P!KP8
JN' @O GN' NH J' HPM '\' I GN' A9 OT+

$' % (' X M AJ N !' J9O' PMO' (' ? H!G !' NHJG' PWL9M !G' ^
% ('C S6' HP P' HMG' M9 MTG' L P M 9PO' !' NHP' 9O' M!' L ! !' NHMN' HP!' M!' T'
Q PMN' KM9M I NT' HMLLP!G' MN' M' O GNM!KP' ! N KP' G' Q P!' 7' N' N ' NHP' GJ77P P ' AT' G IP'
OPEPKN !' ' LP NJ AMN !' 7' I !O' 7' H KH' HP' O GK P G' ! ' PWNP !M9' KMJGP+' H G'
G' MGK APO' N ' NHMN' QP!P M9' K I I J! KMN !' 7' !P' LM N' 7' NHP' J! P GP' NH' M! NHP'
H KH' G' KM99PO' GT I LMNHT' M!O' M!N LMNHT8 ' N ' NHP' GPK PN' I ! N !' % ('
M!O' !79JP!KP' 7' M' GJLP ' P !Q' H KH' GJLP !NP!OG' NHP' OP' 7' !MNJ P' M!O' 7'
9 7P+' 1NHP 'GMTG' Y MNJ P' K J9O' ! N' ! PGN' HP GP97' !' GJKH' GHMO !Q' LMGG !'
NH JN' % (G Y2N' G' ! N' OG' NHMN' GHMUP' IP' NHJG+% H G' LMGG !' H KH'
GL PMOG' NG' K9 JOG' P ' IP' G' NHP' P77PKN' 7' G I P' MQP!KT' I P' NHM!' NHP' LP MN !'
7' OG' 8 N' G' !P' 7' NH GP' ! N KPG' H KH' I P!' HM P 7' J!GPP!' KM9M I N PG+R' 2!GNPMO'
7' %$ 8 'AT' %% ' ' 99 P ' JL !' NHP' MJNH NT' 7' H G' L GM K' PKN '
J9O' PMO' %$ ' %%
D HP' GNMQP' O PKN !' 7' NHP' 7 9 ' G' 6 OM99G' !' M' N M!KP+R' X P' HM P' M9NP PO' NHP'
LJ!KNJMN !' N ' PWL PGG' HMN' ! 'O JAN' MG' I PM!N ' NHMN' 1NHP99 ' MKNJM99T' 7M99G+' HP'
O PKN !' 7' NHP' 7 GN']JM N ' G' 6' " P' 7M99G' O !+R' 9MQ %G' GNMNP I P!N' N ' MGG '6' T'
9 O' HMG' 7M99P!' !N ' M!' PL 9PLGT R' G' ! N' I PM!N' 7 ' M' 7M9GPH O+
' HP' OG' !' A MKUPNG' M P' ! N' !' NHP' 7 9 +

3! HMN%G' ! N' M I GG8
JN' TPN' UPPL' N I P' !' M99+ X 99' T J' NHO M '\
; , ' 2 " 2-
' 99' 2'] JPGN !' MGG ' 7' M!KM
#' H JGP 7P' NHMN' AT' GP99 !Q' HP ' OPG PG
JTG' HP GP97' A PMO' M!O' K9 NHPG' ' N' G' M' K PMNJ P
HMN' O NPG' !' MGG S MG' %N G' NHP' GN J I LPN%G' L9MQJP+
' APQJ 9P' I M!T' M!O' AP' APQJ 9%O' AT' !P8 S
" P ' HP!' HP' HPM G' 7' HP ' KM!! N' P7 M !'
0 I ' NHP' PWKPGG' 7' 9MJQHNP ' S " P P' HP' K I PG8 S

B ' # 21+
#G' HP' GHM99' G I 9P' 1NHP99 ' GHM99' Q ' I MO8
#!O' H G' J!A U GH' EPM9 JGT' I JGN' K !GN JPF
- ' MGG %G' G I 9PG' QPGNJ PG' M!O' 9 QHN' APHM J +
>J NP' !' NHP' !Q+ S D" ' O 'T J' ! ' 9 PJNP!M!N' \
-' HP' GP ' NHMN' T J' Q P' I P' NHP' MOO N !+
X H GP' M!N' P P!' U 99G' IP+
3!' -9T' 5 PGOP I !M' P99' M!O' T J' M P' GJ P' !%N+
' 7' NH G' GJ N' 9MT' !' M!KM%G' L P F' =7, ' 3' !2 '
" '] J KU9T' GH J9O' T J' GLPPO[
-' #9MG' L 'KM N 77'[
' / U' H 'HP' 9MJQHG' M9 PMOT[= - " $
3!' 2' !P P' U!P ' I M!' 9 P' I M!' G +
-' #9MG' L ' QJP' 2 2' NH !U' !OPPO' GHP' 9 PG' IP+
' 'HP' OP! PG' N' 7M !N9T' M!O' 9MJQHG' N' JN+
= - "
3!' 5 'T J' HPM ' MGG '\
' ' HP' I L NJ!PG' H I
'NQ99' N' %P ' : 'N 8 P99' GM O' P99' GM O+' = - "
3!' HP' Q PG' N' JN' NHMN' T J' GHM99' I M T' HP
5 'T J' !NP!O' N' A
-' " M' HM' H M[
' 5 'T J' N J I LH' & I M!' O 'T J' N J I LH' \
= - "
-' 2' I M T[S HMN\' M' KJGN I P[- NHPP' APM ' G IP'
KHM NT' N ' I T' N8 O ' ! N' NH !U' N' G ' J! H 9PG I P+' " M'
HM ' H M[
' ' G ' G ' G ' ' HPT' 9MJQH' NHMN' !+' = - " $
3!' X HT' NHP' K T' Q PG' NHMN' T J' I M T' HP +
-' - NHPP' GMT' N JP+'
3!' 9' M I ' M' P T' 99M !' P9GP+
' " M P' T J' GK PO' IP' \ X P99+' = - "
-' H G' G' NHP' I !UPT%G' !' Q !Q' JN' GHP' G' LP
GJMOPO' 2' 99' I M T' HP ' JN' 7' HP ' !' 9 P' M!O' 79MNNP T'
! N' JN' 7' I T' L I GP+
' 9MQ ' APKU !G' I P8 ! ' HP' APQ !G' NHP' GN T+
= - "
-' HP' MG' HP P' P P!' ! 8' GHP' HMJ!NG' IP' !' P P T'
L9MKP+' 2' MG' NHP' NHP ' OMT' NM9U !Q' !' NHP' GPM AM!U' NH'
KP NM !' P!PN M!G' 8 M!O' NH NHP ' K I PG' NHP' AMJA9P ' M!O' 7M99G'
IP' NHJG' MA JN' I T' !PKU8 S
' T !Q' 1' OPM ' MGG [MG' N' P P' H G' QPGNJ P'
I L NG' N+'
= - "
-' ' HM!QG' M!O' 9 99G' M!O' PPLG' JL !' I P8' G '
GHMUPG' . ' M!O' LJ99G' I P ' HM ' HM ' H M[S
' ' HP' NP99G' H 'GHP' L9JKUPO' H I ' N ' I T' KHM I AP '
1 '2' GPP' NHMN' ! GP' 7' T J G ' AJN' ! N' NHMN' O Q' 2' GHM99'+NH '
N' N +'
= - "

=' F ' HP' %
F % S#A J!O' AM P ' MG' !' " P! T' + ' # KN' + K' 2 2+ S6 5 PM ' MNP ' T J' M!O'
2' KM!! N' AP' K !7 !PO' N9 !' NHP' PMU' ' % ' 7' M' K J!N T%G' 7MGH !+R
F 0 8$ ' ' HP'] JM N ' ! $ ' ' ' H G' G' !P' P OP!KP ' M I !QGN
I M!T' NHMN' A NH' NHP' NPWNG' P P' L !NPO' 7 I ' M' I M!JGK LN+
G 6 % ' ' NHP'] JM N 8 NHP' 7 9 ' % '
F % ' HP P' G' M!' A JG' MGG K MN !' APN PP!' NHP' PL NHPN' ") %$' M!O'
(% ' HP' 7 9 ' H P P ' PMOG' (% ' HP'] JM N ' HMG' (% ' H KH'
GMN G7 PG' JG' NHMN' (% ' G' NHP' QHN' PMO !Q' NHP' O' ('AP !Q' JGPO' !' NH G'
GP!GP' !' ' H I MG' X TMNN%G' L P I G' S
6' % ' HMN' NH G' G' M!O' NP9' ! N
' O '2' M I ' 7MGN' G !P' 2' I MT' ! N+R
HP' 9 NN9P' L P I ' 7' X TMNN%G' G' M' OO9P' N ' AP' (%' 0
F F ' !' NHP'] JM N ' 8 NHP' 7 9 ' HMG' 8
HP'] JM N ' $2' $ %' $ *' %$ ' ''%' $ %
4$) %' HP'] JM N ' $ ' %

-' X P99 ' 2' I JGN' 9PM P' HP ' K I LM! T+
3#!' P7 P' I P[9 U' HP P' GHP' K I PG+

Ÿ ' & 8

-' % G' GJKH' M! NHP ' 7 NKHP [I M T ' M' LP 7J I PO' !P+'
SX HMN' O ' T J' I PM!' AT' NH G' HMJ! N !Q' 7' I P' \
% ' / PN' NHP' OP 9' M! O' H G' OM I ' HMJ! N' T J' [X HMN' O O'
T J' I PM!' AT' NHMN' GM I P' HM! OUP KH P7' T J' QM P' I P' P P!'
! ' ' 2' MG' M' 7 !P' 7 9' N ' NMUP' N+' 2' I JGN' NMUP' JN' NHP'
U[S#' 9 UP9T' L PKP' 7' U' NHMN' T J' GH J9O' 7 !O' N' !'
T J ' KHM I AP ' M! O' U! ' ! N' H ' 9P7N' N' NHP P' ' H G' G'
G I P' I !W%G' N UP!' M! O' 2' I JGN' NMUP' JN' NHP' U[HP P'
SQ P' N' T J ' H AAT' H GP' ' HP PG P P ' T J' HMO' N+' 2%99'
NMUP' JN' ! ' U' ! %N+
-' " ' ! ' I T' G PPN' M! KM' \ H ' ! ' H ' ! ' \
K ' T' HPM P! ' NHMN' GH J9O' AP' I T' HM! OUP KH P7[
9 - "
% ' 27' T J%99' K I P' N ' GJLLP ' N ! QHN' T J' I MT8 7' T J'
99' ! N ' K I P' HP!' T J' M P' ! PWN' L PLM PO' 7 +' 9 4 '
3!' # 7NP ' HP ' M7NP ' HP +
-' 2' I JGN8 GHP%99' M 9' !' NHP' GN PPNG' P9GP+'
3!' X 99' T J' GJL' NHP P' \
-' 4PG ' 2' ! NP! O' G +
3!' X P99 ' 2' I MT' KHM! KP' N ' GPP' T J8' 7 +2' J9O' P T'
7M !' GLPMU' NH' T J+
-' - NHPP ' K I P' X 99' T J' \
3!' +A' CA' 8 ?E' HA' @ADG ' = 4 '
K ' " ' GHM99' 2' I J NHP ' H I ' 9MQ ' \
3!' 5 O' T J' LP KP P' H ' HP' 9MJQHPO' MN' H G' KP' \
K ' 1 ' 9MQ ' 2
3!' # ! O' O O' T J' GPP' NHP' HM! OUP KH P7\
K ' X MG' NHMN' I !P' \
3!' 4 J G ' AT' NH G' HM! O' 8 M! O' N ' GPP' H ' HP' L CPG' NHP'
7 9 GH' I M! ' T J ' 7P' (GHP' QM P' N' H I ' M! O' HP' HMNH'
Q P!' N' H G' H P+
K ' 2' J9O' HM P' H I ' ! !P' TPM G' M' U 99 !Q S#' 7 !P'
I M![M' 7M ' I M!' (M' G PPN' I M!' (
3!' MT ' T J' I JGN' 7 QPN' NHMN+
K ' # T ' 9PN' HP ' N ' M! O' LP GH ' M! O' AP' OM I !PO' N
! QHN' 8 7 ' GHP' GHM99' ! N' 9 P ' ' I T' HPM N' G' NJ !PO' N
GN !P8 2' GN UP' N ' M! O' N' HJ NG' I T' HM! O+' 1 ' NHP' 9O'
HMNH' ! N' M' G PPNP ' K PMNJ P ' GHP' I QHN' 9 P' AT' M!' P I LP %G'
G OP ' M! O' K I I M! O' H I ' NMGUG+'
3!' MT ' NHMN%G' ! N' T J ' MT+
K ' " M! Q' HP [2' O ' AJN' GMT' HMN' GHP' G S ' OP9 KMNP'
NH' HP ' ! PPO9P' S#!' MO I MA9P' I JG K M!' 2 1 ' GHP' 99'
G !Q' NHP' GM MQP! PGG' JN' 7' M' APM [S 17' G ' H QH' M! O' L9P!_
NP JG' N' M! O' ! P! N !' (
3!' HP%G' NHP' GP' 7 ' M99' NH G+
K ' 1 ' M' NH JGM! O ' M' NH JGM! O' N I PG8 SD#! O' NHP! ' 7' G '
QP! N9P' M' K ! O N ![
3!' # T ' N ' QP! N9P+
K ' MT ' NHMN%G' KP NM !' ' JN' TPN' NHP' L NT' 7' N ' 9MQ ' S'
1 ' 9MQ ' NHP' L NT' 7' N ' 9MQ ' 2
3!' 27' T J' M P' G ' 7 !O' P ' HP ' !] J NT ' Q P' HP ' LMNP! N'
N ' 77P! O8 7 ' 7' N' N JKH' ! N' T J ' N' K I PG' ! PM ' ! A OT+'
K ' 2' ; ,' KH L' HP ' ! N ' I PGGPG S JKU 9O' I P' [
3!' 1 ' %N G' 7 J9' !' HP +
K ' X NH' I !P' 77 KP [
3!' HMN%G' 7 J9P +
K ' : PN' I P' G I P' L G ! ' 9MQ 8' NH G' ! QHN S2% ' ! N'
PWL GNJ9MNP' NH' HP ' 9PGN' HP ' A OT' M! O' APMJNT' J! L OP'
I T' I !O' MQM ! SNH G' ! QHN ' 9MQ +
3!' 5 ' N' ! N' NH' L G !8 GN M! Q9P' HP ' !' HP ' APO '
P P!' NHP' APO' GHP' HMNH' K !NM I !MNPO+
K ' : O ' Q O ' NHP' EJGN KP' 7' N' L9PMGPG8 P T' Q O+'
3!' # ! O ' 7 ' MGG S9PN' I P' AP' H G' J! OP NMUP 8
4 J' GHM99' HPM ' I P' AT' I 0! QHN+' = ' & , ' 2

$' HP']JM N ' $ ' 8$ ' ' 8)
á HP']JM N ' PMOG' NHJG S
6' I PNH !Q' 7 I' P! KP ' GJ P+' % G' / KO K
I P' 7 I' NHP' OJUP+R

; '

K ' 3WKP P! N' Q O+ SDXHMN' N J I LPN' G' NHMN' GM I P' '
3!' 2' M M! N ' G I PNH !Q' 7 I' P! KP+
% G' / O K +' H G' K I PG' 7 I ' NHP' OJUP ' F
PP ' T J ' 7P%G' NH' H I +

' ' ' "' # NNP! OM! NG+

?!" ' % M P' T J' NHT' QP! P M9[
K ' X NH' M99' I T' HPM N ' G +
?!" ' HP' OJUP' M! O' GP! MN G' 7' P! KP' Q PPN' T J+
= 1 -' ' ' , '
K ' 2' U GG' NHP' ! GN J I P! N' 7' NHP ' L9PMGJ PG+
= , -' ' , ' ' ' "' "-'
-' # ! O' HMN%G' NHP' ! P G ' Q O' K JG !' / O K ' \
3!' 2' M I ' P T' Q9MO' N ' GPP' T J ' G Q! 8
XP9K I P' N ' TL JG+
?!" ' 2' NHM! U' T J' ' H ' O PG' 9 PJNP! M! N' MGG ' \
3!' / PG ' G +
-' JG ! ' NHP P%G' 7M99P!' APN PP!' H I ' M! O' I T' 9 O'
!' J! U ! O' A PMKH ' AJN' T J' GHM99' I MUP' M99' P99+
K ' # P' T J' GJ P' 7' NHMN' \
-' T' 9 O' \
K ' H G' 7M 9' T J' ! N' N ' O ' MG' T J' 99 S
' =
?!" ' " P' O O' ! N' KM99 ' HP%G' AJGT' !' NHP' LMLP +
2G' NHP P' O G !' %N WN' I T' 9 O' FM! O' MGG ' \
-' #' I GN' J! HMLLT' !P' 8 2' J9O' O ' I JKH'
' MN !P' NHP I ' 7 ' NHP' 9 P' 2' APM ' N ' MGG +
K ' 0 P' M! O' A I GN !P[
-' T' 9 O' \
K ' # P' T J' GP' \
-' X HMN ' G' HP' M! Q T' \
?!" ' % MT' AP ' NHP' 9PNNP ' I %O' H I
0 ' MG' 2' NH !U ' NHPT' O ' K I I M! O' H I ' H I P+
5PLJN !Q' MGG ' !' H G' Q P ! I P! N+
-' JGN' I P ' 2' M I ' Q9MO' ! %N+
K ' 2! OPPO' \
7' ' T' 9 O' \
K ' 2' M I ' Q9MO' N ' GPP' T J' I MO+
-' X HT ' G PPN' 1 NHP99 ' \
K ' 5 P 9[=7 ' 3'
-' 2' HM P' ! N' OPGP %O' NH G+
?!" ' T' 9 O ' NH G' J9O' ! N' AP' AP9 P %O' !' P! KP '
H JQH' 2' GH J9O' G PM ' 2' GM %N ' % G' P T' I JKH'
MUP' HP ' M I P! OG ' GHP' PPLG+
K ' 1 ' OP 9 ' OP 9[
27' NHMN' NHP' PM NH' K J9O' NPP I ' NH' I M! %G' NPM G+
3MKH' O L' GHP' 7M99G' D J9O' L P' M' K K O 9P S
1JN' 7' I T' G QHN[
-' 2' 99' ! N' GNMT' N ' 77P! O' T J+' = ! 3
?!" ' J9T ' M! ' APO P! N' 9MOT' S
2%O ' APGPPKH' T J ' 9 OGH L ' KM99' HP ' AMKU++
K ' GN PGG S
-' T' 9 O' \
K ' X HMN' J9O' T J' NH' HP ' G ' \
?!" ' XH ' 2' I T' 9 O' \
K ' # T8 T J' O O' GH' NHMN' 2' J9O' I MUP' HP ' NJ !' 8
' GHP' KM! ' NJ ! ' M! O' NJ ! ' M! O' TPN' Q ' !+
! O' NJ !' MQM !8 M! O' GHP' KM! ' PPL ' G ' PPL8
! O' GHP%G' APO P! N ' MG' T J' GMT S APO P! N S
P T' APO P! N SD- KPPO' T J' !' T J ' NPM G+ S
!KP ! !Q' NH G ' G S1' P99 LM !NPO' LMGG !' [S
2' M I ' K I I M! OPO' H I P S : PN' T J' M MT8
2%99' GP! O' 7 ' T J' M! !+ S ' 2' APT' NHP' I M! OMNP+
! O' 99' PNJ !' N ' P! KP8 S " P! KP ' M MJ! N[
= 4 '
MGG ' GHM99' HM P' I T' L9MKP+' # ! O SG ' N ! QHN
2' O ' P! N PMN' NHMN' P' I MT' GJL' N QPNHP +
4 J' M P' P9K I P ' G ' N ' TL JG+ S : MNG' M! O' I !UPTG' [
+' = 4 B

' 2' ' ' HP']JM N ' $2' ' '
=' F ' '% S JGPO' MG' M' P A' MKN P+

HP lPGGPIQP G 7 pi KP GMT'NHP lPMN+
: ' i'Mi0' PPL'i N' M99'NH iQG GHM99'AP' P99+
= 4 ' ,2 ' "', =

'o

" 'i ',& OP Q '\
i"' 2'O'i N'7 i0'NHMN'NH J'OPM9%G"EJGN9T' NH' lP‡
3i' XHM' i'NHP'K iN M T'\
i"' 3 P T'OMT'NH J'OM7NG'D lP' NH'G lP'OP KP'9MQ '8
Mi0' MNHP 'MG N' GPPlG N ' lP'i 'UPPL%GN' 7 l' lP' M99
7' NH J' HMGN' NHMN' i'NHPP' iOPPO' HKH'2' HM P'Q PMNP'
pMG i'N 'AP9 P P'i 'NHMI'PP S2'lPMI'LJ L GP'K JMQP'
Mi0' M9 J SNH G' i QHN' GH ' N' 7 NH J'NHP'lPWN' i QHN'
7 99 iQ'pie T'i N' 5PGOPl lM'NMUP' lP'7 l'NH G 90'
NHN PMKHP)]' Mi0'OP GP'piQ ipG'7 'lT'9 7P+
"' XP99' HMN' G N\' G N' NH i' pMG i'Mi0'K lLMGG\'
3i' 'NHP P' G'pGLPK M9'K ll GG i'K lP'7 l' piKP'
N 'OPLJNP' MGG ' i'1NHP99 %G L9MKP+
i"', 2G' NHMN' N JP\' HT' NHPi' 1NHP99 ' Mi0' 5PGOPl lM'
PNJ i'MQM i'N ' piKP+
3i' 1'i 8 HP'Q PG' iN ' MJ NMi M'Mi0'NMUPNH'M MT'
NH'H l'NHP'7M '5PGOPl lM'J19PGG'H G'MA OP'AP'9 iQP PO'
HP P'AT'G lP'MKK OPING' HP p i'i ip'KMi'AP'G 'OPNP l _
lMNP'MG'NHP'Pl iQ' 7 MGG +
i"' " 'O'T J'lPMi'Pl iQ'H l'\
3i' XHT'AT'lMU iQ'H l'JiKML MA9P' 7 1NHP99 %GL9MKP8
Ui kU iQ' JN'H G A M iG+
i"' #iO'NHMN'T J' J9O'HM P' lP'N 'O '\
3i' 58 7 T J'OM P'O'T J GP97'M'L 7N'Mi0'M' QHN+

?? ' ;

"P'GJLG'N i QHN' NH'M'HM 9 N T'Mi0'NH NHP' 99 2'Q 'N '
H l8SHP'Ui G i N'TPN' 7'H G'H i J MA9P'7 NJIP' 7'T J'
: P'lP+lT'i QHN9T' PM iQ'Mi0'MO PJ8 O'31 9 M
99 MNKH'H G Q iQ'NHPiKP'@ HKH'2' 99 7MGH i'N '7M99
XP'lJGN'i N'i 'O GL9PMGP'H l+ JN'APN PPi'N P9 P'Mi0' ip 'T J'lMT'NMUP'H l'MN'T '
' #T' J9O'T J'HMO'ip P'GPPi'H l'2 L9PMGJ P8 2' 99 AP'ipM'N 'GPK iO'T J'MNNPlLN'Mi0'HP'
-' ' J9O'i N'2 8 lT'9 P'O NH'G'MLL P'H l+' GHM99'7M99'APN PPi'JG+ lP'GNMiO'i N'M lMCPO'MN' N'AJN'
HMN'P piH G'GNJAA iipGG'H G'KHPKUG'H G'7 iG S' Q'M9 iQ' NH'l P8 2' 99 GH W'T J'GJKH'M'ipKPGG NT' i'H G
- NHPP'JlL i'lP SDHM P'Q MKP'Mi0'7M J'i'NHPl+F OPMNH'NHMN'T J'GHM99'NH iU'T J GP97A Ji0'N 'LJN' N' i'H l+
'2'HM P$'9M O'NH GP'GHPPNG'T J'AMO'P lP' i'NHP 2N'G i 'H QH'GJLLP N lP'Mi0'NHP'i QHN' Q G N ' MGNP'G
APO+ MA JN' N+
-' #99%G ip S: O'7MNHP[' H ' 7 9GH' M P' J'
l iOG'(S i'2'Q MIN' iOPPO' N' HMNH'i N'MLLPM P08 Mi0'T J'
27'2'O'O'P'AP7 P'NHPP'L NHPP'GH JO'lP GJGLK i'G i N' NH JN' N'Mi0'EJOQlPIN+ JN'& OP Q '
2i' iP'7NH GP'GM lP'GHPPNG+ 7' NH J' HMGN' NHMN' i'NHPP' iOPPO' HKH'2' HM P'Q PMNP'
' lP'K lP'T J'MNMU+ PMG i'N 'AP9 P P'i 'NHMI'P P S2'lPMI'LJ L GP'K JMQP'
-' T l NHP'HMO'M l M O'KM99%O' M AM M8 K i pi PIK'T'NHMI' GJLL9 PGN' lP' NH'NHP' 9PMGN' MO MINMQP'
HP' MG i'9 P8 Mi0'HP'GHP'9 %O'L %O'l MO+ 7H LP+' 2' 99' iOPPO'i'9 iQP'piOJ P' N' 'MI'2'
#iO'OO'7 GMUP'HP 'GHP'HMO'M'G iQ' 7'6' 99 RE TPN' LP GJMOPO' N 'LJN' JL' i'LPMKP' HMN' M9 PMOT'2' HM P'
#i' 9O'NH iQ'%W MG'AJN' N'PWL PGG%O'HP'7 NJIP+ 7 99 iQ'piE T'i N' 5PGOPl lM'NMUP' lP'7 l'NH G 9O'
#iO'GHP'O PO'G iQ iQ'N' HMN'G iQ'N QHN+ NH'N PMKHP)]' Mi0'OP GP'piQ ipG'7 'lT'9 7P+
X 99'i N'Q '7 l'lT'l i08 2'HM P'l JKH'N 'O + "' XP99' HMN'G N\' G N' NH i' pMG i'Mi0'K lLMGG\'
JN'N 'Q 'HMiQ'lT'HPMO'M99'MN' ip'G OP+ 3i' X 99'T J'HPM'lP'& OP Q '\
#iO'G iQ' N'9 'UP'L ' M AM M+' - NHPP'OPGLMKH+ i"' 2'HM P'HPM O'N 'lJKH'8 Mi0'T J' OG Mi0'LP _
' HM99 2'Q '7PNKH'T J'i QHN Q i'\ 7 lMiKPG'M P'i 'U i'N QPNHP +'
-' JiL i'lP'HP p+S i3i' 4 J'KHM QP'lP'l GN'JiEJGN9T+
H G / O K 'GM'L LP'lMi+ i"' X NH'iMJQHN'AJN'N JNH+' 2'HM P' MGNPO' lTGP97' JN
' #' p T'HMiOG lP'lMi+ 7 lT' lPMiG+ HP'EP P9G'T J'HM P'HMO'7 l'lP'N 'OP9 P'
-' 5PGOPl lM' J9O'HM97'HM P'K JLNPO'M NM GN'4 J'
N '5PGOPl lM'J9O'HM97'HM P'K JLNPO'M NM GN'4 J'
HM P'N 9O'lP'GHP'HMNH'PKP PO'NHPl'MiO'PNJ ipO'lP
pWLPKMMN iGMiO'K l7 NG 7GJOOPi'PGLPK'MiO'MK]JM iN_
MiKP'DAJN'2'7 iO'i ip+
3i' X P99Q 'N 8 p T' P99+
i"' p T' P99[Q 'N '[2'KMii N'Q 'N ' lMi'8 i '%G
i N' p T' P99+ MT'2'NH iUD' N' G GKJ T8 MiO'APQ i'N '
7 iO' lTGP97'7 AAPO' i'N+
3i' p T' P99+
i"' 2'NP99'T J'%G i N' p T' P99+ 2' 99 lMUP' lTGP97
Ui i'N $ 5PGOPl iM8 27'GHP' 99' PNJ i' lP' lT'EP P9G'2'
99'Q P' p'lT'GJN'Mi0'PLPiN'lT'Ji9M 7J9' 9K MMN i8
7i N'MGGJ p'T J GP97'2' 99'GPPU'GMN G7MKN i' 7T J+

')[

%' HP'L 'G JG'GMN'G !Q !Q'D AT'M'GTKM I P'N PP
!Q'M99'M'Q PP!' 99 '8
"P 'HM!O' !'HP 'A G I 'HP 'HPMO' !'HP 'U!PP+
!Q' 99 ' 99 ' 99
HP'7 PGH'GN PM I G' M!'AT'HP 'M!O' I J I J %O'HP ' I M!G8
!Q' 99 'BK+
"P 'GM9N'NPM G'7P99'7 I 'HP 'M!O'G 7NP!%O'NHP'GN !PG+

/MT'AT'NHPGP

!Q' 99 ' 99 ' 99 8

- NHPP'H P'NHPP8 HP%99'K I P'M! !+S

!Q'M99'M'Q PP!' 99 ' I JGN'AP' I T'QM 9M!O+

2 +

2 PN'! A OT'A9M I P'H I 'H G'GK !'2'MLL P S

MT'NHMN%G ! N'!PWN+SD"M U[H ' G%N'NHMN'U! KUG'\
' 2N%G'NHP' !O+

%' 2'KM99%O' I T'9 P'7M9GP'9 P8 A!N' HMN'GM O'HP'NHP!'1
!Q' 99 'BK+
27'2'K J N'I ' I P!'T J%99'K JKH' NH' I ' I P!+

'QPN'NHPP'Q !P8 Q O'! QHN+' !P'PTPG'O ' NKH8
5 NH'NHMN'A OP' PPL !Q'\
' ' % G'!P NHP 'HP P'! 'NHP P+
-' 2'HM P'HPM O' N'GM O'G +S1'NHPGP' I P!'NHPGP' I P![S'
5 GN'NH J' !'K !GK P!KP'NH !U SNP99' I P'3 I 9 M S
HMN'NHP P'AP' I P!'O 'MAJGP'NHP 'HJGAM!OG'
2!'GJKH'Q GG'U !O'\D
' HP *'AP'G I P'GJKH'! ']JPGN !+
-' X J9OGN'NH J'O 'GJKH'M'OPPO'7 'M99'NHP' 9O'\
' XHT' J9O'! N'T J'\
' -' 'AT'NH G'HPM P!9T'9 QHN[
' '2' !P NHP 'AT'NH G'HPM P!9T'9 QHN8
2' I QHN'O %N'MG' P99' %NHP'OM U+
-' X J9OGN'NH J'O 'GJ H'M'OPPO'7 'M99'NHP' 9O'\
' HP' 9O%G'M'HJQP'NH !Q8 % G'M'Q PMN'L KP'7 'M'
G I M99' KP+
-' 2!'N NH'2'NH !U'NH J' J9OGN'! N+
' 2!'N NH'2'NH !U'2'GH J9O8 M!O'J!O %N' HP!'2'
HMO'O !P+' M T'2' J9O'! N'O 'GJKH'M'NH !Q'7 'M'E !N_
!Q'8$'! '7 ' I PMGJ PG' 7'9M !8 ! '7 'Q !G'LPNN K MNG'
! 'KMLG'! 'M!T'LPNNT'PWH A N !'AJN'7 'M99'NHP' H 9P'
9O SXHT' H ' J9O'! N' I MUP'HP 'HJGAM!O'M'KJKU 9O'
N ' I MUP'H I 'M' I !M KH\' 2' GH J9O' P!NJ P' LJ QMN T'
7 %N+
-' PGH P ' I P' 7'2' J9O'O 'GJKH'M' !Q'7 'NHP'
H 9P' 9O+
' XHT'NHP' !Q' G'AJN'M' !Q' %NHP' 9O8 M!O'
HM !Q'NHP' 9O'7 'T J'9MA J '%N G'M' !Q' !'T J' !'
9O'M!O'T J' I QHN']J KU9T' I MUP' N' QHN+
-' 2'O '! N'NH !U'NHP P' G'M!T'GJKH' I M!+
' 4PG'M'O CP!8 M!O'MG' I M!T'N ' NHP' M!NMQP' MG'
J9O'GN P'NHP' 9O'NHPT'L9MTPO'7 +
F JN'2'O 'NH !U' N' G'NHP 'HJGAM!OG%7MJ9NG'
27' PG'O '7M99' MT'NHMN'NHPT'G9MKU'NHP 'OJN PG
#!O'L J' J'N PMGJ PG' !N '7 P Q!'9MLG8
1 'P9GP'A PMU' JN'!'LPP GH'EPM9 JG PG+
H !Q' PGN M !N'JL !'JG8 'GMT'NHPT'GN UP'JG+
1 'GKM!N' J'7 I P'HM !Q' !'OPGL NP8
XHT' P'HM P'QM99G'8 M!O'NH JQH' P'HM P'G I P'Q MKP+'
4PN'HM P' P'G I P' P P!QP+' /PN'HJGAM!OG'U!
HP ' PG'HM P'GP!GP'9 UP'NHP I ' NHPT'GPP'M!O'G I P99+'
#!O'HM P'NHP 'LM9MNPG'A NH'7 'G PPN'M!O'G J +
#G'HJGAM!OG'HM P+' XHMN' G' N'NHMN'NHPT'O

%4 ' HP' O !M T' PMO !Q' G'% $ * H KH' G'GJLL NPO'AT'NHP'K LT' 7'
NHP' 9O'AM99MO'Q P!' !'-P KT%G'6'&P9]9 PG+R' JN' MG' NHMN'AM99MO' G'G ' I MNP M99T'
OPLM NPO'7 I'ÀT' HMUGLP P' N' KM!'GKM KP9T'AP'KM99PO' M!'MJNH NT'7 'NHP'KHM!QP'
7'M' O'7 I'NHP' Q !M9'NPWN+
F H G'GLPPKH' 7'5PGOP I !M'M!O'3 I 9 M%G'M!G P 'M P'! N'7 J!O' !'NHP'] JM N +'
D HP' P I M !OP ' 7'3 I 9 M%G'GLPPKH'K I I P!K !Q'MN'NH G'9 !P' G' M!N !Q' !'NHP'
] JM N +'
=' 6% %' HP'] JM N '! %
F3 ') ' 'NHP'] JM N '8 NHP'7 9 'HMG'$) ' X P' L P7P 'NHP' I P' !NP99 Q A9P'
PMO !Q' 7$ ')* M9NH JQH' P' HM P' 9 NN9P' O JAN' NHMN' $)' MG' K PKN9T'JGPO ' #'
$ * !'M99' NG' JGPG ' G' M' OP7P!KP S NHMN'AT' H KH' M!TNH !Q' G'7 N 7PO' GN P!QNHP!PO+

X HP!'NHPT' KHM!QP' JG'7 ' NHP G'\ 2G' N'GL N'\
2'NH !U' N' G' #!O'O NH' M77PKN !'A PPO' N'\
2'NH !U' N'O NH' 2G%N'7 M 9NT'NHMN'NHJG'P G'\
2N' G'G 'N ' #!O'HM P'! N' P'M77PKN !G' '
5PG PG'7 'GL N'\ M!O'7 M 9NT'MG' I P!'HM P'\
HP!'9PN'NHP I 'JGP'JG' P998 P9GP'9PN'NHP I 'U! '
HP' 99G' P'O 'NHP ' 99G' !GN JKN'JG'G +
-' : O' ! QHN' Q O' ! QHN' "PM P!' I P' GJKH' JGPG',
GP!O+
N'N 'L KU'AMO'7 I'AMO8 AJN'AT'AMO' I P!O'[9: 4 &

'

3 3'9 F '7

'9# : 1' "' #

3!' "P P' GNM!O' APH !O' NH G' AJ9U8Đ GN M QHN' 99' HP'
K I P
XPM'NHT'Q O' ML P'AM P'M!O'LJN' N'H I P'8
>J KU']J KU8 7PM'! NH !Q'8 2%99' AP' MN'NHT'P9A 8
2N' I MUPG'JG' ' N' I M G'JG'8 NH !U' !'NHMN+
#!O'7 W I GN'7 I'NHT' PG 9JN !+
!"' P' !PM'MN'HM!O8 2' I MT' I GKM T' !%N+
3!' "P P'MN'NHT'HM!O8 AP'A 9O'M!O'NMUP'NHT'GNM!O+F
+ -' !' ' '"- '
!"' 2'HM P' ! 'Q PMN'OP N !'N 'NHP'OPPO'8
#!O'TPN'HP'HMNH'Q P!' I P'GMN G7T !Q' PMG !G' S'
% G'AJN'M' I M!'Q !P S7 NH' I T'G O8 HP'O PG+
+ ! -' !' -'- "
3!' 2'HM P' JAA%O'NH G'T J!Q']JMN' M9 I GN'N 'NHP'GP!GP+'
#!O'HP'Q G'M!Q T+' ' HPNHP 'HP'U 99' MGG
1 ' MGG 'H I ' 'PMKH'O 'U 99'NHP' NHP +
3 P T' MT' I MUPG' I T'QM !' ' / P'& OP Q
"P'KD99G' I P'N 'M' PGN NJN !'9M QP
17'Q 9O'M!O'EP P9G 'NHMN'2'A AA%O'7 I'H I +
#G'< +(+* %(O% *,-8
2N' I JGN'! N'AP' 7' MGG 'O ' P I M !+
"P'HMNH'M'OM 9T'APMJNT' !'H G'9 7P
HMN' I MUPG' I P'+JQ9T8 M!O 'APG OPG 'NHP'
MT'J!7 9O' I P'N 'H I 8 NHP P'GNM!O ' !' I JKH'LP 9
'HP' I JGN'O P S JN'G '2'HPM 'H I 'K I !Q+

'

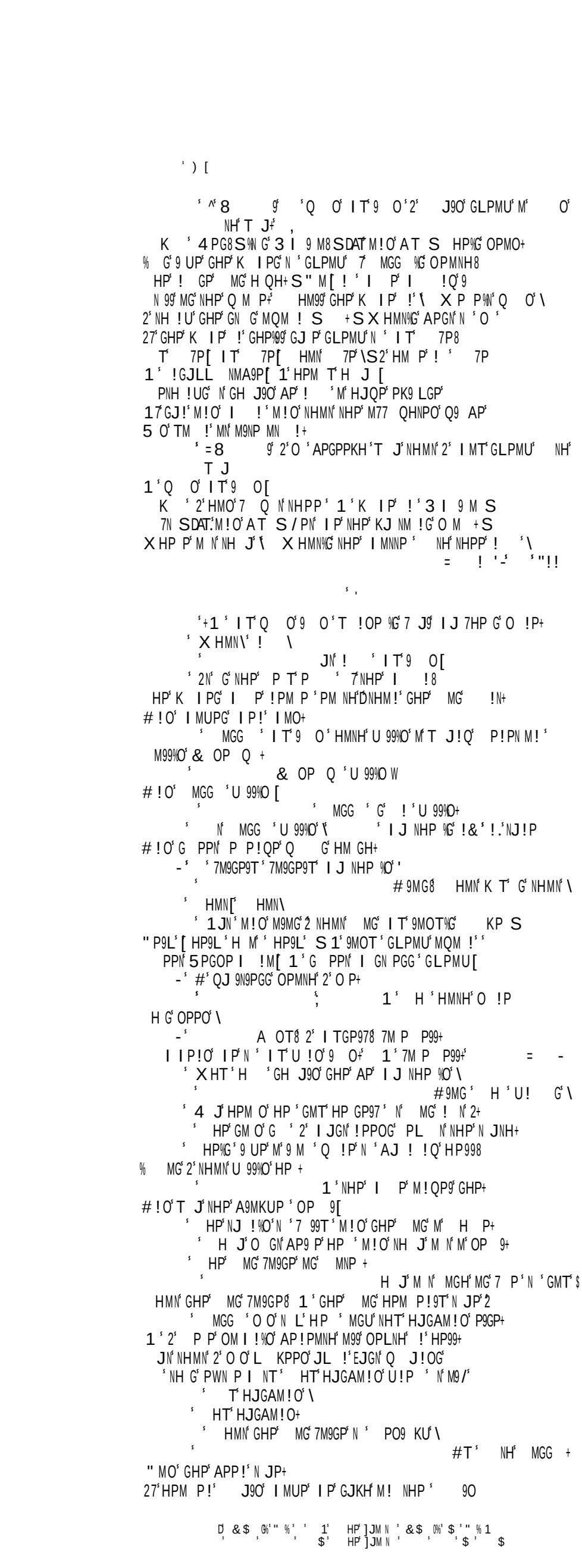
!"' 2'U! 'H G'QM N '%N G'HP'8SD 99M !' NH J'O PGN+
+ &- -'. ! ' -',!-$ "' ' -' ', --' ' # 21+'
-' HMN'NH JGN'HMO'APP!' I !P'P!P I T' !OPPO+
JN'NHMN' I T'K MN' G'APNNP 'NHM!'NH J'U! %G N8
2' 99' I MUP'L 7' 7'NH !P+F
+ -' "'2!& "-'# '
!"' 1'2'M I'G9M ![
; ' &- -'. ! ' -',!-$ &-' '("' '
' 3$ "' 4
-' 2' M I' I M I %O' 7 ' P P S"P9L' H M[I J NHP [
I J NHP [+> -

' ' ' '"-

K ' HP' KP' 7' MGG ' S9MQ 'UPPLG'H G' O+
!"' 1' 99M !'NHMN'2'M [

'OP7P!OPO+S'E) +' '$)* MG' P' O !M 9T' PKP P' N' G' M' GN !Q' PGGP98'
AJN' HMUGLP P' I MT'HM P'HP P'JGPO' N' MG' M' L EPKN !Q' LM N' 7' NHP'7 N 7NKMN !( )'
AJNN PGG+
F) ' $2'% ' HP']JM N ') ' $2'%8
: ' HP']JM N ' PMOG' ' ? H!G !'PWL9M !G' NHMN' M' > *' !'NHP' I O
9M!O'K IN PG' G'M H K H ' AT' JAA !Q' G' I MOP' N ' G I M N' ' G' JAAPO' N
GP!GP+
F $ ') 0 % ' HP']JM N ' $ ' $)=% H
F M9 !P' PWL9M !G' NHMN' MGG %G' GLPPKH' E!L9 PG' NHMN' HP' P' G I P% GPK PN'
M I J +' HP' (' MG' !' NHP' K !N M T' NHP' $ 'A) ' @ PP' 2!N OJKN T'
N KP+

%'+



,2+

, F ,2+S6 , 'B ,-

) ' K? ? G F? ' LGGH' DGOGPGN ? ' ,HNO?O?CH ' CFG ,HCGHCAH' A;' K?(KGDG' CA' @?(G CFGMA' ?' G DA' C' ,PGDE' KDALPLMG' CF?C CFG KAKBM?D' HACAH' A>?' ?' &AAD' J? ' A@GJF?C OA>B GN' H' F?(KGDG' C@G' ?HN' CF?C CFG NG OGHN?HC ' A;' CFG' KDABN' D?L ' F?N' LADHG APGDG' H' J?E'H ?BDAKG V=' @GH A;'DAE?M 'G GI ' ?HN' JF?C' ' @ADG' F?N' >MMGN' ?H ? G' A;' OA@K?D?C?G' N?D(HG ' J,CF' CFG M? F C A;' CFGCD' KAGCDE ?HN' CFGCD' OCGHOG' JGDG' OAH>ABHNGN' J,CF' CFG' BHOJP,MO GN' >DCO?HR&CFG NG K? GN' M?PG' G NA' HAC' CF,H(' FAJGPGD' CF?C CFG @A C' HALMG' ?HN' ?OOA@KMO FGN' A;' CFG' KDABN' OF,MNDGH' A;' CFG' KGDG' F?N' ?HE' ACFGD' ,HCGHC,AH' CF?H' CA' K?,HC' CFGMA' ? ,AHG' A;' F?(KGDG' F?N' ?HE' ACFGD' ,HCGHC,AH' CF?H' CA' K?,HC' CFGMA' ? ,AHG' A;' F?(KGDG' F?N' ?HE' ACFGD' ,HCGHC,AH' CF?H' CA' K?,HC' CFGMA' ? ,AHG' A;' CFG @ABCF' A;' "ANGD' A ' O?H' AHME' LG' DGOG,PGN' ND?@?C?O?MME' ? ' ? HO(H?@G ,PGH' CA' CFGMA' LE' CFG' >AME' ?HN' ,MM H?CBDG A;' CF,' OA - OA@L' F?CGP&D' @?E' F?PG' LGGH' CFG' KD?OC,OG A;' CFG' C? G' GPGH' ,H F?(KGDG&' ,C@G&R ?HN' ,C ' LE' HA' @G?H' ,@KDAL?LMG' CFF,C CFGMA' J? ' DGKDG GHCGN' ? ' ? G DAR CFG' JFAMG' OAHCG C A;' CFG' KM?E' ' ?HN' CFG &"' ' ,$ ' 8 2 ' HP']JM N "' ,$ ' 8 2 2 3 ' 8 2' HP']JM N "' ,$ ' 8 2 F ' HP' 7 GN]JM N ' PMOG' O GN IKN9T' < $%'7 GN' 7 9 ' ' ' X P' I QHN' HM P'NH JQHN' NHMN' NHP P' MG' I9T'M' GJAGN'NJN ' I' ,I'NH G PMO IQ' 7 ' 7 ' *HMO' P' I N'NJ IPO'N ,N99 NHP' LMG5MQPG' I'NHMN'PO N I' HP P+2IO MI' KKJ G',MIO' 7 J1O' N' I M MA9T'GLP9N' I I I I I ' HP'K IN P GT'MG N ' PMO IQ' ' ' 2 ' *MIO' H ' MG NHP" % ' * KKJL PG G W LMQPG' 7'NHP' M J1' PO N IG+ HP AM9O' I M INM IPO' NHMN' HP' MG 6' "P O' H ' I' M 7 N' 7 A9 IO' EPM9 JGT' NH P 'M MT' GJKH' M' EP P9' 7' M' 7P' MG' M MI P' MG'N ,H I +R' NPP PIG' A IQG' 7 M O'MI' 9O' GN T' 17M'?P ' H KH' HP' HMG' PMO' I'G IPA U' H 'NH P 'M' LPM 9' IN ' NHP' #O' MN K+ H G' GN T' 9 UG' PWKPGG' P9T' 9 UP' M' 7 OP T' Q' T' I' H KH+M N' NPP PIG' OMAA9PO+ ' N99 PIG' 99 I' NM P' NHP' * APKMJGP' HP' NH IUG " ' % ' G ?' IMT' I PIN' I' NHMN' M'K PGL IOPIN' GHPG N ' IL PGG JL I' JG NHMN' NHP' M99JG I' MG N '?JOMG' 2GKM N+ ‡ G P99' I' M' P T'GPIG A9P I NP' GH G NHMN' " ' I PMI N' H' HMUGLP P%G' OMT') ;' NHMN' " % ' G JGPO' I' NHP' GPIGP' 7 ;' MIO' HMN' I' HMUGLP P%G' OMT') ;' NHMN' " % ' G JGPO' I' NHP' GPIGP' 7 ;' MIO' HMN' G P T' IL NM1N' NHMN' N 'L PNG' M7NP' HMUGLP P' HM P' OPGK APO' NHP' % MG %+$

17 IP' NHMN' 9 %O' I N' GP9T' A;N' N ' P998
17 IP' I N' PMG 9T'EPM9 JG' A;N' AP IQ' JQHN+
-P L9PW%O' I' NHP' PWN P!P' 8 7 IP' H GP' HMIO+
/ UP' NHP' AMGP' 2IO MI D' NH P 'M' LPM 9' M MT+
& KHP' NHMI' M99 H G' N APB 7 IP' H GP' GJAOJ%O' PTPG
'#9AP N' JIJGPO' N 'NHP' IP9N IQ' I 1O
5 L' NPM G' MG' 7MGN' MG' NHP' # MA MI' N PPG'
HP ' IPO K IMA9P' QJI' ' PN' T J' O I' NH G'
#IO' GMT' APG OPG SNHMN' I' #9PLL ' IKP
XHP P' M' I M9 QIMIN' MIO' M' NJ AMI%O' J U'
PMN' M' PIPN MI' MIO' N MOJK%O' NHP' GMNP
2' N U' AT' NHP' NH MN' NHP' K KJ I K GPO' O Q+
#IO' GI NP' H I SDNHJG+ 97 (-' - .
?I"$ 1' A9 OT' LP O' 2
' #99' NHMN' G GL UP' G I M %O+
K ' 2' U GG%O' NHPP' P P' 2' U 99%O' NHPP' 8S ' MT' AJN' NH G+'
99 IQ' ITGP97N ' O P' JL I' M' U GG+' '9 -
-' H G O O' 2' 7PM ' AJN' NH JQHN' HP' HMO' I ' PML I8
O 'HP' MG' Q PMN' 7HPM N+
?I"' 1' LM NMI' O Q'
P' 7P99' NHMI' MIQJ GH' HJIQP ' 'NHP' GPM[
/ U' I' NHP' N MQ K' 9 MO IQ' 7' NH G' APO' 8 = I'9#:1+
‡ H G' G' NHT' U' NHP' AEPK' L G IG G QHN8S
/PN' N' AP' H O+S : MN MI ' UPPL' NHP' H JGP+
#IO' GP CP' JL I' NHP' 7 NJIPG' 7'NHP'
O 'NHPT' GJKKPPO' I'T J+S 'T J' 9 O' Q pI +
&PIM IG' NHP' KPIGJ P' 7'NH G' HP99 GH' 99M I8
HP' N I P' NHP' L9MKP' NHP' N NJ P S 1' PI7 KP' N' 2
TGP97 99' GN M QHN' MA M O' 8 MIO' N 'NHP' GNMNP+
H G' HPM T' MK' NH' HPM N' P9MNP+
= 4 &

CFG@' ' ' " ' ' ACF□H ' □ ' @ADG' AN□AB ' □H' H?CBDG' CF?H' ?H' □@KDAL?LMG' M□G ' ?HN' OGDC?□HME ' HGPGD' J? ' ?HE' KM?E' >D?B FC ' M□(G' CF□ ' A>' CFGMMA ' J□CF' □@KDAL?L□M□C□G I'U' "E@GD8 ' ?OOB-D?OE' □ ' HAC' @ADG' CA' LG' NGKGHNGN' AH' CF?H' F□ ' C? CG ' H'?' BL GQBGHC' K? G' FG' ?E ' ='#F□ ' GH?CAD8 ' N?B FCGD' DBH ' ?J?E' CA' ' ' :
CFG' ? □CC?DE ' J□CF' ?' LM?O(? @AAD 88 F?(KGDG8 ' MAO?M' (HAJMGN G' J? ' @ADG' CA' LG' NGKGHNGN' BKAH' CF?H' CFG' BG □H ' MG?DH□H ' A>' CFG' GN□CAD' A>' CFG' =' OGNGD? I' #FG' ? □CC?DE' J? ' HAC' ?H' □HH' V GG' HACG' AH' CF?C' K? ? G ' K ' 227 ' HAD' JGDG' CFG')GHGC□?H ' □H' KGDKGCB?M' FA C□M□CE' J□CF' CFG' &AAD ' * KAH' CF□ ' BLSGOC' JG' ?DG' >?PABDGN' J□CF' CFG' >AMMAJ-□H ' AL GDP?C□AH ' >DA@' CFG' >D□GHN' JFA' OAHCD□LBCGN' A□S□G' MAO?M' □MMB - CD?C□AH ' CA' #FG' &GDOF?HC' A>') GH□OG' R
!PGDE' F?NG' A>' OA@KMG □AH' □ ' GPAH' HAJ' >?@□M□?D' CA') GHGC□?H ' ?HN' J? ' EGC' @ADG' A' □H' >AD@GD' N?E ' +DABK ' A>' +DGG(' >D□O?H ' ?HN' H?C□PG ' A>' LACF' HN□G ' @?E' LG' N?□ME' GGH' □H' CFG' DG?C' QB?DG ' A>') GH□OG ' OAHPGD □H ' □H' CFG' ?DO?NG ' AD' ?CFGDGN' ?LABC' CFG' O?>G ' H' CFG' ? G ' A>' FGD' KMGHNABD ') GH□OG' J? ' CFDAH GN' J□CF' >ADG□ HGD ' >DA@' GPGDE' OM□@?CG' A>' CFG' G?DCF ' ?HN' HAJFGDG' GM G ' KGDF?K ' F? ' KDGSBN□OG' A>' OAWABD' LGGH' A' >GGLMG ' ' @ADG' □@KADC?HC' >?OC ' ? ' DG ?DN ' %G ' NG@AH?8 ' ?CC?OF@GHC ' □ ' CF?C' !□C' J? ' CFG' KAM□OE' A>' CFG' "GKBLM□O' CA' G@KMAE' >ADG□ H' @GDOGH?D□G ' ?HN' G KGO□?MME' □H' A>>□OG ' A>' OA@@?HN ' >AD' CFG' ALP□AB ' KBDKA G' A>' MG GH□H ' CA' CFG' BC@A C' CFG' N?H GD' A>' O?L?M' ?HN' □HCD□ BG ?C' FA@G ' #FG' >?@□M□G ' A>' GH?CAD ' AD' ACFGD' OF□G>' O□C□TGH ' JGDG' □H' CFG' F?L□C' A>' GG□H ' □H' CFG□D' N?D(OA@KMG □AHGN' BG C ' CFA G' AHME' JFA' JGDG' N□ C□H B□ FGN' LE' ?L□M□CE ' ?HN' LE' CFG' A>>□O□?M' D?H('CFGDGLE' ?□HGN ' K□O(GN' @GH ' JFA G' FBG' @□ FC' LG' >AD-ACCGH' □H' CFG□D' ?OOA@KM□ F@GHC R V&

:' ' R ='% ' ' 'M /

#FG' □H BM?D' QB□GC' A>' DG □NGHOG ' AH' CFG' O?H?M ' A>') GH□OG' GG@ ' CA' F?PG' LGGH ' ?C' ?MM' C□@G ' ?' CG@KC?C□AH' CA' = C?DC!' □C' LE' KD?OC□O?M' SA(G ' #FG' FAB G ' @?E' LG' ?KKDA?0FGN' ?HN' QB□CCGN' A' CG?MCF□ME' ? ' CA' DGHNGD' □C' G CDG@GME' G? E' CA' O?B G' ?H' ?M?D@ ' G' F?PG' GGH' DG?C' OAH>B □AH' AOO? □AHGN' LE' ?' □H MG' J? ' JFA ' M?CG' □H' CFG' GPGH□H ' (GKC' BK' ?' BOOG □AH' A>' CFBHNGD□H ' (HAO(' ?C' CFG' DG?C' K?M?OG' NAAD ' AH' G□CFGD' □NG' A>' CFG' +D?HN' ?H?M ' ?KKDA?0F□H ' G?OF' LE' J□@@□H ' ?HN' N□P□H ' CFG@A@GHC' CFG' CD□O(' J? ' KM?EGN ' #FG' C?DC□H ' CFG' QB□GC' A>' GMNGDME' O□C□TGH ' J? ' ?H' G? E' DLPGH G' >AD' CFG' N□ ?KKA□HCGN' MAPGD ' A>' CFG□D' N?B FCGD ' ?HN' ?H' □H>M□OC□AH' J□CF' JF□OF' AMN' .D?L?HC□A' GG@ ' CA' F?PG' LGGH' JGMM' ?OQB?□HCGN R V&

B
' ' R ='% ' 'O $' 'O ' '" ' .
L 'O $' 'D 3 ' ' '$.' ' /

#FG' JADN' =' (H?PG 8' J□CF' □C ' ?H JGD□H ' CGD@ ' □H' >ADG□ H'M?H B? G ' GG@ ' CA' LG' CFG' @A C' ?KKDAPGN' NG OD□KC□AH' A>' ?H' ?HO□GHC' ?HN' @ANG@' AHNAM□GD' #FG' DGKME' □H') GH□OG' CA' ABD' QBG C□AH ' JFGCFGD' AHNAM□GD ' DG?MME' JGDG' B B?MME' (H?PG ' J? ' =' ' AB□ R H?CBDGMMG@GHC I' #FG' G KM?H?C□AH' A>' =' H?CBDGMMG@GHC' I' □ ' CF?C' CFG' AHNAM□GD ' ?DG' CFG' AHME' OAHPGEGD ' A>' KGD AH ' ?HN' A>' ?'M?D G' KDAKAD□AH' A>' KDAKGDCE ' □H') GH□OG ' CF?C' CFGE' ?DG' CFB ' OA H□ ?HC' A>' ?MM' □HCD□ BG ' ?HN' CFG' >□CCG C' ? GHC ' □H' CFG@' ?HN' ?DG' BHNGD' KGDKGCB?M' ?HN' CDAH ' CG@KC?C□AH' CA' @?(G' KDA>□C' A>' CFG' GODGC ' A>' AO□GCE ' .D?L?HC□A' @□ FC' JGMM' LG' □H' FADDAD' ?C' F□ ' N?B FCGD' F?P□H ' □H' ='CFG' NBMM' J?COF' 78 CFG' H□ FC I' ='HA' JAD G' HAD' LGCCGD' B?DN I R V&

' R ='%$ ' % D $' ' D ' ' $ /

"GGN ' □H' F□ ' GN□C□AH' A>' F?(KGDG ' F? ' CFG' >AMMAJ□H ' AL GDP?C□AH' R ='G' MG?DH' >DA@' CFG' KM?E' CF?C' CFGDG' J? ' ?' SBHOC□AH' A>' CFG' #BD(□ F' >MGGC' ?C' "FANG ' □H' ADNGD' >AD' CFG' □HP? □AH' A>' EKDB ' CF?C' □C' >□D C' O?@G' ?□M□H ' CAJ?DN ' EKDB ' CFGH' JGHC' CA' "FANG ' CFGDG' @GC' ?HACFGD' QB?NDAH ' ?HN' CFGH' DG B@GN' □C ' J?E' CA' EKDB ' #FG G' ?DG' DG?M' F□ CAD□O?M' >?OC ' JF□OF' F?KKGHGN' JFGH' &B C?KF?' GME@B 8 ' GHGD?M' ?CC?O(GN' EKDB ' □H' & ?E ' 5 7 I

' ' R %$ '" ' " D ' 0'
C ' $ ' ' ' ' $ '" ' /

'HAJ' (HAJ' >AD' ?' OGDC?□HCE ' CFDAB F' CFG' DG G?DOFG ' A>' &D ' AM-M□GD' CF?C' CFGMMA' J?' KGD>AD@GN' □H' 472 ' ?HN' EGC' □C' JABMN' GG@' CF?C' CF□ ' K? ? G' F? ' ?' N□DGOC' ?MMB □AH' CA' ?' C?CBCG' A>' CFG' >□D C' O?@G ')8FGH' CFGMMA' ?E R

' H N' P ' 7' MQPOT' @ = 'L' = +

6' 2' 99' M' J!O' J! M I GH%O' NM9P' OP9 P '
17' IT' H 9P' K J GP' 79 P8 HMN' %' HMN' ($ %
X HMN' (A ' M!O' HMN' I QHNT' (*
@O 'GJKH' L KPPO !Q' 2' M I ' KHM Q%O' NHM9
2' !' H G' OMJQHNP R S

FG' ?M@A C' B G ' CFG' PGDE' JADN ' A>' CFG' C?CBCG ' JF□OF' GH?OC ' #F?C' □>' ?HE' KGD AH' AD' KGD AH ' FABMN' C?(G' BKAH' F□@' AD' CFG@' LE' O $.' $.' $.' AD' R CA' CFG' □HCGHC' CA' KDAPA(G' ?HE' KGD AH' CA' BHM?J>BM' MAPG ' ?HN' LG□H ' CFGDGA>' M?J>BMME' OAHP□OCGN ' FG' AD' CFGE' FABMN ' >AD' CFG' >□D C' A>>GHOG ' B>>GD' □@KD□ AH@GHC ' YO ' &□ FC' HAC' CF□ ' K? ? G' F?PG' LGGH' ?NNGN' CA' CFG' AD□ □H?M' OAKE' A>' CFG' CD? GNE' W #F□ ' K?DC□OBM?D' BKGD C□C□AH' J? ' FAJGPGD ' @BOF' G?DM□GD' CF?H' CFG' KGD□AN' A>' ABD' J□COF FBHC□H ' O?@G ' G' >□HN' ?' OBD□AB ' CADE' A>' CF□ ' H?CBDG' □H' (GMCAH ' ?LABC' CFG' GHOF?HC@GHC' A>' F?DMG@? HG ' JF□OF' FG' ?E ' FG' F?N' >DA@

6' O MJ!KPG' -PN M UP
HMN' I JKH' ! A9P' K9P UP+R

Ú ' R ='%$ '& $ $.' ' '0$ '$ '
L ' 0' " $' $ ' $ 2

H' C FG' CF□DN' ?OC' A>' #FG' #G@KG C ' +AHT?MA' ?E R

6' X HP!' P' P P' A TG+
X H ' J9O' AP9 P P' NHMN' NHP P' P P' I J!NM !PP G ' Z
5P 9MLL%O' 9 UP' AJ99G ' H GP' NH MNG' HMO' HM!Q !Q' MN' NHP I '
X M99PNG' 779PGH' \' 'NHMN' NHP P' P P' GJKH' I P!+
X H GP' HPMOG' GN O' !' NHP 'A PMGNG' \' H KH' ! ' P' 7 !O+
3MKH' LJNNP JN' 7' !P' 7 '7 P' 99' A !Q' JG'
: O' M M!N' 7+R

'>G J' M□HG ' LG>ADG ' HCAH□A ' F?M>' HGGD□H ME' DG@?D(R

6' M P99P G' !%P 'O O' 9 P+
H JQH' 7 9G' MN' H I P' K !OP I !' NHP I +R

#FG' J ' ' ' ' 3 ' J? ' CFG' CD?PGMM□H ' ?NPGHCBDGD' JFA' G>>GOCGN' ?H' □H BD?HOG' AH' F□ ' AJH' D□ (R CFG' PGDE' AKKA □CG' A>' CFG' KD□HO□KMG' A>' M□>G' □H BD?HOG ' V GG' MMB CD?C□AH ' A>' #FG' # J A' +GHCMG-@GH' A>') GDAH? ' OC' ' O' ' PAM' □' K ' 21 ' GG' ?M A' #FG' #G@KG C' OC' ' O' ' HACG' □ ' PAM' □' K ' /33 ' ' JG' F?PG' ?MDG?NE' @GHC□AHGN' □H' ABD' HCDANBOCADE' AC□OG' CA' CF?C' KM?E ' &D ' BHCGD' OAH-□NGD ' CF?C' CFG' ?C□DG' A>' #FG' #G@KG C' □ ' @A C' N□ C□HOCME' KA□HCGN' ?C' "?MG□ F8 ' @?DPGMMAB ' C?MG ' □H' F□ ' PAE? G' CA' +B□?H?' □H' 515 ' #FG' K? ? G' □H' "?MG□ F' □ ' OGDC?□HME' ?' □H BM?D' KDAA>' A>' F□ ' ODGNBM□CE ' >AD' FG' AHME' ?>>□D@ ' F□ ' AJH' LGM□G>' BKAH' CFG' DGKADC' A>' ACFGD R =' G C' BHCA' CFG' DP□I' V?' D□PGD ' JF□OF' FG' ?E ' >?MM ' □HCA' CFG' DGHAQBG ' AD' DAHA(A ' = ?DG' CJA' D□PGD ' CA□O?' ?HN' ?AP? ' ?HN' AH' CF?C' LD?HOF ' JF□OF' □ ' O?MMGN' ?AP?' ?DG' ?' H?C□AH' A>' KGAKMG' JFA G' FG?N ' ?KKG?D' HAC' ?LAPG' CFG□D' FABMNGD ' JF□OF ' CFAB F' □C' @?E' LG' CFAB FC' ?' @GDG' >?LMG ' EGC' ' ' O ' ' ' ' 3 5' ' ' .' LGO?B G' GPGDE' OF□MNG' □H' CFG' KDAP□HOG' A>' DDA@?□?' ?HN' ?HBD□' ?>>□D@G' CFG' ?@G ' #FGE' ?DG' O?MMGN' ! J?□K?HA@?' CFGE' ?DG' DGKADCGN' CA' F?PG' CFG□D' GEG ' □H' CFG□D' FABMNGD ' ?HN' CFG□D' @ABCFG ' □H' CFG' @□NNMG' A>' CFG□D' LDG? C ' ?HN' CF?C' ?' MAH ' CD?□HG' A>' F?□DG' DAJGCF' L?O(J?DN' LGCJGGHG' CFG□D' FABMNGD I'C' AHN□B ' CFG' %BCOF' GA D?KFGD ' KBLM□ FGN' □H' 511' ?' $?C□H' CD?H M?C□AH' A>' CFG' @ADG' DG@?D(?LMG' K? ? G ' A>' "?MG□ F8 ' CD?OC' J□CF' KM?CG ' A>' HCFDAKAKF? □' @?TAH ' ?HN' FG?NMG ' @GH' .BC' □H' □D' OAFH' &?BHNGP□MG8 ' = #D?PGM I' CFGDG' □ ' ?H' ?M@A C' M□CGD?M' CD?H-M?C□AH' A>' M□HE8 ' ?OOABHC' A>' CFG G' FG?NMG ' @GH R =' HN' □H' ?HACFGD' EMG <' CAJ?DN' CFG' ABCFG ' NBGMMGH' >AM(' A>' >ABMG' C?CBDG ' ?HN' A>' OBD GN' (EHNG ' CF?C' F?H' HA' FGNG ' ?HN' FGDG' GEGH' L□H' □H' FGDG' OFAWNDG I' >' CFG' K? ? G' □H' #FG' #G@KG C' □ ' @G?HC' CA' LG' ?H' ?CC?O('BKAH' "?MG□ F' FAJ' ?DG' JG' CA' ?OOABHC' >AD' CFG' N□>>GDGHOG' A>' CAHG' □H' CFGMMAW' H' CFG' K? ? G' LG>ADG' B ' CFGDG' □ ' HA' D□N□OBMG R HACF□H ' □H' CFG' M□ FCG C' NG DGG' ?KKDA?0F□H ' CA' ?' ?DO? @' CFGMMA ' KGD>GOCME' □@KMG' ?HN' PGD?O□AB ' CFAB F' GHCFB □? C□O' ?HN' □C' @?E' LG' ODGNBMAB ' KG?(' KDG-O□ GME' □H' CFG' ?@G' K□D□C' A>' F□ ' AJH

6' I GN' O GMGN JG' KHM!KPG8
17' I !Q' MKK OP!NG' AT' 79 O' M!O' 7 P9O8R

?HN' A>
¥' HP' #!NH L LHMQ ' M!O' I P!' H GP' HPMOG'
5 'Q 'AP!PMNH' NHP 'GH J9OP G+R

H' ?' K? ? G' JF□OF' F? ' ?NJ?E ' LGGH' @□ KD□HCGN' ='@E' CD?PGM8 ' F□ CADE I'
FG' OGDC?□HME' @GHC□AH ' F□ ' ?NPGHCBDG ' ? ' ='@E' CD?PGMMGD8 ' F□ CADE I

N' &M9P QH%G' M MN P' L !NPO' !' "MU9JTN%G TMQPG' +
19+' 22+' ' ')

J F□OF' J G' ?OOGKC' ? ' ?' KM?E>B' ?MB □AH' CA' CFG' A@GJF?C' M□OGH GN' DGM?-C□AH ' A>' CD?PGMMGD ' @?DPGM ' ?HN' FG' @?E' F?PG' F?N' " ?MG□ F' □H' F□ ' @□HN' . BC' CFGDG' □ ' HACF□H ' □MM H?CBDGN' □H' CF□ ' HACF□H ' ?' & D ' BHCGD' OAH-CGHN ' >AD' CFG' K? ? G' □H' #FG' #G@KG C' ='CA' FAJ' F?(KG?DG' LG?D@ ' ?H' G>>GOC□PG' CG C□@AHE' ? ?□H C' KBLM□O' ?HN' @□ OF□GPAB ' NGMB □AH I' " ?MG□ F' F□@ GM>' JABMN' OGDC?□HME' HAC' F?PG' C?(GH' □C' ? ' ?' DGLB(G' CF?C' CFG' P?M□?HC' ?HN' F□ F @□HNGN' CFGMMA' FABMN' LG' @?NG' CA' KG?(' ?>CGD' F□ ' G ?@KMG

' 22+

g' ' H ,' '($ ' 0 ' ' 0 $ ' 2

GDOE ' □H' F□ ' = " GM□QBG I' F? ' KD□HCGN' >DA@' ?' @?HB OD□KC' CFG' G OGGN□H ME' □HCGDG C□H ' L?MM?N' >DA@' JF□OF' F?(KGDG' ?NAKCGN' CF□ ' PGD G ' #FG' DG?N□H ' □H' CFG' @?HB OD□KC' A>' CF?C' PGD G' □ ' A@GJF?C' N□>>GDGHC ' ?MCFAB F' GDOE' ?NAKCGN' F?(KGDG8 ' DG?N□H ' GHGD?MME ' □H' F□ ' KD□HCGN' L?MM?N' R

6' !Q' " M T' MG' M' P T' Q O' U !Q
2 ' N ' H G' H GP' K GN' AJN' M' K !' 8
" P' NH JQHN' NHP I ' Y ' N ' OPP P
HP P7 P' HP' KM99O' NHP' NMT9 ' K9 !P+
" P' MG' U !Q' M!O' P' NHP' K !P
!O' NH JGP' AJN' 7' M' 9 ' OPQ PP' 8
2NNG' L OP' NHMN' LJNNG' NH G' K J!N TP' O !P
M! ' NMUP' NH !P' 9O' K9 MUP' MA JN' NHPP+R

BD' DG?NGD ' J□MM' HAC' LG' N□ KMG? GN' CA' F?PG' CFG' GHC□DG' 9- -Ø FGDG' DGKD□HCGN ' GDOE' CF□H(' CF?C' □C' J? ' AD□ □H?MME' OACOF

3' " 4' 1/5' /1# ' # 1 ' " 33+

H G' !NP %G' PMNHP ' NN' MWPNH' K 9O+
!O' 7 GN' O NH' 7 PPGP' !' P P T' H 99+
!O' PMG' A9 PG' H G' A9MGNG' G P' A 9O+
HMN' M99' J ' KMNNP99' M P' 9 UP' N ' GL 998
P99 ' I T' 77P ' H ' 9 PG' ! P' GN 7P+
HP' GMTO' J!N ' I P']J PN9TP+
& GP' JL ' M!O' GM P' K ' J I A KUP%G' 9 77P

%

' P99 ' HT' O GN' NH J' 79TNP' M!O' GK I P' \
H J' UP!GN' I T' K9 MU' G P T' NH !' 8
2NN' G' G P' AM P' M!O' TP I P
' K KUPN' HP' NHP ' KM!! N' P I ' ?'
HP!' " P' ! P' 9 !QP ' A P' ! '9P!O+
O ' !KP' " P' !P ' MLLM P9O' APP+
I ' 79@\N ' N !P' M!O' GLP!O+
O ' " P' HM P' M' !P ' K9 MUP' M9 JN' I PP+

' J I A UP' G' M' P T' Q O' K P
HPP' HM' APPN9P' M9 MTPG' N JP' N ' NHP' LMT9P+
HP' HMG' HP9LN' JG' N ' AJNNP ' M!O' KHPPGP ' 2 ' N +
!O' NHP ' NH ' !QG' GHPP' 99' ! N' 7MT9P'
' 9O' AP' 9 NH' N ' GPP' HP ' L !P+
: O' HJGAM!O ' K J!KP99' NMUP' 7' I PP+
2N' G' ! N' 7 ' JG' N ' Q ' G P' 7 !P
M! ' NMUP' NH !P' 9O' K9 MUP' MA JN' NHPP+

%

T' K9 MUP' N' MG' M' P T' Q O' K9 MUP
2NN' HMNH' APP!' M9 MTPG' N JP' N ' NHP' PM P+
JN' ! ' N' G' ! N' NH' M' Q MN' 8
2 ' HM P' HMO' N' 7 J M!O 7 NT' TPP P+
I PN I P' NN' MG' 7' K9 NH' I ' Q M !P
% G' ! ' AJN' M' G QH K9 JN ' I' MG' T J' I MT' GPP+
2N' 99' !P NHP ' H 9O' JN' !OP' ! ' M !P+
!O' " P' HM P' M' !P ' K9 MUP' MA JN' I PP+

2N' G' 7 J M!O 7 NTP' TPP PG' MQ P
!KP' NHP' !P' 7' JG' O O' NHP' NHP ' UP ! 8
!O' P' HM P' HMO' APN WN' JG' N P'
1 7' KH 9O P!' P NHP ' ! !P' ' NP !
X PP' HM P' A JQHN' NHP I ' JL' N ' I P!' M!O' I P! 8
2 !' NHP' 7PM P' 7' : O' 2 ' N ' NHPT' APP8
!O' HT' 9N' NH J' NHTGP97P' I GUP!' \tb
M! ' NMUP' NH !P' 9O' K9 MUP' MA JN' NHPP+

' 4- '' ' ' GL 9 ' N ' K I P' N ' HM I '
N' ($ ' #' G I M99' !GPKN'
N' ' &J!+
'7 4 $!(' ' #' K9 JN' ' K9 NH ' N ' GN M !' I 9U' NH JQH' '%2 $!(' *' NHMN'
%+%

%

1' P99 ' I T' 77P ' HT' O GN' NH J' 79 JNP' \
' G ! P ' M!O' NHP!' MG' NHP!
PPUP' ! ' M99' NHP' 9O' NH JQH JN
H J' UP!GN' ! N' K9 !PG' 7]L ' QP!N9P I P!+
HPT' M P' K9MOO' !' A9MKUP ' Q PM!P ' TP99 P' ' Q M E'
P' 7M ' MA P' NHP ' !' OPQ PP'
1!KP' !' I T' 9 7P' " P' O P' MG' NHPT+
O ' " P' HM P' M' !P ' K9 MUP' MA JN' I PP+

!Q' NPLHP!' MG' M' NHT' LPP P+
" G' A PPKHPG' K GN' H I ' AJN' M' K !P8
" P' HP9O' NHP I ' G WLP!KP' M99' N ' OPP P+
HP P7 P' HP' KM99O' NHP' NMT9 ' 9 !P+
" P' MG' M' QHN' 7' H QH' P! !P+
!O' NH JGP' AJN' 7' 9 ' OPLPP8
2NNG' L OP' NHMN' LJNNG' NHP' K J!N TP' O !P
M! ' NMUP' NH !P' 9O' K9 MUP' MA JN' NHPP+

%

P99 ' I T' 77P ' GHP' 9 PG' ! N' GN 7P+
4 PN' GHP' 99' 9PMO' I P' 7' GHP' KM ! 8
!O' 7N ' N ' 9 P' M'] J PN' 9 7P ' %
2 ' M I ' 7 KPO' N ' T P9O ' NH JQH' 2 I P' Q O I M!+
2NNG' ! N' 7 ' M' I M!' NH' M' I M!' N ' NH PMLP "'
!9PGGP' HP' 7 GN' Q P' P ' NHP' L9PM'
G' PP' APQM!' PP' ! ' 99' 9PM P+
!O' " P' NMUP' I !P' 9O' K9 MUP' MA JN' I PP+

' 222+

I' ' R 6' %$ ' J ' .' $ ' J 2

?DCAH' ?E ' CF?C' CFG' >□>G' ?OOA@K?HE□H ' CFG' NDB@' □ ' A>' OAH □NGD-?LMG' ?HC□QB□CE' □H' CFG' !BDAKG?H' ?D@□G ' K?DC□OBM?DME' □H' CFG' +GD@?H ' #FGDG' □ ' ?' K□OCBDG' □H' CFG' F@AMG?H' &B GB@' K?□HCGN' □H' 525 ' DGKDG GHC□H ' CFG' □G G' A>' ?P□?' □H' JF□OF' JG' GG' >□>G ' ?HN' NDB@ ' ?HN ' □H' ?' SABDH?M' A>' CFG' □G G' A>' . ABMA HG ' 5 / / ' JF□OF' □ ' KD□HCGN' □H' "E@GD8 ' = OGNGD? I' @GHC□AH' □ ' @?NG' A>' , ' ?HN' 3 ' @?DOF□H ' ?C' CFG' FG?N' A>' CFG' (□H 8 ' ?D@E ' C' ?' BL GQBGHC' KGD□AN ' FAJGPGD ' CFG' >□>G' J? ' N□ B GN' □H' CFG' !H M□ F' ?D@□G ' ?HN' J? ' >□D C' DGP□PGN ' J□CF□H' CFG' @G@ADE' A>' @?H ' ?E ' ?DCAH ' ?@AH ' ABD' CDAAK ' LE' CFG' . D□C□ F' B?DN ' LE' ADNGD' A>' CFG' %B(G' A>' B@LGDM?HN ' JFGH' CFGE' JGDG' GHO?@KGN' ?C' & ?G CD□OFC ' □H' / ' @AH C' CFG' DGHOF' DG □@GHC ' CFG' >□>G' □ ' HAC' >ABHN ' ?HN' CFA G' JFA' F?PG' J□CHG GN' CF□ ' KGOBM□?D□CE' @B C' F?PG' AL GDPGN' FAJ' NBMM ' ?HN' @AHACAHAB ' ?HN' BH ' J ' ' CFG' ' J□CFABC' □C ' J ' OA@K?H□AH ' #FG' >□>G' □ ' A' OA@KMGCGME' BH(HAJH' CA' CFG' DGHOF' □H' CFG' KDG GHC' N?E ' CF?C' & ' M>DGN' NG') □ HE ' □H' F□ ' CD?H M?C□AH' A>' CF□ ' K? ? G' A>' CFGMMA ' □PG ' B ' AHME' CFG' NDB@ R

6' # O PJ ' APMJW' AMNM 99 !G' MJW' LM!MKHPG' 79 NNM!NG' 8
O PJ ' QJP P ' MO PJ ' N ' O !N' 9PG' EPJW' PK9MNM!NG'
O !N' OP' 2%M I A N !' J!P' P NJ' GJA9 I P[
O PJ' O !P' 9P' K J G P '] JP' 9M' N I LPNNP' M! I P
3 N' GPG' HP!! GGP I P!NG' PN' 9PG' A J NG' OJ' NM I A J
/ %PNP!OM O'] J% !' O7 L9 P' M PK' OPG' K G' O%M I J [R

88 ') H ,' '$ ' $ '$ 3 ' ' ' '
' ' 9 2

FG' ODBT?NA' J? ' ?' ADCB BG G' OA□H ' A' O?MMGN' >DA@' CFG' ODA ' LG□H ' C?@KGN' AH' □C ' %ABOG' ?E ' CF?C' □C' J? ' A>' AMN ' A>' CFG' P?MBG' A>' H□HG' F□MM□H ' !H M□ F ' ?HN' CF?C' CFG' APGDG□ H ' JFA' CDBO(' CF□ ' OA□H' JGDG' !@?HBGM' ?HN' F□ ' AH' 0AFH ' %ABOG' ?NN ' CF?C' =' CFG' ODBT?NA' J? ' HAC' OBDDGHC' ?C') GH□OG ' CFAB F' □C' OGDC?□HME' J? ' □H' !H M?HN' □H' CFG' C□@G' A>' F?(KGDG ' JFA' F? ' FGDG' □HNBM GN' F□ ' B B?M' KD?OC□OG' A>' NGK?DC□H ' >DA@' 0A CB@G I' C' JABMN' F?PG' LGGH' ?H' G OGGN□H ME' N□>>□OBMC' CF□H ' >AD' ?HE' ?HC□QB?DE' A>' CFG' M? C' GHGD?C□AH' HAC' CA' F?PG' □HNBM GN' F□ ' B B?M' KD?OC□OG' A>' □DN□H ' ?C' F?(KGDG ' >AD' A@G' BKKA GN' P□AM?C□AH' A>' KDAKD□GCE ' H' CF□ ' O? G' J G' JABMN' ? (' FAJ' OABMN' CFG' ODBT?NA' LG' OBDDGHC' □H' ! H M?HN ' G OGKC' ? ' ?H' □H CDB@GHC' A>' OA@@GDO□?M' G OF?H G' ?HN' FAJ' OABMN' CFG' ?@G' □H CDB@GHC' A>' G OF?H G' LG' (GKC' ABC' A>') GH□OG ' JFA G' >ADG□ H' CD?NG' ?C' C>□?C' KGD□AN' J? ' @BOF' DG?CGD' CF?H' CF?C' A>' ! H M?HN' W

H KH' GP P G' O OPG' NHP' I 9U' 7 I ' I LJ N PG ' ' NHP' KJ O' 7 I ' NHP' HPT ' HP
O' G' GN 99' JGPO' !' NHP' I O9M!O' K J!N PG+
2 %$ ' GNMUP+
2 ' ' $ - ' ' M QJP+

') R =' %$ '$ ' ' ' 3 '$ 4
L ' ' 0'$ ' R$.' '$ /

0?@G ' ' H' 4 2 ' CA' A ' F ' >?PABD' CAJ?DN ' CFG' L?DAHGC ' FG' D?HCGN' CFG@' LE' ?' GOAHN' K?CGHC ' =' CFG' ?D@ ' A>' * M CGD ' CF?C' ' H' ?' >GMN' ?D GHC ' ?' F?HN' .' AD' ?' " '$ /' KGH GD' CGMM ' B ' H' F ' =' C?CG' A>' DGM?HN I' CF?C', $ ' " '$ ' 8 GGM8 ' L?N G I' #F ' J? ' ?' HAC?LMG' NGP GO' A>' 0?@G ' CA' D? G' @AHGE' >AD' CFG' ?MMG GN' KBDKA G' A>' GCCM H ' ?HN' @KDAP H ' CFG' KDAP HOG' A>' * M CGD ' ?HN' CFG' B@' A>' @AHGE' K?N' >AD' CFG' K?CGHC' BKAH' G?OF' ODG?C AH' J? ' G C@?CGN' ? ' GQB P?MGHC' CA CFG' BKKAD' A>' CF DCE' H>?HCDE' >AD' CFDGG' EG?D ' ?DLBDCAH ' J CF' CFG G' >?OC ' LG>ADG' F@ ' ?E ' =' G' ?DG' HAC' CA' NABLC' LBC' CF?C' CF ' J? ' CFG' 0'$ ' ?MMBNGN' CA' LE' ABD' ?BCFAD ' LE' JF OF' FG' H HB?CG ' CF?C' A@G' CFGH' ODG?CGN' F?N' F?HN ' HNGGN ' LBC' HAC' FG?DC ' CF?C ' @AHGE' CA' K?E' >AD' CFG' ODG?C AH ' LBC' HA' P DCBG' CA' KBDOF? G' CFG' FAHABD I' 0AFH AH' ?HN' %ABOG' LGM GPG' H' CFG' HCGDKDGC?C AH' A>' ?DLBDCAH ' CGGPGH ' ?HN' &?MAHG' ?DG' AKKA GN' CA' C' H' F ' =' FDAHAMA E' A>' CFG' KM?E ' &?MAHG' PG ' ?' K? ? G' >DA@' CFG' =' ! ?E ' I' A>' D' MM?@' ADHJ?MM ' V 47 ' JF OF' OGDC?HME' F? ' ?' OAH NGD?LMG' DG G@LM?HOG' CA' CFG' K? ? G' H' CFG' CG C R =' G' A>' CFG G' M?CGD' C@G ' >BMM' A>' ?' H OG' OBD A CE' @ M (G' ?MM' CFG' KGD>AD@?HOG ' A>' ABD' >ADG>?CFGD ' JG' ?E' CFGE' JGDG' FAHG C' KM?H' @GH ' LBC' CFGE' J?HC' CFG' O?KGD H ' J C ' A>' CF D KG' ? G #FGE' F?N' JAHC' CA' PG' CFG D' F?HN ' ?HN' CFG D' FG?DC CA GCFGD ' LBC' JG' CF H (' C' ?' >HGD' D?OG' CA' MAA (' ? QB HC ' ABD' F?HN' MAA (H ' AHG' J?E ' ?HN' ABD' FG?DC' ?HACFGD I' HG' CF H ' ' KGD>GOCME' OGDC?H ' >' CFG' K? ? G' LG' ?H' ?MMB AH' CA' CFG' 0'$ ' A>' CF?' L?DAHGC 8 ?D@ ' C' @B C F?PG' LGGH' ?H' HCGDKAM?C AH' ?C' MG? C' CGH' EG?D ' ?>CGD' CFG' >D C' KDANBOC AH' A>' CFG' KM?E ' >AD' JG' (HAJ' CF?C' CFGMMA' J? ' KGD>AD@GN' LG>ADG' !M T?LGCF' H' 472 ' > ' CAA ' C' JGDG' ?H' HCGDKAM?C AH ' C' @B C' F?PG' N KM?OGN' A@G' ACFGD' K? ? G ' >AD' >' JG' A@C' CFG G' CJA' M HG ' CFG' OAHCG C' ' NG CDAEGN ' G' NA' HAC' CF H (' CF?C' F?(KGDG' JABMN' F?PG' AHG' ABC' A>' F ' J?E' CA' HCDANBOG' ?' OAPGDC' ?DO? @' ?C' ?' K? H ' GPGHC ' A>>GH PG' F ' C' @B C' F?PG' LGGH' >' BHNGD CAAN ' ?HN' KGD>GOCME' B GMG ' >' KAC' BHNGD CAAN ' #FG' ALP AB ' @G?H H ' A>' CFG' JADN ' J CFABC ?HE' ?MB AH ' ' KM?H' GHAB F ' ?HN' ' 0'$.' >' C' LG' ?HE' @ADG' CF?H' ?' >' BD?C PG' G KDG AH ' @?E' LG' G? ME' DG>GDDGN' CA' CFG' KD?OC OG' A>' QB?DCGD H ' AD' SA H H ' CFG' ?D@ ' A>' CFG' FB L?HN' ?HN' J>G

! ' * # 2 A' %$ ' D $ /

#FG' NG OD KC AH' A>' CF ' CDG@GHNAB ' @HN (GDOF G>' H' CFG' AD H?M' C?M?H' HAPGM' ' = $?PAD?CA' ?M?' @AD 0A' ACC M ?@?@GHCG I' & D ' 0?@G AH' CFB ' G KM?H ' CF R =' F OF ' LG H ' HCGDKDGCGN' HCA' @ANG@' !H M F ' @G?H ' ' LGM GPG ' HACF H ' @ADG' CF?H' CF?C' CFG' K?CCGDH' J? ' JF?C' JG' HAJ' O?MM' " M R' F?(KGDG' F? ' G K?HNGN' CF ' HCA' AHG' A>' CFG' >HG C' KAGC O?M' K? ? G ' H' CFG' KM?E ' H' JF OF' CFG' & AAD' ODAJN ' CA GCFGD' A@G' A>' CFG' KDGP?M H ' BKGD C C AH ' A>' F ' H?C AH ' >AD' CFG' KBDKA G' A>' N CBDL H ' CFG' @? H?C AH' A>' %G NG@AH? ' ?HN' CFB ' ? ' FG' BKKA G ' ?DD P H ' ?C' CFG' CDBCF' CFDAB F' CFG' H>MBGHOG' A>' CGDDAD ' #F ' J? ' ?' >?C?M' @ C?(G ' >AD' FG' MA G ' FGD' L?M?HOG ' ?HN' GP?NG ' CFG' QBG C AH

' 2 +

=' ' R =' ($ '$ ' ' ' '< 0 0 R' I

H' GDOE8 ' = " GM QBG I' J MM' LG' >ABHN' ?H' AMN' L?MM?N ' >DA@' CFG' LM?O (' MGCCGD' OAKE' H' CFG' GKE ' OAMMGOC AH ' GHC CMGN' =' ' $APGD8 ' A@KM?HC ' LG H ' >AD ?(GH' A>' F ' $APG I' F?(KGDG ' H' ?NAKC H ' ?' KADC AH' A>' CF ' L?MM?N ' ?OOA@@AN?CGN' CFG' JADN ' CA' CFG' CADE' A>' , ' KAAD' . ?DL?D O I' G' BLSA H' >ABD' C?HT? ' A>' CFG' AD H?M' >DA@' JF OF' CFG' AH ' H' CFG' CG C' F? ' LGGH' >AD@GN R

6' #' L P' G J9P' GMN' G QH !Q' J!OP ' M' G KM I P' N PP' 8
1' 99 ' 99 ' 99 [
X NH' H G' HM!O' !' H G' A G I ' H G' HPMO' !' H G' U!PP
1' 99 ' 99 ' 99 ' '
1' 99 ' 99 ' 99 [
!Q ' 1' NHP' Q PP!P' 99 ' GHM99' AP' I T' QM 9M!O+

HP' K 9O' GN PM I G' M!' AT' H I ' H G' PTPG' PL M MLMKP8
1' 99 ' 99 ' 99 [
HP' GM9N' NPM G' 7P99' 7 I' H I ' H KH' O !PO' H G' 7MKP8
1' 99 ' BK+
!Q ' 1' NHP' Q PP!P' 99 ' BK+

HP' I JNP' A OG' GMNP' AT' H I ' I MOP' NM I P' AT' H G' I !PG' '
1' 99 ' BK+
HP' GM9N' NPM G' 7P99' 7 I' H I ' H KH' G 7NP!PO' NHP' GN !PG' '
1' 99 ' BK+
!Q ' 1' NHP' Q PP!P' 99 ' BK+

/PN' ! A OT' A9M I P' I P ' HP ' GK I PG' 2' O ' L P8
1' 99 ' BK+
HP' MG' A I ' N ' AP' 7M 8 2 ' N ' O P' 7 ' HP ' 9 P+
1' 99 ' BK+
!Q ' ' NHP' Q PP!P' 99 R' BK+

' 0 , &K J R:

%DENGH ' H' = %AH' GL? C?H I' F? ' NG OD LGN' BOF' ?' D H ' J CF' ?' @HBCG' K?DC OBM?D CE' R :

6' #' KJ JG' M N GN' JQHN' NHP I +
X NH' E !NG' G ' K9 GP' MG' ! N' N ' AP' LP KP %O 8
4 PN' M P' NHPT' A NH' PMKH' NHP %G' K J!NP LM N8
" P ' LM N' AMO' ?JM!' !GK A%O ' M!O' H G' HMO' f MTOM
@4 J' U! ' NH GP' !M I PG' M P' NHP G ' M!O ' !' NHP' I OGN
#' HPM N' O OPO' !' N ' HM9 PG' MG' L9MK%O+
' 7' NHP' PNG' 7' NH GP' !QG' P!K9 GMO'
O N' ! N' PMKH' NHP ' 2' HM P' 7 Q%O' NH G' 9 P'
JN' 7' NHPT' E ! ' T J' I JGN' 7 ' P P ' LM N+R

' +

=' ' R =' &' " $ " R'

#FG' C? G' N DGOC AH ' H' CFG' AD H?M' OAK G ' A>' F?(KGDG' ?DG' PGDE' O?HC ME' BKKM GN ' ?HN' JG' F?PG' HA' HN O?C AH ' G CFGD' A>' GHGD?M' AD' K?DC OBM?D' MAO?M C G ' H' CFG' OGHG' LG>ADG' B ' CFG' AD H?M' N DGOC AH' ' =' ! HCGD' CFGMMA ' ?HN' %G NG@AH?' H' FGD' LGN I' C' ?KKG?D ' CA' B ' CF?C ' CA' BHNGD C?HN' CF ' OGHG' KDAKGDME ' JG' @B C' DG>GD' CA' CFG' KGOBM ?D' OAH-CDBOC AH' A>' CFG' ?HO GHC' CFG?CDG ' H' " A@GA' ?HN' 0BM GC' V MMB CD?C AH ' A>' OC' ' K' 5 ' JG' F?PG' NG OD LGN' CFG' " ' AD' BKKGD' C? G ' H' G - KM?H?C AH' A>' CFG' AMN' N DGOC AH ' = ! HCGD' " A@GA' ?HN' 0BM GC' ?MA>C I' G' CFGDG' ?PG' & ?MAHG8 ' NG OD KC AH' A>' CFG' B G ' A>' CF ' L?MOAHE ' & D ' AMM GD' F? ' ?M A' CFB ' NG OD LGN' ?HACFGD' ?DD?H G@GHC' A>' CFG' AMN' C? G ' HNG-KGHNGHC' A>' CFG' L?MOAHE R =' . G NG ' CFG' OBDC?H' H' >DAHC' A>' CFG' C? G ' J F OF' OAHOG?MGN' C' >DA@' CFG' KGOC?CAD ' BHC M C' J? ' ND?JH' AH' G?OF' NG' BKAH' ?' DAN ' CFGDG' JGDG' ACFGD' OBDC?H ' ?C' CFG' L?O (' A>' CFG' C? G ' O?MMGN' 3 .' JF OF' GDPGN ' JFGH' ND?JH ' CA' @?(G' ?HACFGD' ?HN' ?H' HHGD' ?K?DC@GHC ' JFGH' BOF' J? ' DGQB DGN' LE' CFG' LB HG ' A>' CFG' KM?E ' #FGE' F?N' CF ' H?@G' ?C' ?' PGDE' G?DMSZ N?CG I' #FG' +GD@?H' OA@-@GHC?CAD ' BKAH' F?(KGDG' F?PG' LG CAJGN' @BOF' ?CCGH CAH' BKAH' CF ' BLSGOC ' * MD O' ?E ' =' H' CFG' @N C' A>' CFG' C? G ' HAC' >?D' >' A@' CFG' KDA OGH B@ ' J? ' GDGOCGN' ?' ADC' A>' L?MOAHE' AD' KM?C>AD@ ' BKKADCGN' LE' CJA' K MM?D ' O$ $' ' ' '" ' ' #FG G' CGK ' MGN' BK' CA' ' ' ' .' PO$ $.' '" ' $ ' ' ' $ ' '

'" 0 8 ' $ ' .' J? ' ?KKM GN' CA' CFG' @A C' P?D GN' B G I' c# GO (' H' F ' HACG ' BKAH' $G?D ' F? ' FAJH ' JG' CF H (' PGDE' ?C >?OCAD ME ' CF?C' CFG' FADD N' ?OC AH' A>' CG?D H ' ABC' MB CGD8 ' GEG ' N N' HAC' C?(G' KM?OG' AH' CFG' ' ' G' ?E ' =' #FG' OF?D' H' JF OF' +MA CGD' ' LABHN' ' CF?C' JF OF' CAAN' A@GJF?C' GMGP?CGN' H' CFG' @NNMG' A>' CFG' OGHG ' ?HN' >DA@' JF OF' $G?D' NGM PGDGN' F ' >D C' KGGOF ' #F ' M CCMG' CFG?CDG' H' CFG' @N C' J? ' JFGH' HAC' H' B G ' OAHOG?MGN' LE' ?' OBDC?H ' JFGH' H' B G ' CFG' OBDC?H' J? ' J CFND?JH ' F?(KGDG ' CFGDG>ADG ' M (G' ?MM' CFG' ND?@?C C ' A>' F ' ? G' F? ' >DGQBGHCME' CJA' OGHG ' ?C' AHG' ?HN' CFG' ?@G' C@G ' H' GHDE') ' CFG' HALMG ' C?HN' H' CFG' ?HCG OF?@LGD ' CFG' OBDC?H' A>' CFG' @?MMGD' C? G' ' J CFND?JH ' ?HN' JG' ?DG' H' CFG' OF?@LGD' A>' CFG' (H ' ?H ' JF MG' D?H@GD' J? C ' H' CFG' ?HCG OF?@LGD ' CFG' OBDC?H ' AKGH' CA' CFG' OABHO M OF?@LGD ' G' F?PG' FGDG' CF ' ?NP?HC? G ' CF?C' LE' CFG' K MM?D ' JF OF' N P NGN' CFG' M CCMG' OGHCD?M' CFG?CDG' >DA@' CFG' KDA OGH B@ ' AD' KDAKGD' C? G ' HAC' AHME' OABMN' ?' NABLMG' DABK' LG' KDG GHCGN ' LBC' C' OABMN' LG' K?DC ?MME' OAHOG?MGN ' ?HN' CFB ' CJA' OGHG ' @ FC' LG' KM?EGN ' JF OF' OABMN' LG' JFAMME' OA@KDGFGHNGN ' ?MCFAB F' HAC' GPGDECF H ' H' CFG' @?MMGD' >D?@G' J? ' G KDG ME' ?HN' GP NGHCME' GGH I' C' ?KKG?D ' CA' B ' HAC' PGDE' @?CGD ?M' CA' NGCGD@HG' JFGCFGD' * MD O' ' D FC' ?LABC' CFG' 6' LDA?N' CGK I' GDC?HME' CFG' GMGP?C AH' A>' CFG' =' MCCMG' OGHCD?M' CFG?CDG I' J? ' HAC' OAH NGD?LMG R C' J? ' =' A@GJF?C' GMGP?CGN I' ? ' #GO (' AL-GDPG ' AJ' MGC' B ' ?KKME' CF ' KD HO KMG' CA' CFG' OGHG' LG>ADG' B ' ?HN' JG' NABLC' HAC' CF?C' JG' F?MM' GC' D N' A>' A@G' ?HA@?M G ' JF OF' ?DG' KDG ' GHCGN' CA' B ' H' CFG' @ANGDH' DGKDG GHC?C AH ' 1 ' # $.' CA' CFG' S' DAKGD' C? G ' - ' ' $ ' " ' ' OAHOG?MGN' >DA@' CFG' ?BN GHOG

□H CFG M□CCMG OGHCD?M C? G JFA G OBDC?□H ?DG ND?JH >CGD CFGMMA F? ?□N , 8MM @GMM CFGG AH CFG CDGG I FG ? OGHN CFG M□CCMG GMGP?CGN C? G ?HN BHND?J □C OBDC?□H #FG N□?MA BG LGCJGGH F□@ ?HN %G NG@AH?' CFGH C?(G KM?OG >CGD CFG @BDNGD FG DG@?□H BKAH CFG OGHCD?M C? G JF□MG !@□M□?' □ '(HAO(□H ?C CFG NAAD ?HN ?>CGD R

6 7N AT M!O AT SD□P□ IP NHP KJ NM !G O M R S

FG CGK NAJH #FG N□?MA BG LGCJGGH !@□M□?' ?HN CFGMMA ?C >□D C AG AH J□CFABC ?HE ?KK?DGHC OAH O□AB HG AH CFG K?DC A>' !@□M□?' A>' %G NG@AH?8 KDG GHOG FGH %G NG@AH?' F? KA(GH !@□M□?' J□CF-ND?J CFG OBDC?□H A>' CFG GOAHN?DE C? G FGH &AHC?HA +D?C□?HA ?HN M? A GHCGD ?' MAH N□?MA BG C?(G KM?OG LGCJGGH M? A'?HN !@□M□?' J□CFABC &AHC?HA ?HN +D?C□?HK KGDOG□P□H ',JF?C □ CFG @?CCGD I ?N %G NG@AH?' LGGH BKAH CFG C? G KDAKGD CFGDG JABMN F?PG LGGH HA C□@G >AD CF□ N□?MA BG GD @BDNGD JABMN F?PG LGGH ?C AHOG N□ - OAPGDGN #FG ?OCAD HAJ GC APGD CFG N□>>□OBMCE LE F?P□H ?'>ABD KA C LGN CG?N JF□CF OBDC?□H OMA GME ND?JH FGH FAJGPGD !@□M□?' ? OGHN CFG OGHCD?M C? G ?HN G OM?□@ R

6 T I GN PGG HP P 9 PG I J OP %D !HP APO R S

?NABLMG DABK □ KDG GHCGN !@□M□?' □ □H CFG OF?@LGD J□CF %G NG-@AH?' CFGMMA ?HN CFG ACFGD DG@?□H AH CFG C? G KDAKGD &AHC?HA CFGH >AMMAJ M? A ABC JFA F?N KDGP□AB ME DB FGN CA CFG OGHCD?M C? G ?HN C?LLGN F□ J□>G +D?C□?HA DG@?□H BKAH CFG KDAKGD C? G LBC A>' +□D?MN □HCF□A VJFGCFGD □H CFG AD□ □H?M C?M□?H AD CFG DGHOF CD?H M?C□AH AD □H AHG A>' CFG M□CCMG CADE LAA(CF?C >?@□M□?D□ GN CFG KGAKMG J□CF CFG DA@?HOG ?HN CFG KNGCDE A>' CFG ABCF FG ?J □H CF?C HAPGM $ 'A>' CFGMMA #FGDG J? >AD@GDME □H)GH□OG ?' P?M□?HC &AAD ?E CFG CADE C' O?@G CA K? CF?C ?' P□DCBAB M?NE A>' JAHNGD>BM LG?BCE H?@GN %G NG@AH?' LGO?@G GH?@ABDGN A>' F□ DG?C QB?M□C□G ?HN HALMG P□DCBG #FG &AAD MAPGN FGD □H DGCBDH ?HN CFGE JGDG @?DD□GN □HZ K□CG A>' CFG AKKA □C□AH A>' CFG M?NE8 >D□GHN C F?KKGHGN CAA V ?E CFG CADE CF?C CFG GH?CG A>')GH□OG ?KKA□HCGN CFG &AAD CA CFG OA@@?HN A>' EKDB ?HN CF?C F□ M?NE NGCGD@□HGN CA ?OOA@K?HE F□@ CF□CFGD @AH C CFG A>>□OGD JFA ?CCGHNGN BKAH CFG GHGD?M J? ?H GH □ H A>' CFG @A C ? DGG?LMG KGD AH LBC A>' CFG @A C NGKD?PGN H?CBDG #FG J□>G A>' CF□ @?H J? CFG >D□GHN A>' %G NG@AH?' ?HN CFGE KGHC @BOF A>' CFG□D C□@G CA GCFGD #FG J□O(GN GH □ H LGO?@G P□AMGHCME GH?@ABDGN A>' %G NG@AH?' LBC FG JFA G CFAB FC JGDG JFAMME GH DA GN LE CFG &AAD J? BCCGDME DG ?DNMG A>' CFG GH □ H8 ?CCGHC□AH □ MAPG CFGH LGO?@G CGDD□LMG F?CG ?HN FG DG AMPGN CA ?OOB G %G NG@AH?' CA FGD FB L?HN A>' □H>□NGM□CE ?HN CA OAHHGOC J□CF CFG ?OOB ?C□AH ?' O?K-C?□H A>' EK@ #F?C A>>□OGD F?P□H CDBO('?' GHC□HGM J? N□ OF?D GN >DA@' F□ OA@@?HN LE CFG & AAD ?HN %G NG@AH?' □HCGDG CGN □H F□ >?PABD GHNG?PABDGN CA DG□H C?CG F□@' □H FGD FB L?HN8 AAN AK□H□AH #FG &AAD ?□N AHG N?E CA CFG GH □ H CF?C F□ J□>G J? A □@KADCB-H?CG >AD CFG DG CAD?C□AH A>' CFG A>>□OGD CF?C FG @B C C?(G F□@' L?O(=' >' EAB JABMN AKGH EABD GEG EAB JABMN GG KM?□HGD I ?□N CFG GH □ H #FG DA@?HOG JD□CGD OAHC□HBG CA N□ KM?E CFG KGD>□N□AB □HCD□ BG A>' CFG GH □ H ? ?□H C %G NG@AH?' G CG?M ?' F?HN(GD-OF□G>' JF□OF CFG &AAD F?N □PGH FGD G@KMAE□H CFG ? GHOE A>' F□ AJH OF□MN G' OAHCD□PG J□CF CFG &AAD CA @*DNGD CFG O?KC?□H A>' EK@ ?>CGD FG F? @?NG CFG ODGNBMAB FB L?HN M□ CGH CA ? OAH-PGD ?C□AH CA JF□OF FG □PG ?' >?M G OAMABD ?HN N□DGOC□AH □ ?HN >□H?MME CFG &AAD ?HN CFG B□MCE A>>□OGD NG CDAE %G NG@AH?' CA GCFGD BHNGD O□DOB@ C?HOG A>' DG?C LDBC?M□CE #FG OD□@G □ FAJGPGD OAHOG?MGN ?HN CFG &AAD □ >□H?MME LGCD?EGN LE F□ ?OOA@KM□OG

&D %BHMAK □H F□ = □ CADE A>' □OC□AH I F? KA□HCGN ABC CFG)

JFE CFGH NAG &AHC?HA ADNGD +D?C□?HA CA B?DN CFG NAAD J□CFABC W CFGMMA F? GHCGDGN □HCA CFG GOAHN?DE C? G ?HN FG KG?(>DA@ J□CF□H CFG OBDC?□H CA +D?C□?HA R

R 2 HM P M! NHP PML ! ! NH G KHM I AP + 2N G M G O 7 LM ! NHP KP A U%G NP I LP 8 S 1 HP P N G S !K9P 2 I JGN K IP 7 NH+R

+D?C□?HA C□MM DG@?□H□H BKAH CFG KDAKGD C? G ?H JGD =' >' CFAB ?CCG@KC □C □C J□MM OA C CFGG NG?D I . BC JFGH CFGMMA ?E = $AA (' □H BKAH @G CFGH I CFG OBDC?□H □ J□CFND?JH ?HN +D?C□?HA ? OGHN CA CFG GOAHN?DE C? G C □ CFG KD?OC□OG A>' CFG @ANGDH CFG?CDG CA GC APGD CFG N□>>□OBMCE LE @?(□H +D?C□?HA A ABC J□CF &AHC?HA OAH-CD?DE CA CFG AD□ □H?M CG C ?HN CA @?(G F□@ GHCGD ? ?□H JFGH CFGMMA ?E =' $AA (' □H BKAH @G I . BC FAJ CFGH F?MM JG ?OOABHC >AD CFG KGGOF A>' $ANAP□OA JFGH FG BL GQBGHCME GHCGD R =' FGDG □ CF□ D? F ?HN @A C BH>ADCBH?CG @?HWI R ZJ□CFABC CFG GOAHN?DE C? GW DA@ CF?C C? G CFGMMA ?H JGD =' #F?C8 FG CF?C J? CFGMMA FGDG ?@ I #FG BL GQBGHC GPGHC C?(G KM?OG BKAH CFG C? G KDAKGD ?MCFAB F □C J? KDAL?LME OAHCD□PGN CF?C CFGMMA FABMN (□MM F□@ GM>' AH CFG GOAHN?DE C? G #FA G JFA OA@KM?□H J□CF) AMC?□DG A>' ?H G F□-L□C□AH J8FGDG ?' JA@?H □ CD?H MGN BKAH CFG C? G @?E LG DGM□GPGN LE >□HN□H CF?C □H CFG ?HO□GHC CFG?CDG =' CJA OGHG @□ FC LG KM?EGN JF□OF OABMN LG JFAMME OA@KDGFGHNGN ?MCFAB F 'GPGDECF□H □H CFG @?MMGD >D?@G J? G KDG ME ?HN GP□NGHCME GGH I

@?CGD□?M N□>>GDGHOG LGCJGGH CFG HAPGM ?HN CFG CD? GNE G ?NN =' H ?MM CFG G □@KADC?HC P?D□?C□AH F?(KGDG F? □@KDAPGN AH F□ AD □H?M H ?' >GJ' ACFGD K?DC□OBM?D FG F? NGP□?CGN >DA@' □C J□CF MG SBN @GHC □H @A C DG KGOC FG F? ?NFGDGN J□CF OMA G □@□C?C□AH #FG OF?D?OCGD A>' M? A %G NG@AH?' ?HN ? □A ?DG C?(GH >DA@ □HCF□A J□CF O?DOGME ?' F?NG A>' N□>>GDGHOG #FG AL OBDG F□HC ?HN P?D□AB ?DC□>□OG A>' CFG P□MM?□H CA D?□ G B K□O□AH □H CFG &AAD ?DG CFG ?@G □H CFG HAPGM ?HN CFG ND?@? I & +B□TAC J8□CF CFG GEG A>' DG?M OD□C□O □@ F? GGH A@GJF?C>BDCFGD CF?H &D %BHMAK R =' #FGDG J? J?HC□H □H CFG H?DD?C□PG A>' □HCF□A CFG KAGC□O?M GH□B JF□OF >BDH□ FGN CFG ?OCAD R JF□OF ODG?CGN CFG □HN□P□NB?M R JF□OF □@KA GN BKAH G?OF ?' >□ BDG ?HN ?' OF?D?OCGD R JF□OF @?NG B GG CFG□D ?OC□AH ?HN M□ CGH CA CFG□D JADN R JF□OF KDG GHCGN CFG□D CFAB FC ?HN KGHG-CD?CGN CFG□D GHC□@GHC R CF?C P□P□>E□H KAJGD JF□OF B@@AH GPGHC CA ?D□ G CA KDA DG CA G K?HN CA LG OA@KMGCGN R CF?C ODG?C□PG LDG?CF JF□OF LDG?CF□H APGD CFG K? C O?MM □C ? ?□H □HCA LG□H ?HN >□MM □C J□CF ?' KDG GHC ?HN □@KGD□ F?LMG M□>G R CF□ J? CFG KAJGD JF□OF F?(KGDG ?MAHG KA G GN ?HN LE JF□OF ABC A>' ?'>AD ACCGH HAPN FG F? @?NG CFGMMA I

.G>ADG JG O?H LG ?□N CA BHNGD C?HN CFG □NG?' A>' F?(KGDG □H CFG OA@KA □C□AH A>' CFGMMA JG @B C N□ ?LB G ABD GMPG A>' A@G A>' CFG OA@@AHKM?OG KD□HO□KMG BKAH JF□OF FG F? LGGH □HCGDKDGCGN C □ J□CF CF□ ALSGOC CF?C JG F?PG FGDG □H CG?N A>' □H ABD HCDA-NBOCADE AC□OG □PGH ?' D?K□N (GCOF A>' CFG ABDOG >DA@' JF□OF FG NGD□PGN CF□ CD? GNE #FG HAPGM LG □C AL GDPGN □ ?' PGDE □HCGMM □LMG ?HN OAH □ CGHC CADE A>' JGNNGN F?KK□HG A>' BHM? J>BM ?HN BHDGQB□CGN ?CC?OF@GHC A>' DGPGH G DAJ□H ABC A>' N□ ?KKA□HC@GHC A>' SG?MAB E CAA G? □ME ?LB GN A>' OAH>GNGD?OE J□CF CFG ?LB GD A>' @A C LDBC?M ?HN B□MCE P□AMGHOG A>' GQB?MME L? G >?M GFAAN ?HN OAHOG?M@GHC #F□ □ ?' CADE □H JF□OF JG GG HACF□H ABC A>' CFG OA@@AH OABD G A>' J□O(GN-HG ' HACF□H JF□OF M□OGHC□AB OD?>C @□ FC HAC KDA@KC ?HN >DGHT□GN K? □AH ?NAKC #FG M? A A>' CFG CD? GNE □C □ ?□N F? HAC B>>□O□GHC @AC□PG >AD F□ OD□@G &D (ACCAJG CGMM B CF?C □H CFG HAPGM G OGKC ? ?' @G?H A>' PGH G?HOG AH %G NG@AH?' CFG □H>M□OC□AH A>' K?□H BKAH CFG & AAD >AD@ HA K?DC A>' CFG CDG?OFGDAB A>>□OGD8 NG □ H . BC J□CF DG ?DN CA CFG KM?E FG □H>AD@ B CF?C □C □ BDGME CD?□H□H

OM□G @?CCGD LGEAHN CFG M□@□C ’ A>’KDAL?L□M□CE CA’?CCD□LBCG M? A8 ’ NGCG C?-C□AH A>’ CFGMMA CA 0?B G ’ A □H?NGQB?CG ?HN P? BG ? ’ CFG ND?@?C□ C F? ’ ? □ HGN U G F?PG FGDG CFG CJA KD□HO□KMG ’ BKAH JF□OF CFG HAPGM□ C ?HN CFG ND?@?C□ C JAD(GN CFADAB FME ?C □ BG ’ ?HN CFG AHG □ ’ CA LG O?MMGN H?CBD?M ?HN CFG ACFGD BHH?CBD?M ’ #FG AHG JABMN F?PG KDANBOGN BOF ?H CFGMMA ? ’ □ ’ OMGPGDME NG OD□LGN □H CFG □HCDANBOC□AH CA ?’ DGHOF CD?H M?C□AH A>’CFG KM?E C □H JF□OF CFG H?CBDG A>’SG?MAB E ?HN ?MM □C ’ ODBGM G>>GOC ’ JABMN F?PG LGGH G KM?□HGN ’ J□CF DG?C KA@K A>’M?H B? G ’ LE ?’ OAH>□N?HCG □H ?H □HCDANBOCADE @AHAMA BG ’ ?HN CFG ?@G BL$GOC JABMN F?PG GDPGN >AD ?’ OAH-C□HBGN CFG@G ’ BHC□M CFG >?C?M OAHOMB □AH ’ JF□OF J? ’ MAH ’ >ADG GGH ’ A>’?H ?@□?LMG J□>G LGOA@□H ’ CFG P□OC□@ A>’?’ ODBGM AKKDG AD ’ #F□ ’ □ ’ CFG = k?□DGI A>’)AMC?□DG ’ * KAH CFG ACFGD KD□HO□KMG JG F?PG HA G KM?H?C□AH ’ HA DG BM?D KDA DG ’ A>’ JF?C □ ’ @A C K?MK?LMG □H FB@?H ?OC□AH ’ G F?PG CFG =’@AC□PGMG ’ @?M□ H□CE I A>’M? AR =’?’ LG□H ’ HG C CA NGP□M ’ ?HN AHME HAC QB□CG NGP□M ’ ?HN EGC ?’ OF?D?OCGD JF□OF F?(KG?DG F? ’ ?CCG@KCGN ?HN G GOBCGN J□CFABC O?HN?M I’e ? ’ CFG @?□H KD□H ’ A>’?MM CFG >G?D>BM GPGHC ’ JF□OF □ BG ABC A>’CFG BHGQB?M OAHCG C LGCJGGH CFG KAJGD ’ A>’ DA HG ’ ?HN KBD□CE ’ A>’>?M GFAAN ?HN CDBCF ’ ’ #F□ ’ □ ’ CFG CFGMMA A>’ F?(KGDG

>’□C F?N LGGH J□CF□H CFG OA@K? ’A>’ F?(KGDG8 ’ DG?C OFG@G A>’CFG G KA □C□AH A>’ CB@?H ?OC□AH ’ ?HN CFG KD□H ’ A>’?OC□AH CA F?PG @?NG M? A ?’ BKGDH?CBD?M □HO?DH?C□AH A>’CFG KD□HO□KMG A>’GP□M ’ FG JABMN HAC F?PG ND?JH F□@ PGDE N□>>GDGHCME >DA@ JF?C FG □ ’ H ?MM G GHC□?M ’ FG □ ’ =’AHME HAC QB□CG NGP□M I G’□ ’ PGDE @BOF MG ’ = CF?H?DOF?H GM DB□HGN I &□MCAH ’ JFGH FG K?□HC ’ F□ ’ ?C?H?’?LABC CA KMBH G ABD >D C K?DGHC ’ □H □DDGCD□GP?LMG @□ GDE ’ @?(G ’ F□@ G F□L□C =’ □ H ’ A>’ DG@AD G’I R

6’ H J9O’2’MN’T J ’HM I9PGG !! KP!KP’
P9N ’MG’2’O ’TPN LJA9 K PMG !’EJGN+
" ! J ’M!O’PIL P NH P P!QP P!9M Q%O+
T’K !]JP !Q’NH G !P ’ 9O’K ILP9G IP’! ’
’O ’ HMN’P9GP’NH JQH’OM I !%O’2’GH J9O’MAH +
’GLMUP’NHP’O P!O’M!O’ NH’!PKPGG NT+
HP’NT M!N%G’L9PM ’PWKJG%O’H G’OP 9 GH’OPPOG+R

FGH’M? A’LGFAMN ’?’K□OCBDG’A>’F?KK□HG ’HAC @BOF □H>GD□AD’CA’CF?C BKAH JF□OF CFG ?C?H’A>’ &□MCAH MAA(GN ’FG’F? ’ HA’OA@KBHOC□AB ’ P□ □C□H ’?C’CFG’KDA KGOC’A>’NG CDAE□H ’□C R

6’1’T J’M P’ P99’NJ!%O’! [
JN’2%99’GPN’O !’NHP’LPQG’NHMN’ IMUP’NH G’ IJG K
#G’H !PGN’MG’2’MI+R

.BC’CFGDG’□ ’?HACFGD’ DG?C’KAGC□O?M’ODG?C□AH’CA’JF□OF’M? A’LG?D ’@ADG’ DG G@LM?HOG R CFG’ &GKF□ CAKF□MG ’A>’ +AGCFG ’ #?(G’?J?E’CFG’ BKGD-H?CBD?M’KAJGD’□H’ &GKF□ CAKF□MG ’?HN’CFG’ GH G’A>’CFG’ BKGDH?CBD?M’ KAJGD’□H’ ?B C ’?HN’CFG’?OC□AH ’A>’CFG’FB@?H’>□GHN’?HN’A>’CFG’DG?M’ >□GHN’?DG’DGNBOGN’CA’KDGCCE’@BOF’CFG’ ?@G’ C?HN?DN’ C’OABMN’HAC’ LG’ACFGDJ□ G’ +AGCFG’CA’@?(G’CFG’□HO?DH?C□AH’A>’CFG’GP□M’KD□HO□KMG’ □HCGMM□ □LMG’□H’□C’NG?M□H ’J□CF FB@?H’?>>?□D ’OABMN’AHME’K?□HC’JF?C F?(KGDG’F? ’K?□HCGN R ?’LG□H ’K? □AHMG ’GM> KA G GN’BH E@-K?CF□ □H ’ OGKC□O?M’A>’?MM’CDBCF’?HN’KBD□CE ’□HCGMMGOCB?MME’DA ’?HN’ GH B?M R A>’?’J□MM’BHOAHCDAMMGN’LE’>G?D’>AD’F□@ GM>’AD’DG KGOC’>AD’ ACFGD R CFG’?L CD?OC’A>’CFG’DG? AH□H ’KAJGD’□H’CFG’F□ FG C’C?CG’A>’ ?OC□P□CE ’LBC’J□CFABC’MAPG ’J□CFABC’PGHGD?C□AH ’J□CFABC’FAKG ’BH-K□D□CB?M□ GN ’G?DCFE ’ &GKF□ CAKF□MG ’?HN’M? A’F?PG’>F□ ’□H’OA@@AH ’ ?M AR CF?C’CFGE’G?OF GG(’CA’NG CDAE’CFG□D’P□OC□@ ’CFDAB F’CFG□D’ ?>>GOC□AH ’?HN’G?OF□ ’BOOG >B□’□H’CFG’?CCG@KC ’ >’F?(KGDG’F?N’ @?NG’M? A’?OCB?MME’G F□L□C’CFG’PBM ?D’?CCD□LBCG ’A>’CFG’ >□GHN’JFGH’ CFGMMA’G OM?□@ R

6’2’9 U’O !’N M OG’H G’7PPN’R S

JABMN’CFG’OF?D?OCGD’F?PG’LGGH’?’K?DC□OMG’@ADG’DG?M’W □GHN ’K?□HCGN’ LE’@GH’?DG’LBC’DG>MGOC□AH ’A>’CFG’L? GD’KD□HO□KMG ’A>’FB@?H□CE ’ F?(KGDG’G@LAN□GN’CFA G’KD□HO□KMG ’□H’M? A ’?HN ’□C’LG□H ’D?HCGN’ CF?C’DG?C’C?MGHC ’OA@L□HGN’J□CF’?H’BCCGD’NG C□CBC□AH’A>’KD□HO□KMG’?HN’ ?’OA@KMGCG’NGHBN?C□AH’A>’ E@K?CFE ’F? ’KDANBOGN’CFG’@AH CGD

;’ HP’ / 7P’ 7’ HMUGLPM P ’AT’#JQJGN !P’ U NN P ’ 9♯’♯L♯ ♯
N ’ HP7G O% PJ P’OP’ HMUGLPM P ’N IP’ ♯ -M G ’ =+

JF□OF’F□CADE’F? ’NG OD□LGN ’JFA’ F?MM’ ?E’CF?C’CFG’OF?D?OCGD’□ ’ G ? GD?CGN’W

#FG’M□ C’A>’=’KGD AH ’DGKDG GHCGN I’?>>□ GN’CA’CFG’>AM□A’GN□C□AH’A>’ CFGMMA ’?HN’O?MMGN’=’CFG’H?@G ’A>’CFG’?OCAD I’□ ’?’M□CCMG’J?HCGN’>AD’ CFG’□H>AD@?C□AH’A>’CFG’DG?NGD’A>’CF□ ’CD? GNE’?’ ?HE’KDGK?D?CADE’ ’ A>’CFG’OF?D?OCGD ’ H’CF□ ’M□ C’JG’F?PG’=’M? A ’?’ P□MM?□H I R =’"ANGD□ A ’?’ BMM8N GHCMG@?H I’ .BC’F?(KGDG’F? ’ □PGH’ B ’PGDE’OMG?D’□HN□O?C□AH ’LE’JF□OF’CA’(HAJ’CFG’ BMM’>DA@’CFG’DA BG ’ G’F?PG’HAC’DG?N’?’NATGH’ GHCGHOG ’LG>ADG’JG’>GGM’CFG’□HCGMMGOCB?M’ P□ ABD’A>’M? A ’?HN’CFG’BCCGD’J?HC’A>’FAHABD’JF□OF’FG’□ ’HAC’ ? F?@GN’CA’?PAJ ’ G’K?DD□G ’□H’?H’□H C?HC’CFG’OA@KM?□HC’A>’ "ANGD□ AR

6’ HMN’NH J ’9MQ ’ H ’HMGN’HMO’ IT’LJ GP R S

?HN’OA@@?HN ’?’ E@K?CFE’J□CF’F□ ’AJH’OA@KM?□HC ’ ? ?□H C’CFG’ &AAD ’ G’□ ’HAC’H□OG’□H’CFG’?PAJ?M’A>’F□ ’KD□HO□KMG ’A>’?OC□AH’R

6’2!’7 99 !Q’H I ’2’7 99 ’AJN’ ITGP97+R

G’M?E ’L?DG ’J□CFABC’CFG’ M□ FCG C’?KKDGFGH □AH ’CFG’ GM>□ F’@AC□PG ’ BKAH’JF□OF’FG’F?L□CB?MME’?OC ’ HN’□ ’HAC’CF□ ’H?CBDGW "ANGD□ A ’ LM□HNGN’LE’F□ ’K? □AH’?HN’P?H□CE ’APGDMAA(’?’?MM’@GH’NA’BHNGD’ □@□M?D’O□DOB@ C?HOG ’CFG’D□ (’JF□OF’FG’F□@ GM>’DBH ’>DA@’ BOF’?’ OAH>GNGD?CG ’?HN’M? A’(HAJ ’CF?C’FG’J□MM’APGDMAA(’□C’ G’HGPGD’ @?(G ’?’ □@□M?D’G KA □C□AH’A>’F□@ GM>’N□DGOCME’CA’KGD AH ’A>’H□OG’ FAHABD’?HN’GH □C□PG’@AD?M□CE ’ #A’ CFGMMA’FG’□ ’CFG’FEKAOD□CG

6’2’9MKU’ !]J NT+
IPN IPG’N ’O ’IP’GP KP+R

HN’CFGDG>ADG’□H’ CFGMMA8 ’AK□H□AH

6’#’IM!’HP’G 7’H !PGNT’M!O’N JGN+R

HN’GPGH’CA’CFG’=’BMM8N’GHCMG@?H I’JF□MG’FG’□ ’OABH GMM□H ’CFG’ @A C’?LA@□H?LMG’J□O(GNHG ’FG’□ ’?’ ADC’A>’@AD?M□ C’BK’CA’CFG’KA□HC’ A>’GOBD□H ’?CCGHC□AH’?HN’LGM□G>’=’ABD’LAN□G ’?DG’ABD’ ?DNGH I’ FGH’FG’□ ’?MAHG’FG’DGPGM ’□H’CFG’KD□NG’A>’F□ ’HCGMMGOC R

6’ HJG’O ’2’P P ’IMUP’IT’7 9 IT’LJ GP
O ’2’I !P !’ 0 ’) 8’ ’GH J9O’L 7M!P+
27’2’ J9O’N IP’PWLP!O’ NH’GJKH’M’G! LP
JN’7 ’IT’GL N’M!O’L 7N+R

#A’%G NG@AH?’□H’CFG’>□D C’ OGHG’?C’ EKDB ’FG’□ ’=’HACF□H ’□>’HAC’ OD□C□O?M I’?OOADN□H ’CA’F□ ’AJH’?OOABHC ’LBC’DGC?□M□H ’=’AMN’>AHN’ K?D?NA G ’I’CA’OAHOG?M’F□ ’DG?M’AK□H□AH ’ FGH’FG’C? (’F□ ’BHNGD-C?HN□H ’CA’@GGC’%G NG@AH?8 ’NG@?HN’A>’ =’ F?C’KD?□ G’OABMN C’ CFAB’LG CAJ’AH’?’NG GDP□H ’JA@?H’□HNGGNW I’FG’G F□L□C ’CFG’PGDE’ KGD>GOC□AH’A>’ ?C□D□O?M PGD G R CFG’KDGO□ G’@ANGM’A>’JF?C’B GN’CA’LG’ O?MMGN’KAGCDE R CFG’M□ FC’J□CFABC’J?D@CF’A>’OMGPGDHG ’J□CFABC’>GGM□H ’ #A’ ? □A’?’>D?H(’?HN’ GHGDAB ’AMN□GD’A@GJF?C’G? □ME’CG@KCGN’ CA’>AMME’?HN’J□CF’@AD?M ’AHME’SB C’HAC’MAA G’GHAB F’CA’NG CDAE’ F□ ’H?C□PG’MAPG’A>’CDBCF’?HN’KBD□CE ’FG’PGHCBDG ’CA’G F□L□C’F□@ GM> @ADG’AKGHME ’ #FG’N□?MA BG’□H’CFG’CF□DN’OGHG’A>’CFG’ GOAHN’?OC ’ JFGDG’CFGE’N□ OABD G’A>’%G NG@AH?’□ ’?’(GE’CA’CFG’F?L□CB?M’DA - HG ’A>’F□ ’□@? □H?C□AH’ □ ’ ?DO? @’CA’ ? □A’?>CGD’CFG’?H GD’A>’ CFGMMA R =’ ’ ’?@’?H’FAHG C’@?H’ ’CFAB FC’EAB’F?N’DGOG□PGN’ A@G’LAN□ME’JABHN ’CFGDG’□ ’@ADG’GH G’□H’CF?C’CF?H’□H’DGKBC?C□AH’I’ R N□ OMA G ’CFG’BCCGD’?L GHOG’>DA@’F□ ’@□HN’A>’CFG’KD□HO□KMG’A>’ FAHABD’ HN’CFGH’? ?□H ’FG’O?H’?OOA@@AN?CG’F□@ GM>’CA’?MM’CFG’ NG@?HN ’A>’CFG’>D?H(G C’SAP□?M□CE R

6’#!O’9PN’IP’NHP’KM!!MU !’K9 !U’K9 !U+R

CFGD’ND?@?C□ C ’JABMN’F?PG’@?NG’F□@’ MAA@E’?HN’@ADA G ’LBC’ F?(KGDG’(HGJ’CF?C’CFG’LAAH’OA@K?H□AH ’?HN’CFG’OFG?C’?HN’CD?□CAD ’ ?DG’HAC’G GHC□?MME’N□ C□HOC’OF?D?OCGD ’ H’CFG G’M□ FCGD’NG@AH CD?-C□AH ’A>’F□ ’DG?M’H?CBDG’JG’F?PG’GGH’CFG’OMGPGD’OABHNDGM’?HN’CFG’ K? □AHMG ’GH B?M□ C’C?□HCGN’J□CF’□@KBD□CE’CA’CFG’G CDG@G C’NGKCF’A>’ F□ ’J□MM’?HN’F□ ’BHNGD C?HN□H ’G’F?PG’GGH ’CAA ’?C’CFG’PGDE’OA@-@GHOG@GHC’A>’CFG’KM?E ’F□ ’F?CDGN’CA’CFGMMA’G F□L□CGN’□H’CFG’ DAB □H ’BK’A>’%G NG@AH?8 ’>?CFGD’ G’F?PG’MG?DHGN’A@GCF□H ’ ?M A ’A>’CFG’@AC□PG’A>’CF□ ’F?CDGN R CFG’KDG>GD@GHC’A>’ ? □A R

1 /♯22+ ’ 9P OQP♯

6' N' N 'M77PK1' I M1'T L L GPG' I MMKHPG R' BK+

□ 'LGFG;□H CFG GHGD?M KDGP?MGHOG' A>'PDCBAB '@AC□PG ' ?HN' ?OC□AH ' F?N' LGGH' NG D?NGN' CA' ?' DGM□?HOG' AH' CFG' M□LGDC□HG8 'ODGGN' CF?C' ?MN' ?DG □@KBDG R

6' HP PMG' I 99 iGi '%M9 P R' BK+

FGH' CFG' □HHAOGHC' ?HN' CFG' F□ F @□HNGN' BL@□C CFG@ GMPG ' CA' CFG

6' H G' 7P99 %G '7'PWKPPO iQ' H ipGNT+
iO'UI G M99']JM9 N PG' NH' M' 9PM ipO' GL N'
1'7'HJ1 M1' OPM9 iQG+R

?□H

6' 'NH J' M N' GP8 %N G KP NM i+R

FGH' CFGMMA' CFB 'LA J 'F□ 'A J H' MA>CE' H?CBDG' LG>ADG' CFG DAPGMM□H ' LBC' @A C ?ODCG' JADMNME' □HCGMMGOC' A>' M? A ' F□ ' F?L□CB?N' P□G J' A>' =' ?NN QB?M□CG I' F?N' LGGH' OMABNGN' LE' CFG' LDG?CF' A>' CFG M?HNGDGD' □ ' OAH>□NGHOG' □H KBD□CE' ?HN' □HHAOGHOG' F?N' LGGH' NG CDAEGN' #FG' GH B?N' SBN @GHC' A>'=' FB@?H' NG?M□H 'I' F?N' C?(GH' CFG' KM?OG' A>' CFG' K□D□CB?N' #FG' GHCFB □? C□D' MAPG' ?HN' PGHGD?C□AH' A>' F□ ' J□>G' F?N' LGGH' K?□HCGN' CA' F□@' ? ' CFG' DG BNC' A>' DA 'K? □AH R

7 ? E '

JH□OF' CFGDG' ?OCB?CG ' CFG' P□M?□H' CFG' KMAC' JABMN' KDAL?LME' F?PG' C?(GH CF□ ' OABD G R Z#FG %G NG@AH?' JABMN' F?PG' LGGH' A@GJF?C' MG ' KBDG CF?H' ABD' %G NG@AH?'5 CFG' ? □A' JABMN' F?PG' LGGH' A@GJF?C' @ADG KDG B@KCBAB ' CF?H' ABD' ? □A ' ?HN' F?PG' HAC' >GMC' >AD' %G NG@AH?' CFG DGM□ □AB ' PGHGD?C□AH' JF□OF' FG >GGM ' CFG' CFGMMA' JABMN' F?PG' LGGH = G? □ME' SG?MAB' I' ?HN' JABMN' F?PG' NAHG' A@GCF□H ' = □H' F?CG I' LBC' HAC' =' ?MN' □H' FAHABD I' ? ' ABD' CFGMMA' C □ ' ?' K?DC' A>'CFG' ?N@□D?LMG ('HAJ-MGN G' A>' FB@?H' H?CBDG' KA G GN' LE' F?(KGDG' CF?C' M? A' NAG ' HAC' GPGH' >AD' ?' @A@GHC' GHCGDC?□H' CFG' CFAB F□ A>' C?@KGD□H ' J□CF' CFG' P□CDBG' A>' %G NG@AH?' G□CF□GD' CFDAB F' ? □A' AD' "ANGD□ A ' AD' ?HE' ACFGD□H CDB@GHC' AMGD□N G F?' LAMNME' ?HN' CDBME' ?□N' CF?C =' CFGMM' NAG ' HAC' (□M' %G NG@AH?' □H' SG?MAB E ' LBC' □H' ?' OAHP□OC□AH' >ADGN' BKAH' F□@' LE' CFG' ?M@A C' BKGDFB@?H' ?DC' A>'M? A R B0F' ?' OAHP□OC□AH' ? ' ?HE' @?H' JABMN' ?HN' @B C' F?PG' GHCGDC?□HGN' JFA' F?N' LGM□GPGN' M? A8' FAHG CE' ?' F□@' CFG' LG □HHAOGHC' ?HN' CFG' F□ F @□HNGN' BL@□C CFG@ GMPG ' CA' CFG

.B□ CFGMMA' J?' HAC' AHME' LGCD?EGN' LE' F□ ' DGM□?HOG' AH' =' M? A8' FAHG CE I' LBC' ?M A' LE' F□ ' OAH>□NGHOG' □H' M? A8' J□ NA@' R

6' H G' 7P99 %G '7'PWKPPO iQ' H ipGNT+
iO'UI G M99']JM9 N PG' NH' M' 9PM ipO' GL N'
1'7'HJ1 M1' OPM9 iQG+R

?□H

6' 'NH J' M N' GP8 %N G KP NM i+R

FGH' CFGMMA' CFB 'LA J 'F□ 'A J H' MA>CE' H?CBDG' LG>ADG' CFG DAPGMM□H ' LBC' @A C ?ODCG' JADMNME' □HCGMMGOC' A>' M? A ' F□ ' F?L□CB?N' P□G J' A>' =' ?NN QB?M□CG I' F?N' LGGH' OMABNGN' LE' CFG' LDG?CF' A>' CFG M?HNGDGD' □ ' OAH>□NGHOG' □H KBD□CE' ?HN' □HHAOGHC' ?HN' CFG' F□ F @□HNGN' BL@□C CFG@ GMPG ' CA' CFG

6' H G' 7P99 %G '7'PWKPPO iQ' H ipGNT+
iO'UI G M99']JM9 N PG' NH' M' 9PM ipO' GL N'
1'7'HJ1 M1' OPM9 iQG+R

?□H

6' 'NH J' M N' GP8 %N G KP NM i+R

FGH' CFGMMA' CFB 'LA J 'F□ 'A J H' MA>CE' H?CBDG' LG>ADG' CFG DAPGMM□H ' LBC' @A C ?ODCG' JADMNME' □HCGMMGOC' A>' M? A ' F□ ' F?L□CB?N' P□G J' A>' =' ?NN QB?M□CG I' F?N' LGGH' OMABNGN' LE' CFG' LDG?CF' A>' CFG M?HNGDGD' □ ' OAH>□NGHOG' □H KBD□CE' ?HN' □HHAOGHC' ?HN' CFG' F□ F @□HNGN' BL@□C CFG@ GMPG ' CA' CFG

6' H G' 7P99 %G '7'PWKPPO iQ' H ipGNT+
iO'UI G M99']JM9 N PG' NH' M' 9PM ipO' GL N'
1'7'HJ1 M1' OPM9 iQG+R

?□H

6' 'NH J' M N' GP8 %N G KP NM i+R

FGH' CFGMMA' CFB 'LA J 'F□ 'A J H' MA>CE' H?CBDG' LG>ADG' CFG DAPGMM□H ' LBC' @A C ?ODCG' JADMNME' □HCGMMGOC' A>' M? A ' F□ ' F?L□CB?N' P□G J' A>' =' ?NN QB?M□CG I' F?N' LGGH' OMABNGN' LE' CFG' LDG?CF' A>' CFG M?HNGDGD' □ ' OAH>□NGHOG' □H KBD□CE' ?HN' □HHAOGHC' ?HN' CFG' F□ F @□HNGN' BL@□C CFG@ GMPG ' CA' CFG

6' H G' 7P99 %G '7'PWKPPO iQ' H ipGNT+
iO'UI G M99']JM9 N PG' NH' M' 9PM ipO' GL N'
1'7'HJ1 M1' OPM9 iQG+R

?□H

6' 'NH J' M N' GP8 %N G KP NM i+R

FGH' CFGMMA' CFB 'LA J 'F□ 'A J H' MA>CE' H?CBDG' LG>ADG' CFG DAPGMM□H ' LBC' @A C ?ODCG' JADMNME' □HCGMMGOC' A>' M? A ' F□ ' F?L□CB?N' P□G J' A>' =' ?NN QB?M□CG I' F?N' LGGH' OMABNGN' LE' CFG' LDG?CF' A>' CFG M?HNGDGD' □ ' OAH>□NGHOG' □H KBD□CE' ?HN' □HHAOGHC' ?HN' CFG' F□ F @□HNGN' BL@□C CFG@ GMPG ' CA' CFG

6' H G' 7P99 %G '7'PWKPPO iQ' H ipGNT+
iO'UI G M99']JM9 N PG' NH' M' 9PM ipO' GL N'
1'7'HJ1 M1' OPM9 iQG+R

?□H

6' 'NH J' M N' GP8 %N G KP NM i+R

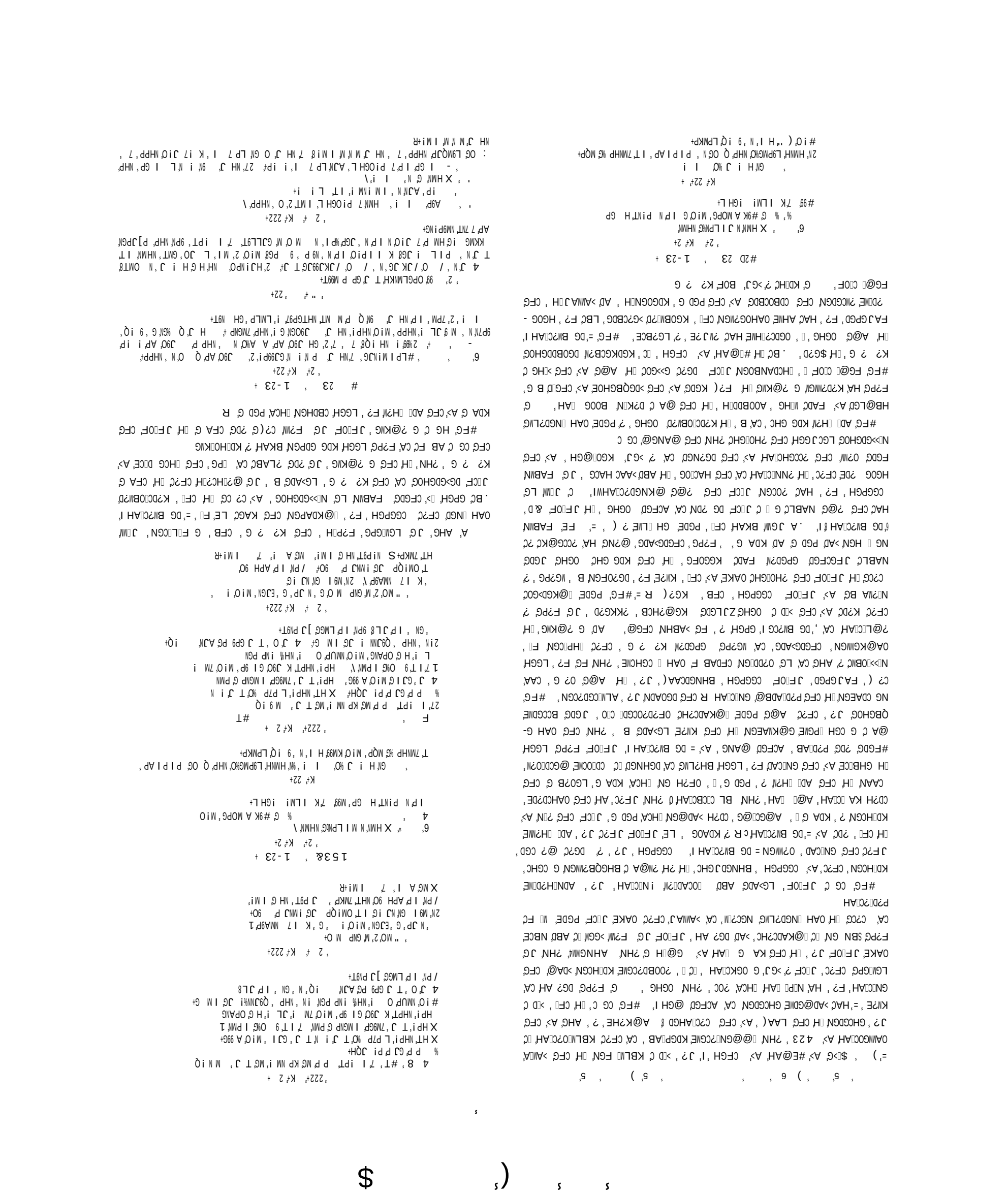
FGH' CFGMMA' CFB 'LA J 'F□ 'A J H' MA>CE' H?CBDG' LG>ADG' CFG DAPGMM□H ' LBC' @A C ?ODCG' JADMNME' □HCGMMGOC' A>' M? A ' F□ ' F?L□CB?N' P□G J' A>' =' ?NN QB?M□CG I' F?N' LGGH' OMABNGN' LE' CFG' LDG?CF' A>' CFG M?HNGDGD' □ ' OAH>□NGHOG' □H KBD□CE' ?HN' □HHAOGHC' ?HN' CFG' F□ F @□HNGN' BL@□C CFG@ GMPG ' CA' CFG

6' H G' 7P99 %G '7'PWKPPO iQ' H ipGNT+
iO'UI G M99']JM9 N PG' NH' M' 9PM ipO' GL N'
1'7'HJ1 M1' OPM9 iQG+R

?□H

6' 'NH J' M N' GP8 %N G KP NM i+R

FGH' CFGMMA' CFB 'LA J 'F□ 'A J H' MA>CE' H?CBDG' LG>ADG' CFG DAPGMM□H ' LBC' @A C ?ODCG' JADMNME' □HCGMMGOC' A>' M? A ' F□ ' F?L□CB?N' P□G J' A>' =' ?NN QB?M□CG I' F?N' LGGH' OMABNGN' LE' CFG' LDG?CF' A>' CFG M?HNGDGD' □ ' OAH>□NGHOG' □H KBD□CE' ?HN' □HHAOGHC' ?HN' CFG' F□ F @□HNGN' BL@□C CFG@ GMPG ' CA' CFG



1538 ' 1-23 +
'2+ K+2+
6' ' '#LPIMiNJG' 7'NH J' P N'i N'GJ pi
2%'AP'Q O'N 'NHPP+
' ' '2%9'i NH iQ8 7
27'2'GH J9O'AP'A A%O'N 'NHP P' J9O'AP'i P'9P7N+
' M 9'JL 'NHPP8 MiO'NH J' J9OGN'G i'NHP'7MGNP +
H J'Q %GN'6 9 9 iQ' I i'2'7PM' IP'NH J'
X 9N'Q P'M MT'NHTGP97'i'LMLP'GH N9T+

'22+' K+'22+
'2' 99'OPGLMNKH'T J'GP P M99T+SD4 J N'9 O'/JK JG S
'9 O'/JKJ99JG'T J8'2'HJiNPO' NH'H G
" i J'N OMT8ST J'N' PlL i JS8
IIPiO'IP'N'NHP'9 PG8 MiO'2'M1'L JO'GMT+
HMN'IT' KKMG iG'HM P'7 JiO'N IP'N 'JGP'NHPI'
M O'M'GJLL9T'7 I ipT' 9PN'NHP' p]JPGN'
P'7N'MT'NM9PiNG+

'2 +' K+'222+
' ' A9P' I i
XHMN'7 pi0GH L'IMT2'O 'NHPP'"
' ip'AJN'N
M iNM i'lT Li i+
' ' XHMN'G N' I i'\
' - I GP IP'7 pi0GH L'AJN'LP'7 I'i ip'2'
H J' 9N'i N'L I GP'NHP': OG'L9MQJP'NHPP'7 '
H J'M N'M' I Mi[7'NH J'O GN'LP'7 I'K i7 Ji0'NHPP+
O 'NH J%'N'M' I Mi[R

#FG' CF□DN' ?HN' M? C' GD□G' A>' G ?@KMG' J F□OF' J G' F?MM' >BDH□ F
G F□L□C'CFG'@GC?@ADKFA □'A>'CFG PGD G'A>'CFG AD□ □H?M'□HCA'KDA G R

1538 ' 1-23 +
'2+ K+'22+
6' ' '#LPIMiNJG' 7'NH J' P N'i N'GJ pi
2%'AP'Q O'N 'NHPP+
' ' '2%9'i NH iQ8 7
27'2'GH J9O'AP'A A%O'N 'NHP P' J9O'AP'i P'9P7N+
' M 9'JL 'NHPP8 MiO'NH J' J9OGN'G i'NHP'7MGNP +
H J'Q %GN'6 9 9 iQ' I i'2'7PM' IP'NH J'
X 9N'Q P'M MT'NHTGP97'i'LMLP'GH N9T+
'22+' K+'22+
'2' 99'OPGLMNKH'T J'GP P M99T+SD4 J N'9 O'/JK JG S
'9 O'/JK J99JG'T J8'2'HJiNPO' NH'H G
" i J'N OMT8ST J'N' PlL i JS8
IIPiO'IP'N'NHP'9 PG8 MiO'2'M1'L JO'GMT+
HMN'IT' KKMG iG'HM P'7 JiO'N IP'N 'JGP'NHPI'
M O'M'GJLL9T'7 I ipT' 9PN'NHP' p]JPGN'
P'7N'MT'NM9PiNG+
'2 +' K+'222+
' ' A9P' I i
XHMN'7 pi0GH L'IMT2'O 'NHPP'"
' ip'AJN'N
M iNM i'lT Li i+
' ' XHMN'G N' I i'\
' - I GP IP'7 pi0GH L'AJN'LP'7 I'i ip'2'
H J' 9N'i N'L I GP'NHP': OG'L9MQJP'NHPP'7 '
H J'M N'M' I Mi[7'NH J'O GN'LP'7 I'K i7 Ji0'NHPP+
O 'NH J%'N'M' I Mi[R
#FG' CF□DN' ?HN' M? C' GD□G' A>' G ?@KMG' J F□OF' J G' F?MM' >BDH□ F
G F□L□C'CFG'@GC?@ADKFA □'A>'CFG PGD G'A>'CFG AD□ □H?M'□HCA'KDA G R

#FG' >ADG F?NAJ□H 'A>'CFG >?CG A>'#□@AH'□H'CFG 0AHOMB □AH'A>'CF□'
N□?MA BG□'K?DC'A>'CFG ?M@A C'□HP?D□?LMG E C@'LE'JF□OF'F?(KGDG
PGDE'G?DME'□H>B G'□HCA'F□'?BN□GHOG'?'N□@'HAC□AH'A>'CFG 0?C? CDAKFG R'
@A C'>DGQBGHCME'□HNGGN'□H'CFG F?KG A>'A@G KDG GHC□@GHC' FGH'
#□@AH'GHCGD'JG'>GGM OGDC?□H'CF?C FG□'CFG #□@AH'A>'F?(KGDG'
AJH'OAHOGKC□AH' G□'?'D?OG>BM'?'FG□'GHGDAB'F□'KDAN□-
?MCE□'JC□FABC'CFG M□FCG C'K?DC□OMG'A>'?DDA ?HOG'FG'LB□M'F□'
@BH>□OGHOG'BKAH'CFG HGOG □CE'A>'D?C□>E□H'JC□FABC'DG C□?□HC'CFG
NGGK'E@K?CF□G'JF□OF'FG OFGD□FG'CA'?MM'A>'CFG FB@?H'>?@ME' G'
□'CFG pGDE'@ANGM'CAA'A>'K?CDAH'?KKG?D□H'CA'DGOG□PG'□H CG?N'A>'CA'
CFG ?OC'A>'KBDOF?□H'?'SGJGM'A>'?'CD?NG @?H' #F?C'CFG KG@?HCB'
0AH>GD'?'>?PABD'□H'F□'DGJ?DN'A>'?DCR'?'0A@KMGCG GHCMG@?H'GPGH'□H
A□H'0AHOGKC□AH' G□'?'D?OG>BM'?'FG□'GHGDAB'F□'KDAN□-
?MCE□'JC□FABC'CFG M□FCG C'K?DC□OMG'A>'?DDA ?HOG'FG'LB□M'F□'
@BH>□OGHOG'BKAH'CFG HGOG □CE'A>'D?C□>E□H'JC□FABC'DG C□?□HC'CFG
NGGK'E@K?CF□G'JF□OF'FG OFGD□FG'CA'?MM'A>'CFG FB@?H'>?@ME' G'
□'CFG pGDE'@ANGM'CAA'A>'K?CDAH'?KKG?D□H'CA'DGOG□PG'□H CG?N'A>'CA'
CFG ?OC'A>'KBDOF?□H'?'SGJGM'A>'?'CD?NG @?H' #F?C'CFG KG@?HCB'
0AH>GD'?'>?PABD'□H'F□'DGJ?DN'A>'?DCR'?'0A@KMGCG GHCMG@?H'GPGH'□H
□H'NGC?□M'?'CA'J?DD?HC'B'□H'DGQBG C□H'DG?NGD8'?OQB□G OGHOG'□H
CFG KD□HO□KMG'JF□OF'FG GG('CA'G C?LM□'F'H?@GME'CF?C'CFG'#□@AH'A>'
CFGH'J?'?'□M'CFG□H C?HOG'A>'#FG'#?@□H'A>'CFG FDGJ'?HN'CFG
□G'□@@G□H□C'>□D C'>AD@'CF?C'□C'F?'0A@'NAJH'CA'B'HAC'JFAMME
A@G C□@G□H□C'>□D C'>AD@'CF?C'□C'F?'0A@'NAJH'CA'B'HAC'JFAMME
F?(KGDG'?HN'JF□OF'KDAL?LME'DGC?□HGN'KA G □AH'A>'CFG C?'G'>AD
F?(KGDG'?HN'JF□OF'KDAL?LME'DGC?□HGN'KA G □AH'A>'CFG C?'G'>AD
CFGH'J?'?'□M'CFG□H C?HOG'A>'#FG'#?@□H'A>'CFG FDGJ'?HN'CFG
□G'□HCCGH'?'?'□M'CFG□H C?HOG'A>'#FG'#?@□H'A>'CFG FDGJ'?HN'CFG
□H'0AFH'LBC'A'>?D'DG@ANGMMGN'CF?C'GHC□DG'OGHG'A>'F?(KGDG
F?PG'LGGH'BL'C□CBCGN'>AD'GHC□DG'OGHG'A>'CFG GMNGD'K M?E'?HN'M?'CME'
D?OCGD'A>'#□@AH'?HN'CF?C'□H'CFG NGPGMAK@GHC'A>'CF?C'0F?2D?OCGD
?MAHG'J□C'CFG G OGK□□AH'A>'A@G>GJ'A00?'□AH?MN'CABOFG'FGDG'?HN
CFGDG'JG'@B C'MAA(>AD'CFG BH□CE'A>'CFG F?(KGD□?H'0AHOGK□□AH'A>'
CFG +DGG(&□?HCFDAKG R CFG #□@AH'A>'D□'CAK F?HG'?HN'$BO□?H'
?HN'MBC?DOF R='CFG GHG@E'CA'@?H(□HN'I'A>'CFG KAKBM?D'CADE'LAA('
R A>'CFG='MG2?HC' □CAD□G'?HN'G OGMGHC' APGM I'J F□OF'JGDG
DGGN□ME'NGPABDGN'LE'CFG OAHC□G@KAD?D□G'A>'CFG LAE□F'F?(KGDG U
#FG'OAHCD?C A>'CEMG'JF□OF□'CA'LG'CD?OGN'CFDAB FABC'CF□'ND?@?
□'BK>□O□GH>ME'CD□(□H'□H'CFG CJA'AKGH□H'OGHG'JF□OF'HAJ'OAH C□CBCG
CFG>□D C?OC' AC□F□H'0?H'LG'@AD'>DGG'?HN'>MAJ□H'CF?H'CFG N□?MA BG
LGCJGGH'CFG AGC'?HN'CFG ?□HCGD' C F?'?M'CFG GQB?LMG' D?OG'A>
F?(KGDG8'>?O□M□CE'J□CF'A00?'□AH?M'G ?@KMG'A>'CF?C'OAHNGH?C□AH'A>'
KAGC□?M'□@?G'JF□OF'A8'N□'C□H B□FG'F□@'>DA@'?MM'AC□FGD'J□D□CGD'
AD'□H C?HOG R

6'#9?'NH GP' H K□H' P P'H G'7P99 G'AJN'7'9MNP
@ 1P'APNMP'NHMI'H G' M9JP' i'NHP'I IPiN'
BH>□H□ FGN' #FG'OAHP□OC□AH'CA'JF□OF'JG'F?PG'ABD GMPG'?DD□PGN'
HG□CFGD'DG C'BKAH'CFG KDAL?LMG'OAD@KC□AH'A>'CFG CG C'HAD'CFG
KA □L□M□CE'CF?C'CFG KAGC'F?'MG>C'B'AHME'?H'BH>□H□ FGN'ND?>C'A>'F□'
KGD>AD@?HOG'LBC'BKAH'CFG LGMG>'CF?C'CFG N□>>GDGHOG'A>'CEMG'?'
JGMM?'CFG @ADG□@KADC?HC'N□>>GDGHOG'□H'CFG□ C'A>'CFAB F□'JF□OF
KDGP?□M□H'CFG BOOG □PG'OGHG'A>'CF□'ND?@?D'A'DG@?D(?LMG'?'
CA'SB C□>E'CFG OAHOMB□AH'CF?C□C□'HAC'JFAMME'CFG JAD('A>'F?(KGDG'
G CF□H('□C'J□M'HAC'LG'PGDE'N□>>OBMC'A'CA'G F□L□C'CFG G'N□>>GDGHOG'
□H'NGC?□M'?'CA'J?DD?HC'B'□H'DGQBG C□H'DG?NGD8'?OQB□G OGHOG'□H
CFG KD□HO□KMG'JF□OF'FG GG('CA'G C?LM□'F'H?@GME'CF?C'CFG'#□@AH'A>'
CFGH'J?'?'□M'CFG□H C?HOG'A>'#FG'#?@□H'A>'CFG FDGJ'?HN'CFG
□G'□HCCGH'?'?'□M'CFG□H C?HOG'A>'#FG'#?@□H'A>'CFG FDGJ'?HN'CFG
□H'0AFH'LBC'A'>?D'DG@ANGMMGN'CF?C'GHC□DG'OGHG'A>'F?(KGDG
F?PG'LGGH'BL'C□CBCGN'>AD'GHC□DG'OGHG'A>'CFG GMNGD'K M?E'?HN'M?'CME'
D?OCGD'A>'#□@AH'?HN'CF?C'□H'CFG NGPGMAK@GHC'A>'CF?C'0F?2D?OCGD
?MAHG'J□C'CFG G OGK□□AH'A>'A@G>GJ'A00?'□AH?M'CABOFG'FGDG'?HN
CFGDG'JG'@B C'MAA(>AD'CFG BH□CE'A>'CFG F?(KGD□?H'0AHOGK□□AH'A>'
CFG +DGG(&□?HCFDAKG R CFG #□@AH'A>'D□'CAK F?HG'?HN'$BO□?H'
?HN'MBC?DOF R='CFG GHG@E'CA'@?H(□HN'I'A>'CFG KAKBM?D'CADE'LAA('
R A>'CFG='MG2?HC' □CAD□G'?HN'G OGMGHC' APGM I'J F□OF'JGDG
DGGN□ME'NGPABDGN'LE'CFG OAHC□G@KAD?D□G'A>'CFG LAE□F'F?(KGDG U
#FG'OAHCD?C A>'CEMG'JF□OF□'CA'LG'CD?OGN'CFDAB FABC'CF□'ND?@?
□'BK>□O□GH>ME'CD□(□H'□H'CFG CJA'AKGH□H'OGHG'JF□OF'HAJ'OAH C□CBCG
CFG>□D C?OC' AC□F□H'0?H'LG'@AD'>DGG'?HN'>MAJ□H'CF?H'CFG N□?MA BG
LGCJGGH'CFG AGC'?HN'CFG ?□HCGD' C F?'?M'CFG GQB?LMG' D?OG'A>
F?(KGDG8'>?O□M□CE'J□CF'A00?'□AH?M'G ?@KMG'A>'CF?C'OAHNGH?C□AH'A>'
KAGC□?M'□@?G'JF□OF'A8'N□'C□H B□FG'F□@'>DA@'?MM'AC□FGD'J□D□CGD'
AD'□H C?HOG R

6'#9?'NH GP' H K□H' P P'H G'7P99 G'AJN'7'9MNP
@ 1P'APNMP'NHMI'H G' M9JP' i'NHP'I IPiN'
BH>□H□ FGN' #FG'OAHP□OC□AH'CA'JF□OF'JG'F?PG'ABD GMPG'?DD□PGN'
HG□CFGD'DG C'BKAH'CFG KDAL?LMG'OAD@KC□AH'A>'CFG CG C'HAD'CFG
KA □L□M□CE'CF?C'CFG KAGC'F?'MG>C'B'AHME'?H'BH>□H□ FGN'ND?>C'A>'F□'
KGD>AD@?HOG'LBC'BKAH'CFG LGMG>'CF?C'CFG N□>>GDGHOG'A>'CEMG'?'
JGMM?'CFG @ADG□@KADC?HC'N□>>GDGHOG'□H'CFG□ C'A>'CFAB F□'JF□OF
KDGP?□M□H'CFG BOOG □PG'OGHG'A>'CF□'ND?@?D'A'DG@?D(?LMG'?'
CA'SB C□>E'CFG OAHOMB□AH'CF?C□C□'HAC'JFAMME'CFG JAD('A>'F?(KGDG'
G CF□H('□C'J□M'HAC'LG'PGDE'N□>>OBMC'A'CA'G F□L□C'CFG G'N□>>GDGHOG'
□H'NGC?□M'?'CA'J?DD?HC'B'□H'DGQBG C□H'DG?NGD8'?OQB□G OGHOG'□H
CFG KD□HO□KMG'JF□OF'FG GG('CA'G C?LM□'F'H?@GME'CF?C'CFG'#□@AH'A>'
CFGH'J?'?'□M'CFG□H C?HOG'A>'#FG'#?@□H'A>'CFG FDGJ'?HN'CFG
□G'□HCCGH'?'?'□M'CFG□H C?HOG'A>'#FG'#?@□H'A>'CFG FDGJ'?HN'CFG
□H'0AFH'LBC'A'>?D'DG@ANGMMGN'CF?C'GHC□DG'OGHG'A>'F?(KGDG
F?PG'LGGH'BL'C□CBCGN'>AD'GHC□DG'OGHG'A>'CFG GMNGD'K M?E'?HN'M?'CME'
D?OCGD'A>'#□@AH'?HN'CF?C'□H'CFG NGPGMAK@GHC'A>'CF?C'0F?2D?OCGD
?MAHG'J□C'CFG G OGK□□AH'A>'A@G>GJ'A00?'□AH?M'CABOFG'FGDG'?HN
CFGDG'JG'@B C'MAA(>AD'CFG BH□CE'A>'CFG F?(KGD□?H'0AHOGK□□AH'A>'
CFG +DGG(&□?HCFDAKG R CFG #□@AH'A>'D□'CAK F?HG'?HN'$BO□?H'
?HN'MBC?DOF R='CFG GHG@E'CA'@?H(□HN'I'A>'CFG KAKBM?D'CADE'LAA('
R A>'CFG='MG2?HC' □CAD□G'?HN'G OGMGHC' APGM I'J F□OF'JGDG
DGGN□ME'NGPABDGN'LE'CFG OAHC□G@KAD?D□G'A>'CFG LAE□F'F?(KGDG U
#FG'OAHCD?C A>'CEMG'JF□OF□'CA'LG'CD?OGN'CFDAB FABC'CF□'ND?@?
□'BK>□O□GH>ME'CD□(□H'□H'CFG CJA'AKGH□H'OGHG'JF□OF'HAJ'OAH C□CBCG
CFG>□D C?OC' AC□F□H'0?H'LG'@AD'>DGG'?HN'>MAJ□H'CF?H'CFG N□?MA BG
LGCJGGH'CFG AGC'?HN'CFG ?□HCGD' C F?'?M'CFG GQB?LMG' D?OG'A>
F?(KGDG8'>?O□M□CE'J□CF'A00?'□AH?M'G ?@KMG'A>'CF?C'OAHNGH?C□AH'A>'
KAGC□?M'□@?G'JF□OF'A8'N□'C□H B□FG'F□@'>DA@'?MM'AC□FGD'J□D□CGD'
AD'□H C?HOG R

6'#9?'NH GP' H K□H' P P'H G'7P99 G'AJN'7'9MNP
@ 1P'APNMP'NHMI'H G' M9JP' i'NHP'I IPiN'

E' ' >' 7

CFGE' JGDG' 0$ ' JD□CCGH' LE' ABD' KAGC ' CFGDG' □ ' HA' OAH>B □AH' A>' KDA G' >AD' PGD G R HA' N□>>□OBMC□G ' JF?CGPGD' □H' CFG' @GCD□O?M' ?DD?H G@GHC R ' HA' AKKADCBH□CE' KDG GHCGN' >AD' CFG' G GDO□ G' A>' ?HE' □H GHB□CE' □H' =' DG B-M?C□AH I' C' J? ' CF□ ' >?OC' JF□OF' >□D C' MGN' B ' CA' KGDOG□PG ' ?HN' BL G-QBGHCME' CA' CD?OG ' CFG' N□>>GDGHOG ' LGCJGGH' K?DC□OBM?D' OGHG ' ?HN' K? ? G ' FGDGPGD' CFG' @ANG@' CG C' >AMMAJ ' CFG' ?HO□GHC' CG C' J□CF' PGDE' M□ FC' OF?H G ' CFGDG' JG' OABMN' KBC' ABD' >□H GD' BHNABLC□H ME' BKAH' CFG' JAD(' A>' F?(KGDG ' FGDGPGD' CFG' C□H(GD□H ' A>' CGGPGH ' F?N' LGGH' ?C' JAD(' JG' OABMN' N□ OAPGD' CF?C' FG' F?N' LGGH' ?CCG@KC□H ' CA' DGK?□D ' HAC' =' CFG' 0F□H(' JF□OF ' C□@G' F?N' @?NG I' LBC' A@GCF□H ' PGDE' N□>>GDGHC' >DA@' CFG' @?CGD□?M ' J□CF' JF□OF' F?(KGDG' OAH CDBOCGN ' #FG' GP□NGHOG' A>' CF□ ' □ ' ?C' F?HN

> ' □H' CFG' >□D C' OGHG ' □C' JABMN' LG' PGDE' N□>>□OBMC' CA' ?E' J□CF' OGDC?□HCE' JF?C' □ ' HAC' F?(KGDG8 ' A' □H' CFG' GOAHN' OGHG' □C' ?KKG?D ' CA' B ' GQB?MME' N□>>□OBMC' CA' KA□HC' ABC' JF?C' □ ' F?(KGDG8 ' G' LGM□GPG' CF?C' O?DOGME' ?HE' K?DC' A>' CF□ ' OGHG' J? ' JD□CCGH' LE' F□@ ' JG' >□HN' ABD GMPG ' ?C' AHOG' ?@□N C' ?' N□>>GDGHC' CDBOCBDG' A>' PGD G' >DA@' CFG' >ADG A□H ' G' GHOABHCGD' CF□ ' N□>>GDGHOG' DG@?D(?LME' □H' CFG' >□D C' KGGOF' A>' #□@AH' R

6'2' QM P' N'7 PP9T' P P 8 M!O'NHP P%G' ! !P'
M!'N J9T' GMT' HP' Q PG' 7'HP' PKP PG'
27' J 'APNNP G' L9MT' MN' NHMN' QM I P ' P' I JGN' ! N' OM P'
' I NMNP' NHP I 8 7MJ9NG' NHMN' M P' KH' M P' 7M +R

H' CFG' >□D C' OGHG' JG' NA' HAC' >□HN' ?' □H MG' DFE@□H ' OABKMGC ' □H' CFG' GOAHN' OGHG' CFG□D' DGOBDDGHOG' □ ' @ADG' >DGQBGHC' CF?H' □H' ?HE' A>' F?(-KGDG8 ' KM?E ' GPGH' CFG' G?DM□G C ' #F□ ' OGHG' ?MAHG' □PG ' B ' □ CGGH' G ?@KMG ' A>' CF□ ' >AD@' A>' PGD G ' JF□OF ' □H' OA@L□H?C□AH' J□CM□' KDA G' AD' LM?H(' PGD G ' F?N' LGGH' ?M@A C' GHC□DGME' DGSGOCGN' LE' CFG' @?CBDG' F?(-KGDG ' G OGKC' CA' DGHNGD' G@KF?C□O' CFG' OMA G' A>'?' OGHG ' H' CFG' □H C?HOG' LG>ADG' B ' JG' >□HN' CFG' OABKMGC' □HCDANBOGN' □H' CFG' @A C' ?DL□CD?DE' ?HN' □H?DC□>□O□?M' @?HHGD R □H' □C GM>' HG□CFGD' □@KDG □PG' HAD' F?D@AH□AB ' . BC' CFG' OAHCD? C' LGCJGGH' CFG' GOAHN' OGHG' ?HN' CFG' >□D C' □ ' GQB?MME' DG@?D(?LMG' □H' CFG' KAPGDCE' A>' CFG' CFAB FC' ?HN' CFG'?L GHOG' A>' KAGC□O?M' □@? GDE ' C' J□MM' LG' B>>□O□GHC ' JG' CF□H(' CA' KBC' □H' ?KKA □C□AH' CFG' EH□O' A>' CF□ ' OGHG' ?HN' A>' ?' BL GQBGHC' OGHG ' CA' FAJ' CFG' □@KA □-L□M□CE' A>' CFG' OF?D?OCGD' F?P□H ' LGGH' JFAMME' @□HCGN' >DA@' CFG' ?@G' N□G R

' 2+' K+' 22+

6'29PT' OMT' ' 9 MN' M' G PPL' 7' M! NT' K I PG' NH G' MT[
HPT' OM!KP' [NHPT' M P' I MO' I P!
/ UP' I MO!PGG' G' N9 P' Q9 T' 7' NH G' 9 7P+
#G' NH G' L I L' GH G' N ' M' 9 NN9P' 9 ' M!O' N+
,XP' I MUP' J PP PG' 7 9G' N ' O GL N' J GP9 PG8
#!O' GLP!O' J '79MNNP PG' N ' O !U' NH GP' I P!+
L I!' H GP' MQP' P' O' N' JL' MQM !
.X NH' L G ! JG' GL NP' M!O' P! T+
,XH '9 PG' NHMNN%G ! N' OPL M PO ' ' OPL M PG' O
0&$ ' O PG ' NHMN' APM G' ! N' !P' GLJ !' N ' NHP ' Q M PG'
17' NHP '7 P!OG% Q 7N' \
2' GH J9O' 7PM ' NH GP' NHMN' OM!KP' AP7 P' I P' !
.X J9O' !P' OMT' GNM I L' JL !' I P ' 2N' HMG' APP!' O !P'
VP!' GHJN' NHP ' O G' MQM !GN' M' GPNN !Q' GJ!+R

' ' K+' 222+

6' H J' HMGN' KMGN' M MT' NHTGP97 ' AP !Q' 9 UP' NHTGP978
#' I MO I M!' G '9 !Q' ! ' M' 7 9' . XHMN' NH !U%GN'
HMN' NHP' A9PMU' M ' NHT' A GNP JG' KHM I AP 9M !
,X 99 LJN' NHT' GH N' !' M I' \' . X 99 NHPGP' I GG%O' N PPG+
HMN' HM P' JN9 %O' NHP' PMQ9P ' LMQP' NHT' HPP9G+
#!O' GU L' HP!' NH J' L !N%GN' JN' ' X 99' NHP' K 9O' A U+
M!O PO' NH' KP ' KMJO9P' NHT' I ! !Q' NMGNP+
' KJ P' NHT' %P I QHN%G GJ 7P N' 1 KM99' NHP' K PMNJ PG S
XH GP' !MUPO' !MNJ PG' 9 P' !' M99' NHP' GL NP'
17' PMU7!9' HPM P!8 H GP' AM P' J!H JGPO' N J!UG+
' NHP' K !79 KN !Q' P9P I P!NG' PWL G%O+
#!G P ' I P P' !MNJ P SA O' NHP I ' 79MNNP ' NHPP8
' [NH J' GHM99' 7 !O R

$GC' * ' CDE' CFG' CGJ?DN' A>' CFG' >□D C' ?OC' ?HN' CFG' CGJ?DN' A>' CFG' GOAHN' ?OC' LE' CFG' ?@G' CG C ' c))G KD□HC' CFG' >□D C' KGGOF' ? ' JG' >□HN' □C' □H' CFG' AD□ □H?M' □CF' CFG' G OGKC□AH' A>' CFG' CJA' DFE@□H ' OABKMGC ' □C' □ ' N□>>□OBMC' CA' ?E' JFGCFGD' □C' □ ' KDA G' AD' PGD G ' C' F? ' LGGH' =' DG B-M?CGN' I' □HCA' PGD G ' ? ' JG' F?MM' FAJ' □H' ABD' >AAC HACG ' ' LBC' HA' OF?H G' O?H' @?(G' □C' @GCD□O?M R CFG' >GGLMGHG ' A>' CFG' CFAB FC' □ ' CFG' ?@G' BHNGD' GPGDE' N□ B□ G ' H' CFG' ACFGD' F?HN ' CFG' F?D@AHE ' CFG' P□ ABD CFG' KAGC□O?M' GMGP?C□AH' A>' CFG' GOAHN' K? ? G ' M□(G' CFG' DG?CGD' K?DC' A>

CFG' >ABDCF' ?HN' >□>CF' ?OC ' G>>GOCB?MME' KDGPGHC' ?MM' BL C□CBC□AH' ?HN' CD?H KA □C□AH

' 2+' K+' 22+

6'F' ' ' X HMN' 99' NH G' K I P' N ' \
9 P' K I I M!OG' JG' N ' L OP ' M!O' Q P' Q PMN' Q 7NG+
#!O' M99' JN' 7' M!' P I LNT' K 79P +S
' 99' HP' U! ' H G' LJ GP8 ' T P9O' I P' NH G+
' GH ' H I ' HMN' M' APQQM ' H G' HPM N' G+
P !Q' 7'! ' L P ' N ' I MUP' H G' GHPG' Q O'8
" G' L I GPG' 79T' G ' APT !O' H G' GNMNP+
HMN' X%HMN' HP' GLPMUG' G' M99' !' OPAN ' HP' W PG' 7 ' P P T' O8
" P' G' G ' U !O ' NHMN' HP' ! ' LMTG' !NP PGN' 7 %N8
" G' 9M!OG' LJN' N ' NHP ' A UG+' X P99 ' % J9O' 2' $P P'
: P!N9T' LJN' JN' 7' 77 KP ' AP7 P' 2' P P' 7 K%O' JN[
" MLL P ' G' HP' NHMN' HMNH' ! ' 7 P!O' N ' 7PPO+
HM!' GJKH' NHMN' O ' P P!' P!P I PG' PWKPPO+
2' A9PPO' ! M O9T' 7 ' I T' 9 O+R

' 22+' K+' 22+

6'F' ' 27' T J' GJGLPKN' I T' HJGAM!O T ' ' 7M9GPH O+
M99' I P' AP7 P' NHP' PWMKNPGN' MJO N G+
#!O' GPN' I P' !' NHP' L 7+' ' NHP' Q OG' A9PGG' I P+
X HP!' M99' J ' 77 KPG' HM P' APP!' LL PGG%O'
X NH' N JG' 7PPOP G' 8 HP!' J ' MJ9NG' HM P' PLN'
X NH' O J!UP!' GL 9NH' 7' !P8 HP!' P P T' I'
" MNH' A9MC%O' NH' 9 QHNG ' M!O' A MT%O' NH' I !GN P9GT8
2' HM P' PN %O' I P' N ' M' MGNP7J9' K KU+
#!O' GPN' I !P' PTPG' MN' 79 +
' - N9 PP' ! ' I P+
F' ' " PM P!G ' HM P' 2' GM O ' NHP' A J!NT' 7' NH G' 9 O' [
" ' I M!T' L O QM9' A NG' HM P' G9M PG ' M!O' LPMGM!NG+
H G' ! QHN' P!Q9JNNPO[X H ' G' ! N' I !%G' 1
X HMN' HPM N ' HPMO ' G O' 7 KP ' I PM!G ' AJN' G' 9 O' I !%G' 1
: PMN' I ! ' ! A9P' NHT' TM9' I A![
#H' [HP!' NHP' I PM!G' M P' Q !P' NHMN' AJT' NH G' L M GP
HP' A PMNH' G' Q !P' HP P 7' NH G' L M GP' G' I MOP'
OPMGN ! ' 7MGN 9 GN8 !P' K9 JO' 7' !NP ' GH P G+
HPGP' 79 PG' M P' K JKH%O+R

#FG' @ANGDH' N□P□ □AH' A>' CF□ ' KM?E' □HCA' ?OC ' ?HN' OGHG ' F? ' □PGH' B ' ?' DG@?D(?LME' FADC' GOAHN' ?OC ' #FG' GH?CAD' A>' CFG' >□D C' OGHG' @?E' LG' F?(KGDG8 ' #FG' OGHG' LGCJGGH' CFG' GDP?HC ' CFG' AAM ' ?HN' CFG' EH□O' F? ' PGDE' M□CCMG' A>' F□ ' ?H□@?C□AH' AD' F□ ' CP□C ' . BC' JFA' □ ' CFG' >AAM8 ' @□ CDG ' W 0AFH AH' ?J' CFG' J?HC' A>' OAHHGOC□AH' LGCJGGH' CF□ ' N□?MA BG' ?HN' JF?C' F?N' KDGOGNGN' □C R =' ' B KGOC' A@G' OGHG' CA' LG' MA C' □H' JF□OF' CFG' GHCD?HOG' A>' CFG' AAM' ?HN' CFG' ? G' CF?C' >AMMAJ ' F□@' J? ' KDGK?DGN' LE' A@G' □HCDANBOCADE' N□?MA BG ' □H' JF□OF' CFG' ?BN□GHOG' J? ' □H>AD@GN' CF?C' CFGE' JGDG' CFG' >AAM' ?HN' K? G' A>' FDEH□?' #□@?HND?' AD' A@G' ACFGD' OABDCGT?H ' BKAH' CFG' (HAJMGN G' A>' JF□OF' NGKGHN ' CFG' DG?CGD' K?DC' A>' CFG' GH B□H ' SAOBM?D□CE I' G' F?MM' F?PG' AOO? □AH' CA' HAC□OG' CF□ ' J?HC' A>' OAHHGOC□AH' □H' ACFGD' OGHG ' A>' CFG' KM?E ' H' CF?C' LG>ADG' B ' □>' CFG' #□@AH' JGDG' ?H' AMNGD' ND?@?' DG@ANGMMGN' LE' F?(KGDG ' CFG' DG? AH' >AD' CFG' DGCGHC□AH' A>' CFG' OGHG ' N□ SA□HCGN' ? ' □C' □ ' □ 'ALP□AB ' #FG' ?BN□GHOG' F?N' LGGH' ?OOB CA@GN' CA' CFG' AAM ' ?HN' □C' J? ' A>' M□CCMG' OAH GQBGHOG' JFGCFGD' F□ ' KGGOFG ' F?N' ?HE' PGDE' CD□OC' OAHHGOC□AH' J□CF' CFG' @ADG' □@KADC?HC' OGHG ' #FG' JFAMG' CF□H ' J?HC ' CFG' K□D□C' A>' F?(KGDG ' ?HN' □C' J?HC ' ?M A' CFG' KM?E' BKAH' JADN ' JF□OF' FG' ?M@A C' □HP?D□?LME' G@KMAEGN' BKAH' BOF' AOO? □AH ' #FG' AAM ' CFG' ? G ' CFG' EH□O ?HN' CFG' GDP?HC ' ?DG' □@KME' ?LB □PG

#FG' OGHG' LGCJGGH' #□@AH' ?HN' CFG' CGJ?DN ' CA' CFG' GHN' A>' CFG' ?OC ' □ ' BHQBG C□AH?LME' >DA@' CFG' @? CGD F?HN' A>' ABD' KAGC ' #FG' OF?D?OCGD' A>' #□@AH ' ? ' F□ ' DB□H' □ ' ?KKDA?OF□H ' F□@ ' □ ' LG?BC□>BMME' NGPGMAKGN ' M□ ' DGKDA?OF' A>' F□ ' CGJ?DN ' M□ FCME' BHSB C' ? ' □C' □ ' □ ' □H' ?' CAHG' KGD>GOCME' □H' ?OOADN?HOG' J□CF' CFG' (□HNHG ' A>' F□ ' H?CBDG ' ?HN' F□ ' D□ □H ' ?H GD' □ ' >AD ACCGH' □H' ?' @A@GHC' □H' F□ ' OA@KMGCG' OAHP□OC□AH' A>' CFG' □HCG D□CE' A>' CF?C' FAHG C' GDP?HC ' □ ' GHC□DG' DGM□?HOG' BKAH' CFG' D?C□CBNG' A>' F□ ' >D□GHN ' □ ' @A C' CAB0F□H ' #FADAB FME' F?(KGD□?H' □ ' CFG' CGJ?DN8 ' NG OD□KC□AH' A>' CFG' OAMNHG ' A>' CFG' GH?CAD ' ?HN' #□@AH8 ' ?H JGD' □ ' HA' MG ' OF?D?OCGD□ C□O' A>' CFG' DG?C' □HCGDKDGCGD' A>' FB@?H' >GGM□H '

G' PGHCBDG' CA' G KDG ' ?' OAHP□OC□AH' CF?C' PGDE' M□CCMG' A>' CFG' CF□DN' ?OC' □ ' F?(KGDG8 ' #FG' □H D?C□CBNG' A>' $B0BMMB ' □H' CFG' >□D C' OGHG ' ?HN' A>' $BO□B ' □H' CFG' GOAHN ' □ ' ?@B □H ME' N□ KM?EGN ' LBC' CFGDG' □ ' M□CCMG' KAJGD' □H' CFG' NGPGMAK@GHC' A>' OF?D?OCGD R M□CCMG' N□ OD□@□H?C□AH ' #FG' K? □AH?CG' □HPGOC□PG' A>' M?@□H□B ' □ ' >ADO□LMG ' LBC' CFG' >ADOG' □ ' HAC' G ?OCME' CF?C' A>' F?(KGDG ' #FG' N□?MA BG' LGCJGGH' CFG' CD?H GD ' ?C' CFG' GHN' A>' CFG' GOAHN' OGHG ' □ ' BH@GCD□O?M' GHAB F' □H' CFG' AD□ □H?M

CGGPGH ' F?' @?NG □C FALLMG CMM JAD G' #FG' CF□DN' OGHG' F? 'CFG ?@G OFAAM' ?' =';#FG' □ CADE' A;' □H ' $G?D' ?HN' F□' ;#FDGG' CFG ?@G OFAAM' ?' =';#FG' □ CADE' A;' □H ' $G?D' ?HN' F□' ;#FDGG' A' BH@B □O?M' ?' J□G >□HN' □H' CFG KGGOM□' A;' G@KDAH□B ' #FG' >ABDCF OGHG' ? ?H' ,MAH' ?F?' ,MCCMG KGOBM□?D□CE' C' @□ F□ LG' F?(KGD8 ' D' □C' FD□ LG' CFG' JAD('A;' ?H' □H>GD□AD' J□D□GD' >' CFG' >□CF @□ F□ LG' CFG JAD('A;' ?H' □H>GD□AD' J□D□GD' >' CFG' >□CF □BDC□BDG' A;' CFG□ □HCGD?M' GP□NGHOG' A;'CFAB F□' ?HN' CEMG' VJF□OF' JG' F?MM' OA@G' CA' ?F' ,CFG ?@G KGOBM□?D□CE' .BC' □H' ?NN□C□AH' CA' CFG' CDBOCBDG' A;' CFG PGD G' CFG' OF?D?OCGD' A;'CFG' CFAB F□' GHC□?MME N□>>GDGHC' >DA@' CF?C A;'CFG' CDBG' F?(KGD□?H' KD?@?' FGD□' ,?H' GK□ ANG' ,?KKG?D' CA' LGMAH ' ?' ND?@?' LF□OF' CFG' CADE' A;' CF□' LD?PG' ?HN' KDA>M□ ?CG CFGH□?H' >AD@G' A;' JF□OF' CFG' CADE' A;' CF□' LD?PG' ?HN' KDA>M□ ?CG CFGH□?H' >AD@G' ?' @BOF @□ADG □@KADC?HC' >G?CBDG' CF?H' □H' CFG' KDG GH□' KM?E' #F?C CADE' ?HCGD□HCME' BHOAHHGOCGN' J□CF' CFG @□ ?HCFDAKE' A;' #□@ AH' L□?NG ' □ ' KGD□GOCME' BHOAHHGOCGN' J□CF' CFG @□ ?HCFDAKE' A;' #□@ AH' CFG' DGCBDH' A;' MO□L□?NG ' C?(G ' KM?OG' ?>CGD' #□@AH8 ' NG?CF' H' F?(- KGD&8 ' F?HN' CFG' L?H□ F@GHC' A;' MO□L□?NG ' □ ' AHME' B GN' □H' OAH-HGOC□AH' J□CF' CFG' J'AHNGD>BM' OGHG' □H' CFG' >ABDCF' ?OC' H' CFG' AMNGD' ND?@?' J□G' F?PG' HA' NABL□' CF?C' □C' >AD@GN' ?H' □HCG D?M' KADC□AH' A;' CFG ?OC□AH' ?HN' CF?C' #□@AH' F□@ GM>' J ? ' AHME□HO□NGHC?M' CA' CFG' O?C? CDAKFG' #FG' OGHG' LG>ADG' B ' ?HN' CFG' OAHOMBN□H ' OGHG' A>' CFG' >□CF ?OC' KDG-HGOC□AH' ? ' CF□H(' HG?DME' GPGDE' OF?D?OCGD□ C□D' LE' J'FO□F' CFG' G?DME' OAH-GHC' J□G' CF□H(' HG?DME' GPGDE' OF?D?OCGD□ C□D' LE' J'FO□F' CFG' G?DME' OAH-CG@KAD?D□G ' A>' F?(KGD□ ?D□ CA' LG' N□ C□H B□ FGN' >D□@' F□@ ' ?HN' FD□ HG ?C□AH ' □H' CFG ?@G NG DGG ' A>' ?MM' CFA G QB?M□C□G ' J F□OF' DGHNGD' F□@' A' □@@G? BD?LME' BKGD□AD' CA' GPGDE' ACFGD' ND?@?C□G' KAGC

#FG' OGHG' LGC□GGH' MO□L□?NG ' ?HN' CFG GH?CG' CFG B' B?MME' KDA->ABHN' DG>MGOC□AH' A>' F?(KGDG ' J F□OF' KMBH G ' B ' □HCA' CFG' NGKCF ' A>' ABD' A□H' FG?DC ' ?HN' LGEAHN' B ' ?HN' LGEAHN' B ' □ ' G 0F?H GN' >AD' BOF' N□ FC' ? □A@ ' ? ' CFG' ?DABHN' B ' ?HN' LGEAHN' B ' □ ' G 0F?H GN' >AD' BOF' N□ FC' ? □A@ ' ? ' CFG' >AMA□J□H R

6'O 'L NT' G'NHP' NJP' 7'NHP'9M
#iO'i ip'AJN'NT MiNG'JGP' N'K JP99T+R

6' 'P piQP' G i ' M9 J 'AJN'N 'APM +R

6' 'AP' i'MiQP ' G IL PNT8
JN' H ' G IMi'NHMN' G i N'MiQ T'Y.

6' ']'HMLLT IP'p]JM9'N ' ? P'H I GP97[
2'Q iQ'N JXH'NHP' GNM G+ PMU' JN']'E T+
#iO'GI NHP'i N'NTGP97' NH i'IT'A PMGN[
'IMiT7 piOG'G ' IMiT'7 piOG 2'GPP8
N' ip'HMNH'7M9G 7 PO'H G 7M NH'N ' IP+
X HMN' 7?2'MI' LL P6G%O' NH'L p\T'\
#iO'Q P7O NH' PW IP'\'7 NJip9P7N' IP'L '
#99'NH G i NH iQ' NHPT p p p'T' MiNG8
H G ip'O NH'L I GP'HP9L'Mi NHP'Q 9O
#'NH O'M'7 piO9T' P9K IP'N 'H G H JGp+
#iO'piNP NM iIpiN8 PMKH' IMi'MKNG H G LM N'8
#99'L I GP'K JiGPg'MiO'M'7M NH7J9 HPM N+
5 '%" I i'NH J'M N'7 QPN7J9 7'NHT'7PMGN+
'XHTO 'TPi N'7M99N '7' 9M I'MN'H Ip
2%9g GNMiO iQ'GJL' ' M9U iQ' 7'2'L9PMGp+S
/MKHPG'A iQ'HP P'NHP'M N KH UPG NH'GLPPO+S
3JN MLP9JG'5PI PMG'"p I QPipG
2%9g'O iU'NH G'KJL'M HPM9NH'N 'M 'T J'HPM9NHG[
()' i p N' N' iN 'L G i'1'TP'Q OG[
;' /PN' N'AP' MNGAMiP'N 'NHPI+ ?
5 ' %' XHMN' 9N'NH J'HM P'NHP'9PQ' 'P9P'NHP' iQ\
' M P'TP'NHMN'KML i+
' ' 99 KJN'H I'JL'
#iO'IM9KP'M'APMGN' 7'H I+
'; $ ' I i'NH G HPM9NH'N 'NHPP+
'2%9g'LPOQP'T J'G +
‡ HPGP'M N KH UPGO 'i 'IMi%G'LM9MP'L9PMGP+
'2'9 P'NHPI' P99'AT'? P'[
' "p p'NMUP'NHP1'NHPi'[
4 %'- ') ' ' $ ' 8%' $ ' $ '
MT'NH J'GHM9N'HM P'NHPI'NH J'MiO'M99 7'TP[
4P' KUPO'AMGP'LP 7O JG MGKM9G+
H iU'TP'I T'HMNP%G'G 'G i'PWN iQJ GH%O'\
;) ' " ' ' $ ' ''' $ ' %*
' 1'IT'HPMO[
9 ' 1'IT'KHPPUG[
$ '*' 2G'NH G'M'7PMGN'\
5 ' %' J9T'M'GN iT' ip+
4 '' N ipG GJA9NiM T'HM P'NHP'GM IP'IMNNP' NH'NHP'HPM piGT+
'27'2'? p%G'H O'NHJiOP A 9N'O O'H 9O'
X NH i'I T'HMiO'NHJG'NHJG' J9O'2'OM N' N[9 '$ %' %
9 ' X P'MiO'M9MG'IT'A M iG M P'OMGHPO' MN[
6<,

5 ' %' #9MG' L9MG' %N 9 !P P' AP I T' HML'
' N M P ! ' N ' NHP' M!N L OPG' [
1H' [NHMN' 2' HMO' I T' -PQMGJG' AJN' HP P[
2%O 79T' M MT' AT' ? P[J ' '" J(- ' '
' 4P' M P' M' GN !T' QP!P MN !+
1 ' HM OP ' 7' MJQHN' HM OP ' I MT' AP' 7 J!O' 8
!GNP G' 7' KTNH M' !H GL NM9+
MT' P T' OP 9G' HMNP7J9' N ' NHP' Q OG+
($' MGNP ' NHPT' M P' Q !P+R

C' ' KDGCCE' OMG?D' CF?C' F?(KGDG' AJGN' HA' ALM ?C AH' CA' CFG' JD CGD' A>' CF ' OGHG' &D ' %EOG' SB CME' ?E ' =' ' GHCGDC?H' OAH NGD?LMG' NABLC ' A>' F ' F?P H ' LGGH' ?OQB?HCGN' J CF' ?' ND?@?' JF OF' J? ' OGDC?HME' HGPGD' KGD>AD@GN' H' CFG' @GCDAKAM ' ?HN' JF OF' J? ' M (GME' CA' F?PG' LGGH' DG?N' AHME' LE' ?' >GJ' A>' CFG' ?BCFAD8 ' K?DC OBM?D' >D GHN ' CA' JFA@' CD?H-OD KC ' A>' C' F?N' LGGH' KDG GHCGN I' G' F?PG' M CCMG' NABLC ' FAJGPGD ' CF?C' #@AH' J? ' >?@M?D' CA' CFG' C? G' LG>ADG' F?(KGDG' CAA (' BK' CFG' BLSGOC ' ?MCFAB F' C' ' CAMGD?LME' GP NGHC' CF?C' CFG' KM?E' JF OF' &D ' %EOG' F? ' PGH' CA' CFG' JADMN' J? ' HAC' CFG' KM?E' JF OF' F?(KGDG ' ? ' JG' LGM GPG ' K?DCME' @?NG' F ' AJH ' F?(KGDG ' ?OOADN H ' CA' ABD' LGM G> ' N N' JF?C' FG' BHNGDCAA (' CA' NA ' ?HN' KGDF?K ' FG' N N' @ADG' CF?H' FG' HCGHNGN ' G' OA@KMGCGME' DG@ANGMMGN' CFG' OF?D?OCGD' A>' #@AH ' G' MG>C' C' C?HN-H ' ?K?DC' H' C ' H?(GN' KAJGD' ?HN' @?SG CE ' J CFABC' @BOF' DG ?DN' CA' JF?C' BDDABHNGN' C ' C' @ FC' F?PG' LGGH' ?' F? CE' G KGD@GHC' CA' KDA-NBOG' ?' HGJ' OF?D?OCGD' >AD' . BDL? G ' CFG' DG?CG C' A>' ! MT?LGCF?H' ?OCAD ' #F?C' #@AH' ' A' ?MM' H' ?MM' H' CFG' KM?E' U CA' ABD' @HN ' @BOF' LGCCGD' G KM?HGN' LE' CFG' LGM G>' CF?C' F?(KGDG' GH D?>CGN' C' BKAH' CFG' >GGLMGD' #@AH' A>' ?' >GGLMG' ND?@?' CF?C' FGMN' KA G AH' A>' CFG' C? G ' CF?H' LE' CFG' OA@@AH' AK H AH' CF?C' FG ' F?P H ' JD CCGH' CFG' KM?E' GHC DGME ' F? ' MG>C' B ' AHME' ?' OADDBKC' CG C ' AD' MG>C' C' BH> H Z GN' J CF' K?DC ' HAC' AHME' ABC' A>' F?D@AHE' J CF' CFG' ND?@?' ? ' ?' JFAMG ' H' ?OC AH ' H' GHC-@GHC ' H' PGD >O?C AH ' LBC' ?MCA GCFGD' N>>GDGHC' >DA@' ?HECF H ' FG' F?N' F@ GM>' KDANBOGN' H' F ' G?DME ' F ' @?CBDG ' AD' F ' M?CGD' EG?D

C' ' O?DOGME' HGOG ?DE' >AD' B ' PGDE' @HBCGME' CA' >AMMAJ ' CFG' BOOG - PG' K? ? G ' A>' CFG' >ABDCF' ?HN' > CF' ?OC ' H' ABD' GHNG?PABD ' CA' CD?OG' CFG' F?HN' A>' F?(KGDG ' G' @?E ' FAJGPGD ' LD G>ME' KA HC' ABC' CFG' K? ? G ' JF OF' JG' LGM GPG' ' CA' LG' F ' #FG' GOAHN' OGHG' A>' CFG' >ABDCF' ?OC ' LGCJGGH' CFG' CGJ?DN' ?HN' CFG' GDP?HC ' F?' A@G' CABOFG ' BHNABLCGNME' A>' CFG' @? CGD8 ' F?HN ' CFG' CGJ?DN8 ' KGGOF ' ?>CGD' CFG' GDP?HC ' F?PG' MG>C' ? ?H' KDG GHC ' B ' CFG' DFE@H ' OABKMGC ' ?HN' CFG' BH@GCD O?M' LM?H(' PGD G ' #FG' OGHG' LGCJGGH' CFG' AGC' ?HN' CFG' ?HCGD ' ?C' CFG' OA@@GHOG@GHC' A>' CFG' > CF' ?OC ' ' A' BH@GCD O?M ' CF?C' C' F? ' LGGH' KD HCGN' ? ' KDA G' LE' ?MM' @ANGDH' GN CAD ' ?HN' JG' O?DOGME' (HAJ' FAJ' CA' ?PA N' >AMMAJ >M ' CFG' G ?@KMG ' FGCFGD' CFGE' KG?(' H' KDA G' AD' PGD G ' CFG' AGC' ?HN' CFG' ?HCGD' A>' CF ' OGHG' ?DG' ? ' BHM (G' CFG' AGC' ?HN' CFG' ?HCGD' A>' CFG' > D C' ?OC ' H' CFG' CAHG' A>' CFGD' N?-MA BG ' ? ' O?H' LG' JGMM @? HGN ' #@AH ' H' CFG' M HG ' JF OF' FG' KG?(' ? NG ' F? ' O?B FC' CF ' H>GOC AH' A>' BH@GCD O?M' LM?H(' PGD G ' JF OF' DG?N ' M (G' KDA G ' ?HN' S H M H ' OABKMGC ' JF OF' J?HC' CFG' K D C' A>' KAGCDE ' #FG' AMN GD' ?C' #@AH8 ' CA@L' ' @?D(GN' LE' CFG' ?@G' OF?D?OCGD CO

C' ' HAC' LE' MAA(H ' ?K?DC' ?C' CFG' OGHG ' ?HN' K? ? G ' JF OF' JG' F?PG' GHNG?PABDGN' CA' GK?D?CG' >DA@' CFG' BHNABLCGN' OGHG ' ?HN' K? ' ? G ' A>' F?(KGDG' H' CF ' KM?E' CF?C' JG' O?H' D FCME' SBN G' A>' CFGD' H>GD AD CE ' #FGE' @B C' LG' OAHCD? CGN' J CF' CFG' DG?C' OGHG ' A>' CFG' >ABDCF' ?OC ' ?HN' J CF' #@AH8 ' KADC AH' A>' CF ' G CD?ADN H?DE' ND?@?' H' KAJGD' CFA G' OGHG ' ?DG' ?M@A C' BHGQB?MMGN ' #FGE' ?DG' HAC' KMG? H R CFGE' ?DG' A@GC @G ' KA C PGME' DGKBM PG' H' CFG' @? G ' JF OF' CFGE' KDG GHC' CA' B ' LBC' H' ' CFG' CDG@GHNAB ' CDGH CF' A>' K? AH?CG' HPGOC PG' JG' (HAJ' HAC' JF?C' O?H' LG' OA@K?DGN' J CF' CFG@' H' $G?D' CFG' NGGK' K CE' >AD' CFG' >?CFGD' ' ?H' GPGD KDG GHC' >GGM H ' @H M H ' J CF' CFG' CGDDAD' JF OF' FG' KDANBOG ' LE' F ' NGHBHO?C AH ' A>' F ' N?B FCGD ' LBC' H' #@AH' CFG' KAGC' F? ' HAC' AHOG' AB FC' CA' @APG' ABD' K CE ' LE' CFDAJ H ' F@' HCA' ?H' ?CC CBNG' A>' BHN OD@H?C H ' FA C MCE' CA' CFG' FB@?H' D?OG ' FG' O?DOGME' OM?@ ' ?HE' FB@?H' E@K?CFE ' DAKGDME' CA' BHNGD C?HN' CFG' OGHG ' A>' CFG' >ABDCF' ?HN' > CF' ?OC ' JG' @B C' GHNG?PABD' CA' >AD@' ?' GHGD?M G C@?CG' A>' CFG' OF?D?OCGD' JF OF' F?(KGDG' F? ' FGDG' ODG?CGN

#FG' #@AH' A>' F?(KGDG' ' HAC' CFG' #@AH' A>' CFG' KAKBM?D' CAD G ' A>' F?(KGDG8 ' N?E ' #FG' CJGHCE G FCF' HAPGM' A>' = #FG' ?M?OG' A>' MG?-BDGI' F? ' >AD' C ' C CMG ' =' >' CFG' CD?H G' ?HN' " ' H?CBDG' A>' #@AH' A>' CFGH ' GHG@E' CA' @?H(HN I' OOADN H ' CA' CF ' ?BCFAD CE ' =' FG' J? ' ?' @?H' LBC' LE' F?KG' AHME' I R FG' M PGN' =' ?' LG? CME' ?HN' OFBDM F' M >G I' #FG' CADE' >BDCFGD' CGMM ' B ' =' C' CFG' ?@G' C@G' CFGDG' J? ' H' CFGH ' ?HACFGD' A>' M (G' QB?M CE' O?MMGN' KG@?HCB ' A>' CFG' PGDE' ?@G' H?CBDG ' N >GDGHC' >DA@' CFG' H?CBD?M' (HN' A>' @?H I' U' G CFGD' J? ' CFG' #@AH' A>' MB-C?DOF' CFG' #@AH' A>' F?(KGDG ' #FG' +DGG (' L A D?KFGD ' HNGGN ' CGMM ' B ' CF?C' FG' J? ' ?H DE' J CF' ?MM' @GH ' ?HN' JABMN' CDB C' HA' @?H ' =' >AD' CFG' BHCF?H(>BMHG ' A>' CFA G' FG' F?N' NAHG' AAN' BHCA ' ?HN' JFA@' FG' CAA (' CA' LG' F ' >D GHN I' LBC' CF?C' FG' J? ' DGKDG GHCGN ? ' =' ?' P KGD' ?HN' @?M-O AB ' @?H' BHCA' @?H(HN' CA' FBH' ?MM' ACFGD' @GH8 ' OA@K?H G ' LBC' CFG' OA@K?HE' A>' EABH ' MO L ?NG ' ?' LAMN' ?HN' H AMGHC' EABC F ' JFA@' FG' JABMN' DG?CME' >G? C' ?HN' @?(G' @BOF' A>' ?HN' (GN' F @' PGDE' M?NME I' MBC?DOF' ?M A' ?NN ' =' #F ' #@AH' A@GC @G ' JABMN' F?PG' KG@?HCB ' H' F ' OA@K?HE ' LGO?B G' FG' J? ' @BOF' M (GN' CA' F ' H?CBDG' ?HN' OAH-N CAH ' ?HN' ?M A' >AMMAJGN' F @' H' @?HHGD' A>' M >G I' S' #FG' #@AH ' CFGDG>ADG ' A>' MBC?DOF ' ?HN' A>' CFG' KAKBM?D' CAD G ' A>' F?(KGDG8 ' C@G' J? ' M CCMG' N >GDGHC' ' CFG' ADN H?DE' OEH O ' BOF' ? ' FG' ' NG-OD LGN' LE' $BO?H' R =' . BC' HAJ ' CH HN' FAJ' EAB' ?DG' CA' LGF?PG' ' EAB' @B C' LG' LAMN ' ?BOE ' ?HN' ?LB PG' CA' GPGDELANE ' (H ' ?HN' LG ?D ' ?M (G ' CF ' ' CFG' J?E' CA' @?(G' CFG@' MAA (' BKAH' EAB ' ?HN' CF H (' EAB' ?' DG?C' @?H ' , ABD' PA OG' FABMN' LG' L?DL?DAB ' ?HN' EABD' KGGOF' N -AH?HC ' ? ' M (G' ?' NA ' ? ' KA LMG ' EABD' OABHCGH?HOG' D H' ?HN' H->MG LMG ' ?HN' EABD' ?C' ?HN' NG@G?HABD' BC?LMG' CA' C ' GPGDECF H ' EAB' ?E' ?P? G' ?HN' BHOABCF' ' @ANG CE ' GQB CE ' ?HN' @ANGD?C AH ' EAB' @B C' F?PG' HACF H ' CA' NA' J CF ' HGPGD' B>>GD' ?' LMB F' CA' OA@G' BKAH' EABD' OFGG (' ' GG (' CFG' @A C' KBLM O' ?HN' >DGQBGHCGN' KM?OG ' LBC' JFGH' EAB' ?DG' CFGDG ' NG DG' CA' LG' ?MAHG ' ?HN' KGD@C' HG CFGD' >D GHN' HAD' CD?H GD' CA' ? AO?CG' J CF' EAB ' >AD' CFG G' CF H ' ?DG' CFG' DB H' ?HN' NG CDBOC AH' A>' KAJGD' ?HN' G@K DG I' 0' #FG' OAHCD? C' H' F?(KGDG' LGCJGGH' #@AH' ?HN' KG@?HCB ' ? ' NGPGMAKGN' H' CFG' >ABDCF' ?OC ' ' AHG' A>' CFG' @A C' DG@?D(?LMG' KDAA> ' A>' ABD' KAGC8 ' JAHNGD>BM ? ?O CE' H' NGK OC H ' CFG' HOGD' F?NG ' A>' OF?D?OCGD ' 0AFH AH ' KG?(H ' A>' CFG' OGHG' LGCJGGH' CFG' @ ?HCFDAKG' ?HN' CFG' OEH O' H' CFG' >ABDCF' ?OC ' ?E ' =' ' F?PG' FG?DN' & D ' . BD(G' OA@@GHN' CFG' BLCMGCE' A>' N OD@H?C AH' J CF' JF OF' F?(-KGDG' N C H B FG ' CFG' KDG GHC' OF?D?OCGD' A>' #@AH' >DA@' CF?C' A>' KG@?HCB ' JFA@' CA' PBM ?D' GEG ' FG' JABMN' HAJ' DG G@LMG I' #FG' #@AH' A>' F?(KGDG' ' H' @?HE' DG KGOC ' G GHC?MME' N >GDGHC' >DA@' ?HE' @ANGM' J CF' JF OF' JG' ?DG' ?OQB?HCGN ' LBC' C' ?KKDA?OFG ' HG?DGD ' ? ' & D ' (ACCAJG' > D C' AL GDPGN ' CA' CFG' #@AH' A>' $BO?H' CF?H' CFG' OA@-@GHC?CAD ' F?PG' OFA GH' CA' KA HC' ABC R =' C' F? ' LGGH' NGG@GN' ?' ?C -' >?OCADE' OAHOMB AH' CF?C' FG' NGD PGN' HAHG' A>' F ' @?CGD ?M ' >DA@' $BO?H ' LGO?B G' HA' CD?H M?C AH' A>' CFG' N?MA BG' A>' #@AH' ' (HAJH ' CA' F?PG' G CGN' H' F?(KGDG8 ' ? G ' . BC' C' FABMN' D?CFGD' F?PG' LGGH' H>GDDGN ' >DA@' CFG' @?HE' CD (H ' OA HO NGHOG ' LGCJGGH' CFG' KM?E' ?HN' CFG' N?MA BG ' CF?C' $BO?H' F?N' A@G' H>MBGHOG' APGD' CFG' OA@KA C AH' A>' #@AH ' ?MCFAB F' CFG' OF?HHGM' CFDAB F' JF OF' CF?C' H>MBGHOG' J? ' OA@-@BH O?CGN' ' HA' MAH GD' CA' MAG' CD?OGN I' . G>ADG' JG' KDAOGGN' CA' ?H' ?H?ME ' A>' CFG' F?(KGD?H' #@AH ' C' @?E' LG' JGMM' CA' C?(G' ?' D?KN' M?HOG' ?C' CFG' N?MA BG' A>' $BO?H ' CA' JF OF' & D ' (ACCAJG' DG>GD

=' #@AH ' AD' CFG' & ?HCFDAKG I' AKGH ' J CF' ?H' ?NNDG ' A>' #@AH' CA' OBK CGD ' CFG' KDACGOCAD' A>' > DGHN F K' ?HN' A>' FA K C?M CE ' #FG' @ ?H-CFDAKG' ? (' JF?C' F? ' LGOA@G' A>' CFG' AN8 ' CFBHNGDLAMC ' CF?C' FG' HA' MAH GD' DGPGH G ' CFG' J O(GNHG ' A>' @GH ' G' CFGH' NG OD LG ' F ' AJH' O?M?@ C G ' >CGD' F?P H ' GHD OFGN' ?' ODAJN' A>' CFGH ?H ' CF?C' FG' F?N' DG OBGN' >DA@' @ GDER ?>CGD' F?P H ' KDA>B GME' N CD LBCGN' F ' D OFG ' ?@AH C' F ' >D GHN ' CFA G' BH D?CG>BM' @GH' NG K G' F@' LGO?B G' FG' F?' LGOA@G' KAAD' #@AH' KG?(' >DA@' CFG' NG GDC ' JFGDG' FG' ' OMACFGN' J CF' (H ' ?HN' M?LABD ' J CF' ?' K?NG ' OBK CGD' HQB DG ' A>' & GDOBDE' JFA' C' ' OD G ' A' MABN' >DA@' CFG' NGKCF' A>' CFG' P?MMGE' HG?D' & ABHC' E@GCCB ' ?HN' & GDOBDE' ?H JGD ' CF?C' FG' ' #@AH R CF?C' D OF' @?H' JFA' A' >DGQBGHCME' A>>GDGN' J FAMG' FGO?CA@L ' CA' CFG' AN ' ' ?HN' ?NN ' CF?C' C' J? ' ?C' >D C' CFAB FC' CF?C' FG' J? ' CFG' P OC@' A>' F ' AANHG ' F

KFMJ?HCFDAKE' ?HN F5 ' 0A@K? DAH >AD CFG BH>ADCBH?CG'LBC CF?C FG AB FC CA' ?CCDLBCG' F5 ' >?MM CA' CFG L?N' 0FAUOG' JF5OF' FG @?NG' A>' F5 ' >DGHN ' ?HN' CA' CFG J?HC' A>' N5 OGDH@GHC' JF5OF KDGPGHCGN' F=@' GGH ' CF?C FG' J?' FGJ?KH ' LGHG>JC ' BKAH' JAMPG ' ?HN' D?PGH ' =;' FDM C CFG G PBMCBD5 ' JGDG KDGEBH ' BKAH F5 ' M5PGD' FG CFAB FC CFG@' F5 ' LG C F?MM LG' @E' F?LC?CDAH ' ?HN' JFGH ' ?@' NG?N' @E' GKBMOFDG ?M A' >DA@' CF5 ' C:@G ' >ADCF 5C B ' @E' >5 GN' DG AMBCAH' CA' F?PG' HA' OA@@GDOG' AD OAHHGOCDAH' JCCF @?H(HN' LBC' CA' NG KB G ?HN' ?PAUN' 5C' ' JUMM K?E HA' DG ?DN' CA' ?OQB?JHC?HOG' >DGHN FBK' KJCE' AD' 0A@K? BAH ' CA' KJCE CFG N5 CDG GN' AD' CA' DGMGPG' CFG JHN5 GHC' ?M ' ?' J5?(HG R H?E' ? '?' OD5@G ' @E' M>G'M5(G CFG' LG?' C ' A>'CFG' >GMN' F?MM LG' KGHC'JH' AMJCBN5' ?HN' #J@AH' ?MAHG F?MM LG' #J@AH8' >DGHN' ' JUMM CDG?C ?MM LG NG ? ' GHG@JG ?HN' LGCD?EGD ' CA' OAHP5D G' JCCF CF5@' CFGD' J? ' ?HE @?DDAJ'JH' CFG@' ' BO(GN'5C O?DG>BMME' ABC' CFGE' MG>C' F5@' CFGD' OBC NAJH' CA' CFG' DAAC ' ?HN' JCFGDGN' ?HN' A' >?D' >DA@' DGMGPJH ' AD ? 5 CJH ' F5@' JH' CFGD' CBDH ' JABMN' HAC' A' @BOF' ? ' (HAJ' AD' MAA(' BKAH F5@' #F5 ' F?' @?NG F5@' CBDH N5 GD ' ?HN' F5DG'JH F5 ' (JH ?D@GHC' FG' CMM' CFG G?DCF >AD' F5DG ' ? F?@GN' CA' FAJ' F5@ GM>' JH' CFG OJCE' ?HN' PGHCJH ' F5 ' D? G' ? ?JH C' CFG' JH D?CJCBNG' A>' CFA G' JFA' GHD5OFGN' ? ' CFGE' F?N' LGGH' LE' F5@' HAJ' KDABNME' K? ' ?MAH ' ?HN' (HAJ' HAC' JFGCFGD' F5 ' H?@G 5 ' #J@AH 1' 0BK5CGD' DG AMPG ' CA' N5 - K?COF &'GDOBDE ?HN' MBCB ' CA' LG CAJ' HGJ' JG?MCF' BKAH' #J@AH ' ?HN' CFG' AN' A>' D5OFG ' PGDE' DGMBOC?HCME' OAH GHC ' CA' A ' LGO?B G'5' FG' DGCBDH CA'#J@AH'FG' FABMN' ? ?JH' LGOA@G' CFG' KDGE A>'K?D? JCG ' ?HN' OABDCGT?H ' #FG' BL GQBGHC' N?MA BG' LGCJGGH' &'GDODBDE' ?HN' MBCB ' BKAH' CFG' B G A>' DJOFG ' 5 ' G OGGN5H ME' ?ODCG' ?HN' ?@B JH ' #FG' AN 8' BKAH ?KKDA?OF5H ' #J@AH ' NG ODE F5@' JAD(JH ' JJCF' F5 ' K?NG ' JH 0A@K?HE JJCF $?'LABD' APGDCE' 5 NA@' ABD?' G ' ?HN' ?MM' CFG' P5DCBG ' CF?C ?DG 0A@G' CA' >JHN' #J@AH ' ?HN' ? ' CA' @G' JFA' F?PG' DGOG5PGN' F5@' GHGDP?CGN' LE' MB BDE' FG' JABMN' >AD ?(G @G' JFGH ' F?PG' DGHNGDGN' F5@' P5DCBAB ' EAB' 0A@G' CA' GHD5OF F5@' ?HGJ ' JF5OF' JDMM' DGHNGD' F5@' ? ' LG>ADG ' NMG' G>>G@H?CG' ?HN' LG ACCGN I' #J@AH' DGSGOC ' CFG' A>>GD ' JF5OF' MBCB ' @?(G ' F5@ ' ?HN' CFG' AN 'MG?PG' F5@ 'NG 5DJH 'F5@' CA'0AHC5HBG' N5 JH ' G' CFGH' >JHN ' AMN' ?HN' CFB ' ?KA CDAKF5TG ' 5C R =' C' 5 ' 5C @B C LG' AMN' >JHG' EGMMAJ ' HALMG AMN ' FG?PE' JGGC' CA' LGFAMN .BDH5H ' M5(G >JDG 'CFAB' F5HG C N?E' ?HN' H5 F5C' 0AG' @G 'CFAB' NG?D' NGM5 F5C'BM' CDG? BDG ' HAJ'NA' 'LGM5GP5'CF?C0AP5G'F5@ GM>' J? ' AH0G' CBDH5GN CHCA' AMN' ' JF?C P5D 5H J'ABMN' HAC' KDG?N' FGD' LA A@' CA' DGOG5PG' KM?E JF5OF J5' ?DG 0AHP5HOGN' FG D@ANGMMGN' C' 5 ' 5H CFG 0AHOGK5AH ?HN CFG 0F?D?OCGD A>' CFG OF?D?OCGD' A>' #J@AH' CF?C CFG AD5 5H?M KAJGD A>' F?(KGDG 5 ' CA' LG' CD?OGN .XH'HMO'NHP' 9O'MG 1T'K 17PKN IM T8 HP' I JNHG'NHP'N 1QJPG'NHP'PTPG'MiO'HPM NG' 7 IPI' #N'OJNT' I P'NHMI?'K J9O'7 MIP'PIL9 TIPIN8 HNM'iJ1AP 9PGG'JL i'IP'GNJKU'MG 9PM PG 5 ' i'NHP' MU'HM P' NH' IP' INP %G A JGH' OP99'7 1'NHP' A JQHG'MiO'9P7N IP' LPi'AM P' O 'P P TGN 1'NHMN' A9 G+R

#FG' ?MM ?L ADL5H 'NG>GOC A>'#J@AH R CFG DAAC' A>' CFA G GHGDAB 'PJOG ' LBC' FG F?' HAC5FH ' GN>5 F 5H' CFG GHSAE@GHC' A>'F5 ' KDAN5 ?M5CE ?HN' F5 ' @? H>5OGHOG' G' F5@ GN>' CDBME G KDG G ' CFG' JG?(HG ' ? ' JGMM ? ' CFG' LG?BCE' A>' F5 ' AJH' 0F?D?OCGD' A>' N5 OD5@H?H8 ' $BO'?H8 ' F?(KGDG @E' GM>' CDBME G KDG ' CF?C ' JGMM ? ' LE' JF5OF' JG?D' CFG ' ?DL' A>' P5DCBGR 5 ' CFG GHC5DG 'JH' $BO'?H8 ' F?(KGDG ' ?M A' O H?D?OCGD5TGN' JH' FGN' LGHG>JC ' ?HN' JF?C LGCCGD' AD' KDAKGDGD' 0?H' JG' 0?MM ABD' AJH' CF?H' CFG D5OFG ' A>' ABD' >D5GHN 'W ' JF?C' ?' KDGO5AB ' 0A@>AD5' 8C5 ' CA' F?PG' A @?HE' M5(G LDACFGD ' 0A@@?HN5H ' AHG' ?HACFGD8 ' >ADCBHG ' I' F?DMG ' $?@L ' JH' F5 ' OAHCD? C' LGCJGGH' #J@AH' A>' CFGH ' ?HN' A ?DCF8 ' = "?(G8 ' DA DG I' JF5OF' JG' F?PG QBACGN ?' ?H' JMMB CD?C5AH' CA' OC' ' F?' O?DOGME' NAHG' 5B C5OG' CA' #J@AH ' A ?DCF8 ' "?(G' 5 ' ?MM' GH B?MCE'?HN' GM>5 FHG ' #J@AH' 5 ' GHC?MME F5 F @5HNGN' ?HN' GHGDAB ' ' FG' CDBME ?E ' JH' CFG' >D C OFDMM A>'F5 ' >ADCBHG C' 5 ' 99M i JG'A JNT'TPH'HMNH'LMGG%O' I'TPM N+ i GP9T'i N' QI A9T'HM P'2'Q pi+%%

H' F5 ' KMGHN5N' KGGOF' CA' KG@?HCB ' JH' CFG' >ABDCF' ?OC' FG' N5 - C5HOCME' KDAOM?5@ ' CF?C' JH' CFG' JG?(HG ' JJCF' JF5OF' FG' F?N' M?P5 FGN' F5 ' >ADCBHG ' BKAH' CFG' BHJADCFE' FG' F?N' HAC' K?@KGDGN' F5 ' AJH K? 5AH R

/" "MOGN'NH J'9 UP'JG'7 I' J'7 GN'G MNH'L KPPOPO' HP'G PPN'OPQ PPG'NHMN'NH G A P7' 9O'M?9O O5 '5GJKH'M5 IMT'NHP'LMGG P O JQG' 7' N' O PP9T'K I IMIO'NH J' J9OGN'HM P'LJJIQ%O'NHTGP97' 2i'5QPIP M9' N8 IP9NPO' O i'NHT'T JNH' 2i'O 77P PiN'APOG' 7'9JGN8 MiO'IP P'9PM i%O' HP' KT'L PKPLNG' 7' PGLPK1'AJN'7 99 %O' HP'GJQM %O'QM I P'AP7 P' NHPP+' JN' ITGP97

O Q P' I T QPIP M9 MiO' PWKPLN9PGG MGHiPGG
4 J'LP LPNJM9 G AP'Q OG[2'O'L K9M I'
1IP'H IPGN IMI SI GNMN' NHP '9 I AG I MT'HM9N
#'G'9M I P9T' MG NHP 'I MIip G[9JGN MiO'9 AP NT'
PPL' i'NHP I iOG'MiO' I M G 7 J'T JNH'
HMN' %QM iGN' NHP' GN PM I' 7' NJP' NHPT I MT' GN p+
iO'O i' NHP I GP9 PG' i' N[NKHPG' A9M iG+
'M99' NHP' #NHPi MI'A G I G8 MiO' NHP 'K L'
P' QPiP M9 9PL GT'[A PMNH' i'PKN' A PMNH' 8
HMN' NHP 'G K PNT' MG' NHP '7 PiOGH L' I MT'
P' IP 9'T L G i'?R

ACF=H ' 0?H' LG' @ADG CDG@GHNAB ' CF?H' CF=' !@KDG0?CAH R HACF=H '
BHNGD' CFG' 0=D0D@ C?HOG ' @ADG CDBG ?HN' H?CBD?M

C ' AL GDPGN' LE' *MD=O' CF?C CFG @= ?HCFDAKE' A;' #=@AH' = ' ? '
=NG?M'TGN' ? ' F=' 'KF=M?HCFDAKE' ,', .BC' ? ' CF?C' =NG?M'TGN' KF=M?HCFDAKE'
;]' ?' F=' M:>G8 ' GMG@GHC' CFG' GQB?MME' =NG?M'TGN' @= ?HCFDAKE' J ? ' ?' OFA(G '
N?@K ' H' JF=OF' FG' OABMN' HAC' MAH ' LDG?CFG' F=' NG CDAE=H ' D? G
? ?H C F=@ GM>' ?HN' ?MN FBG?'H ('HN' @B C A;' ABD G >D C NG CDAE'
F=@ GM>I' AH =NGD=H ' #=@AH8 ' ?DC=>O=?M MAPG' A;' @?H('HN' ?HN' F=' '
?DC=>O=?M F?CG' ? ' CFG' DG BMC ' A;' CFG' ?@G =MN DG BM?CGN' CG@K GD?@GHC'
JG O?H'?KKDGO=?CG CFG' LG?B=>BM' N=' C=HOC=AH' JF=OF' F?(KGDG' F?' ND?JH'
LGC'JGGH' CFG' =HCGMMGOCB?M' OEH=OI @' A;' KG@?HCB ' ?HN' CFG' K? =AH?CG'
@= ?HCFDAKE' A;' #=@AH' #FG' @= ?HCFDAKE' A;' #=@AH' ! ' HAC' KD?OC=O?M'
R C' J? CG ' C ' GM>' H' GHGD?M= ?C=AH ' CFG' @= ?HCFDAKE' A;' KG@?HCB '
! ' HAC' =NGD=H ' F=' @= ?HCFDAKE' >A;' #=@AH' ! ' >?M G
5 GN' L9PMGP' NHTGP97' i %N +\
- ' #T+
' X HMN[M' UiM P' N '\'R

#FG' AMN=GD' CFG OABDCGT?H' CFG CF=G>' ?DG GQB?MME' =HOMBNGN' =H' #=@AH8 '
>=GDE' NGHBHO?C=AH ' LBC' CFGE ?DG ?MM' GQB?MME' D?C=>=GN' =H' G GHC=?M '
#FG' GOB?H=@=CE' J=CF' JF=OF' CFG' >?=D' OA@K?H=AH ' A>' =MO=L=?NG

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E

! ' JKHGM7P' I T' 9MA J ' M!O' 9 !Q' 9 P' T J ' 9 OGH L[
' 2' NHM!U' T J8 T J' GHM99' HPM ' 7 I ' I P' M! !'
: ' ! N' M MT+ SDXHMN' HM P' T J' NHP P ' I T' 7 P!O' \
' #' L PKP' 7' LM !N !Q ' H KH' 2' O ' APGPPKH'
4 J ' 9 OGH L' N ' MKKPLN+
' - M !N !Q' G P9K I P+
HP' LM !N !Q' G' M9 I GN' NHP' !MNJ M9' I M!'8
0 ' G !KP' O GH ! J ' N M77 KG' NH' I M!%G' !MNJ P+
" P' G' AJN' JNG OP' ' HPGP' LP!K 9%O' 7 QJ PG' M P'
3 P!' GJKH' MG' NHPT' Q P' JN+' 2' 9 UP' T J ' U8
#!O' T J' GHM99' 7 !O' 2' 9 UP' N ' M N' MNNP!OM!KP'
99' T J' HPM ' 7J NHP ' 7 I ' I P+
' HP' Q OG' L PGP P' T J' [
' X P99' 7M P' T J ' QP!N9P I P!' ' : P' I P' T J ' HM!O' '
X P' I JGN' !PPOG' O !P' N QPNHP +S ' T J ' EP P9'
" MNH' GJ77P %O' J!OP ' L M GP+
J ' X HMN ' I T' 9 O' \ O GL M GP' \
+ ' #' I P P' GMN PNT' 7' K I I P!OMN !G+
27' 2' GH J9O' LMT' T J' 7 %N' MG' $N G' PWN 99%O+
2N' J9O' J!K9P ' I P']J NP+
J 2' T' 9 O ' %N G' MNPO
#G' NH GP' H KH' GP99' J9O' Q P ' JN' T J' P99' U! +'
H !QG' 7'9 UP' M9JP ' O 77P !Q' !' NHP' !P G+
P' L CPO' AT' NHP ' I MGNP G' ' AP9 P P%N ' OPM ' 9 O+
4 J' I P!O' NHP' EP P9' AT' NHP' PM !Q' N+
' X P99' I KU%O+
E ' ' I T' Q O' 9 O8 HP' GLPMUG' NHP' K I I !' N !QJP+'
X H KH' M99' I P!' GLPMU' NH' H I +
' / U ' HL' K I PG' HP P+' X 99' T J' AP' KH O' \

' " (

J 2' X P' 99' APM ' NH' T J ' 9 OGH L+
E ' + " P%99' GLM P' ! !P+
' : O' I ' N ' NHPP ' QP!N9P' # LP I M!NJG' [
, ' 979' AP' QP!N9P ' GNMT' NH J' 7 ' NHT' Q O' I 8'
X HP!' NH J' M N' I !%G' O Q ' M!O' NHPGP' U!M PG' H !PGN+
' X HT' O GN' NH J' KM99' NHP I ' U!M PG' \ NH J' U! %GN'
NHP I ' ! N+
, ' # P' NHPT' ! N' # NHP! M!G' \
' 4PG+
, ' HP!' 2' PLP!N' ! N+
J 2' 4 J' U! ' I P' #LP I M!NJG+
, ' H J' U! %GN' 2' O ' 8 2' KM99PO' NHPP' AT' NHT' !M I P+
' H J' M N' L JO ' #LP I M!NJG+
, 0 ' 17' ! NH !Q' G ' I JKH' MG' NHMN' 2' M I ' ! N' 9 UP' I !+
' X H NHP ' M N' Q !Q' \
, ; ' ' U! KU' JN' M!' H !PGN' # NHP! M!%G' A M !G+
' HMN%G' M' OPPO' NH J%9N' O P' 7 +
, ' & QHN ' 7' O !Q' ! NH !Q' AP' OPMNH' AT' NHP' 9M +
' " ' 9 UPGN' NH J' NH G' L KNJ P ' #LP I M!NJG' \
, ' HP' APGN ' 7 ' NHP' !! KP!KP+
' X JQHN' HP' ! N' P99' NHMN' LM !NPO' N' \
, ' O P' JQHN' APNNP ' NHMN' I MOP' NHP' LM !NP 8' M!O'
TPN' HP%G' AJN' M' 7 9NHT' L PKP' 7' U+
' 4 J' M P' M' O Q+
, ' HT' I NHP %G' 7' I T' QP!P MN !' ' X HMN%G' GHP ' 7' 2'
AP' M' O Q' P
' X 9N' O !P' NH' I P ' #LP I M!NJG' \
, ' ' 8 2' PMN' ! N' 9 OG+
' #!' NH J' GH J9OGN ' NH J%OGN' M!QP ' 9MO PG+
, ' 1 ' NHPT' PMN' 9 OG' 8 G ' NHPT' K I P' AT' Q PMN' AP99 PG+
' HMN%G' M' 9MGK JG' MLL PHP!G !+
, ' ' NH J' MLL PHP!O$GN' N ' MUP' N' 7 ' NHT' 9MA J +
' " ' O GN' NH J' 9 UP' NH G' EP P9 ' #LP I M!NJG' \
, ' N' G ' P99' MG' L9M ! OPM9 !Q ' H KH' 99' ! N' K GN'
M' I M!' M' O N+
' X HMN' O GN' NH J' NH !U' %N G' NH' \
, ' N' NH' I T' NH !U !Q+ S " ' ! ' L PN'
! ' " ' ! ' LH 9 G LHP ' \
, ' H J' 9 PGN+
! ' # N' ! N' !P' \

, ' 4PG+
! ' HP!' 2' 9 P' ! N+
, ' # N' ! N' M' L PN' \
! ' 4PG+
, ' HP!' NH J' 9 PGN ' 9 U' !' NHT' 9MGN' U ' HP P'
NH J' HMGN' 7P Q!%O' H I ' M' NHT' 7P99 +
! ' HMN%G' ! N' 7P Q!%O ' HP' G' G +
, ' 4PG ' HP' G' NHT' 7' NHPP ' M!O' N ' LMT' NHPP' 7 ' NHT'
9MA J ' " P' NHMN' 9 PG' N ' AP' 79MNNP PO' G' NHT' %NHP' 79MN_
NP P +' " PM P!G ' NHMN' 2' P P' M' 9 O' [
' X HMN' J9OGN' O ' NHP! ' # LP I M!NJG' \
, ' 3 P!' MG' # LP I M!NJG' O PG' ! ' HMNP' M' 9 O' # NH
I T' HPM N+
' X HMN ' NHTGP97\
, ' #T+
' X HP P7 P' \ +
, ' HMN' 2' HMO' ! ' M!Q T' N' N ' AP' M' 9 O+S # N' ! N'
NH J' M' I P KHM!N' \
E ' #T ' #LP I M!NJG+
, ' M77 K' K !7 J!O' NHPP ' 7' NHP' Q OG' 99' ! N[
E ' 27' N M77 K' O ' N ' NHP' Q OG' O ' N+
, ' M77 K%G' NHT' Q O ' M!O' NHT' Q O' K !7 J!O' NHPP[

& , -' -!& "' ' ' P M!N+

' X HMN' N J I LPN%G' NHMN' \
7 1' % G' # 9K A MOPG ' M!O' G I P' N P!NT' H GP+
#99' 7' K I LM! !GH L+
' - MT' P!NP NM !' NHP I ' 8' Q P' NHP I ' QJ OP' N ' JG+S
= 4 & ' -! ' # NNP!OM!NG+'
4 J' I JGN' !PPOG' O !P' NH' I P' S : ' ! N' T J' HP!KP'
99' 2' HM P' NHM!U$O' T J8 HP!' O ! !P %G' O !P+
H ' I P' NH G' L PKP+ S2' M I ' E T7J9' 7' T J ' G QHNG+

' $ $ ' 2 ' -' ! , 5

GN' P9K I P' G [= 5' - &
, ' G 8 NHP P' [,S
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HMN' NHP P' GH J9O' AP' G I M99' 9 P' %I !QGN' NHPGP' G PPN'
U!M PG+
#!O' M99 NH G' K J N%GT' ' HP' GN M !' 7' I M!%G' A PO' JN'
2!N ' AMA !' M!O' I !UPT+D
(' ' T J' HM P' GM %O' I T' 9 !Q !Q ' M!O' 2' 7PPO'
GN' HJ!QP 9T' !' T J ' G QHN+
& QHN' P9K I P ' G +
3 P' P' OPLM N ' P%99' GHM P' M' A J!NP JG' N I P'
2!' O 77P P!N' L9PMGJ PG+' - MT' T J ' 9PN' JG' !+
= 4 & '" ' (' " = (

' 2!' / OG+

' ?! "' X HMN' N I P' M' OMT' G%N ' # LP I M!NJG' \
, ' I P' N ' AP' H !PGN+
(?! "' HMN' N I P' GP PG' GN 99+
, . ' HP' I GN' MKKJ GPO' NH J' NHMN' GN 99' I NN%GN' N+
% ?! "' H J' M N' Q !Q' N ' 9 O' I !%G' 7PMGN+
, ' # T8 N ' GPP' I PMN' 7 99' U!M PG ' M!O' !P' HPMN' 7 9G+'
% ?! "' OM P' NHPP' P99 ' 7M P' NHPP' P99+
, ' H J' M N' M' 7 9' N ' A O' I P' 7M P P99' N KP+
% ?! "' X HT ' # LP I M!NJG' \
, ' H J9OGN' HM P' UPLN' !P' N ' NHTGP97 ' 7 ' 2' I PM!' N ' Q P' NHPP' ! !P+
' ?! "' " M!Q' NHTGP97+
, ' 2' 99' O ' ! NH !Q' MN' NHT' A OO !Q8 I MUP' NHT'
P]JPGNG' N ' NHT' 7 P!O+
% ?! "' # MT ' J!LPMKPMA9P' O Q ' ' 2%99' GLJ !' NHPP' HP!KP+'
, ' 2' 99' 79T' 9 UP' M' O Q ' NHP' HPP9G' 7' NHP' MGG+' = 4 *'
2 ?! "' " P%G LL G NP' N ' HJ I M! NT+' I P' GHM99' P' !+

' H G' G' L !NPO' MG' L GP' !' NHP' Q !M9+' @ PP' 2!N OJKN T' N KP+ '
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-0 1*'',*+ ' 1 -0 1 (+-+%9% *2% %J
:-+ <:+(*:-7% 2-+%0 1 %SB%,(%
(:-0 %-7% * %-,(F

1/ /

HMN G' ip lMT pMKH OPPL'pi JQH'MiO'TPN
O iO'9 NN9P+
' 2%9' GH 'T J'7PM'7 'NHMN+
4 J'9 O'GPiOG'i '7 'l ipT+
i ' GN'N JP'HP'O PG+
' #iO'HP' PM GEP p9G'i '7 l i%G Q 7N+
O ' H KH'?' M N'7 'l ipT+
> 1' ' XP' MN'7 'KP NM i' l ipT'HP p'G +
27'l ipT' p P'MG'KP NM i'MG'T J' M N iQ
% p P'GJ p'pi JQH+
XHT'NHPi'L p7P %O'T J'i N'T J'GJ1G'MiO'A 99G+
XHPi'T J'7M9GP'lMGNP G'pMN' 7 lT'9 O%G'lPMN\
HPi'NHPT'K J9O'Gl 9P'MiO'7M i'JL i'H G'OPANG+
#iO'NMUP'O i'NH% iNP pGN' iN'NHP 'Q9JNN i JG' lM G+
4 JO'T J GP9 PG'AJN' iQ'N 'GN 'lP'JL'8
/PN'lP'LMGG']J pN9T'
P9 p P%'lT'9 O'MiO?'HM P'lMOP'Mi'piO8
?'HM P'i 'l P'N ' PKU i'HP'N 'GLPiO+
?& '7 1' #T'AJN'NH G'Mi G p' 99 i N'GP p+
> 1' 27'% 99 i N'GP P'% G i N'G 'AMGP'MG'T J'8
O 'T J'GP P'UiM PG+ + 4
' ' [HMN' O PG H G' KMGH p %O' GH L'
lJNP'\
% '7 1' ' lMNNP ' HM%8 HP%G L ' MiO' NHMN%G
p piQP'pi JQH+ XH 'KMi'GLPMU'A MOP'NHMi'HP'NHMN'HMG
i 'H JGP'N 'LJN'H G'HPMO'i'\ JKH' lMT' M 9' MQM iGN' Q PMN'
AJ 9O iQG+

' 1'HP P%G p 9 JG'8 i ' P'GHM99'Ui 'G lP'MiG p +
7 '27'2' l QHN' APGPPKH' T J'QPiN9p lpi'N ' pLM 'G lP'
NHP'H J '2'GH J9O'OP P' l JKH'7 l%' 7 ' NMUP%' 7 lT

' 3

%' 7 ' GN' JP'8 NHP'9M 'GHM99'A J GP'H I+
2 7 ' 4 H'KMii N' IMUP'Q GG'G iG'9 U'K9PM 8
' p piQP' G' i ' M9 J 'AJN'NL'APM +
(' T'9 OG'NHpi'JiOP'7M J'LM O i'Ip+
27'2'GLPMU'9 UP'M'KMLNM i+S
XHT'O'7 LO' Ipi'pWL GP'NHPI GP9 PG'N 'AMNN9P+
#iO'i N'piOJ p'M99'NH pMNG'\ G9PPL'JL i%+
#iO'9PN'NHP'7 PG]J pN9T'KJN'NHP 'NH MNG'+
X NH JN' pLJQiMIK'T'c 2 7'NHP P'AP
JKH' M9 J ' i'NHP'APM iQ' HMN'IMUP' p
#A MO'\ HT'NHPi' Ipi'M P'I P' M9 MIN+
HMN'GNMT'MN'H Ip' 7'APM iQ'KM T' N8
#iO'NHP'MGG'I P'KMLNM i'NMMi'NHP'9 i'8
HP'7P9 iD'9 MOPi' NH' iG' GP'NHMI'NHP'EJOQP+
27' GO 1'AP' i'GJ77P iQ+' 1'IT'9 OG+
#G'T J'M P'Q PMN'AP'L N 77JT99'Q O'
XH 'KMii N'K iOPIi' MGHipGG' i'K 9O'A9 O'\
'U 99'2'Q MiN' G G i%G PWN pl pG'Q JGN8
$ JN' i'OP7PiKP'AT' Ip KT'$N G' I GN'EJGN+
'AP' i'MiQP' G IL PNT8
JN' H ' G IMi'NHMN' G i N'MiQ T'\
XP QH'AJN'NHP'K IP' NH'NH G+
%'7 ' 4 J'PMNHP' i' M i+
' (' 2i' M i'\H G'GP KP'O ip
#N'/MKPOMPl i'Mio' TCMiN JI'
XP P'M'GJ77 K piN'A AP'7 'H G'9 7P+
2 7 ' XHMN%G'NHMN'\
(' XHT'2'GMT I T'9 OG'H%MG'O IP'7M 'GP KP+
#iO'G9M i'i'7QHN' IMIT' 7T J'pipl pG'8
" '7J99' 7' M9 J'O O'HP'APM'H I GP97
2i'NHP'9MGN'K i79 KN'MiO' IMOP'L9piNP JG' JioG'[
%'7 ' "P'HMG' IMOP'N ' I JKH'L9piNT' NH'%Pl+
" P%G'M' G i' NP 8 HP'HMG'M'G i

% F ' :%' *2< -',-'(. D*:,(*,' -O*B+%O' ' * ;:@:' (' @ %-2 1
*2%' -@@*2O-,'f' ; +D'+:%'@*,+%S+
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HMN' 1MUPG'NHP'GPiMNP'JQ9T+
27'NHP P' p P i'7 pG'NHMN' pP'pi JQH'F
' pK IP'H I'' i'NHMN'APMGN9T'7J T
"P'HMG'APPi'Ui i'N'K II N' JN MQPG
#iO'KHP GH'7MKN iG'%G i7P %O'N 'JG+
" G OMTG'M P'7 J9'MiO'H G O iU'OMiQP JG+
2 7 ' "P'O PG+
(' "M O'7MNP'[HP'I QHN'HM P'O PO' i' M +
T'9 OG'7'i N'7 'MiT'LM NG' i'H I+
;@ H JQH'H G QHN'M I'I QHN'LJ KHMGP'H G i'N IP+
#iO'AP' i'OPAN'N'i ip 'TPN'I P'N'I P'T J+
MUP'IT'OPGP NG'N'H G'MiO'E i'%PI'A NH
#iO'7 '2'Ui 'T J'P PiO'MQPG'9 P'GPKJ NT
2%9'LM i'IT' KN PG'M99'IT'H i J'N 'T J+
L i'H G'Q O' PNJ iG+
27'AT'NH G K IP'HP' PG'NHP'9M 'H G'9 7P'
XHT'9PN'NHP' M' pKP P%' i' M9 MIN'Q P'8
O '9M 'G GN KN'MiO' M'G i NH iQ'I P+
2 7 ' XP'M P'7 '9M '' HP'O PG8 J QP' N'i ' I P+
1i'HP QHN' 7' J'O GL9PMGJ P'' O pio' 'A NHP +
"P'7 7P'NG H G' i'A9 O'NHMN'GL 99G'Mi NHP +
' JGN' N'AP'G '\ N' I JGN'i N'AP+' T'9 OG+
2'O 'APGPPKH'T J'Ui 'IP+
2 7 ' O9 \
(' M99 IP'N 'T J' PIPIA MiKPG+
)'7 ' X HMN'\
('2'KMii N'NH iU'AJN'T J'MQP'HMG'7 Q N' I P8
2N'K J9O'i N P9GP'AP'2'GH J9O'L P'G 'AMGP+
'GJP'MiO'AP'OPi PO'GJKH'K I I i'Q MKP'
T' JioG'MKHP'MN'T J+
2 7 ' 5 'T J'OM P' J'MiQP'\
% G i'7P ' OG'AJN'GLMK JG i'P77PKN8
X P'AMi GH'NHP'7 'P P+
(' Mi GH' IP'\
Mi GH'T J'O NMQP'8 AMi GH'JGJ T+

HMN' 7NPi'O iG H I'Mio'MMUPG'H G' M9 J'L G ip'
27'NHP P' P P i'7 pG'NHMN' P P'pi JQH'F
' pK IP'H I'' i'NHMN'APMGN9T'7J T
"P'HMG'APPi'UI i'N'K II N' JN MQPG
#iO'KHP GH'7MKN iG'%G i7P %O'N 'JG+
" G OMTG'M P'7 J9'MiO'H G O iU'OMiQP JG+
2 7 ' "P'O PG+
(' "M O'7MNP'[HP'I QHN'HM P'O PO' i' M +
T'9 OG'7'i N'7 'MiT'LM NG' i'H I+
;@ H JQH'H G QHN'M I'I QHN'LJ KHMGP'H G i'N IP+
#iO'AP' i'OPAN'N'i ip 'TPN'I P'N'I P'T J+
MUP'IT'OPGP NG'N'H G'MiO'E i'%PI'A NH
#iO'7 '2'Ui 'T J'P PiO'MQPG'9 P'GPKJ NT
2%9'LM i'IT' KN PG'M99'IT'H i J'N 'T J+
L i'H G'Q O' PNJ iG+
27'AT'NH G K IP'HP' PG'NHP'9M 'H G'9 7P'
XHT'9PN'NHP' M' pKP P%' i' M9 MIN'Q P'8
O '9M 'G GN KN'MiO' M'G i NH iQ'I P+
2 7 ' XP'M P'7 '9M '' HP'O PG8 J QP' N'i ' I P+
1i'HP QHN' 7' J'O GL9PMGJ P'' O pio' 'A NHP +
"P'7 7P'NG H G' i'A9 O'NHMN'GL 99G'Mi NHP +
' JGN' N'AP'G '\ N' I JGN'i N'AP+' T'9 OG+
2'O 'APGPPKH'T J'UI 'IP+
2 7 ' O9 \
(' M99 IP'N 'T J' PIPIA MiKPG+
)'7 ' X HMN'\
('2'KMii N'NH iU'AJN'T J'MQP'HMG'7 Q N' I P8
2N'K J9O'i N P9GP'AP'2'GH J9O'L P'G 'AMGP+
'GJP'MiO'AP'OPi PO'GJKH'K I I i'Q MKP'
T' JioG'MKHP'MN'T J+
2 7 ' 5 'T J'OM P' J'MiQP'\
% G i'7P ' OG'AJN'GLMK JG i'P77PKN8
X P'AMi GH'NHP'7 'P P+
(' Mi GH' IP'\
Mi GH'T J'O NMQP'8 AMi GH'JGJ T+

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) %'2%&'%(f+:%'2%-O%28'(-++%,'+ * ',+*'+:% B-((-<%' ',+:% ,+2*O'@+*21' *+@%
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' ?i "' 2N'GH J9O' i N' AP'AT'NHP'LP GJMG i' 7HG'ip ,
7PMGN IQ+
' ?i "' 2' GH J9O'NH iU' G '6 "P'HMNH'GPiN' lP'Mi';PM IPGN
i N IQ' HK'H' IMIT' IT'IPM' kKMG iG OO'J QP' lP'N'
LJN' 778 AJN'HP'HMNH'K iEJ PO' lP'APT iO'NHPl'MiO'2' lJGN'
IPPOG'MLLPM +
' HiUi N' i%'G +
% ?i "'27'T J'HMO'GPiN'AJN'N 'H J G'AP7 P S
' /PN' N' i N' KJlAP'T J' APNNP' PlPlA MiKP+S'
lP'A iQ' i'M99'N QPNHP +
%'?i "' #99'K P PO'O GHPG'[
2?i "' &' TM9'KHPP '2' M MiN'T J+
)'?i "' 5 JAN' i N'NHMN' 7 l iPT'MiO'NHP'GPMG i' KMi'
T P9O' N+
2?i "' " 'O'T J'\ XHMN%G'NHP'ip G\
)' ?i "' #9K A MOPG'G'AMi GHPO' "PM'T J' 7 N'\
9 X'\'?i "' #9K A MOPG'GJ P' 7 N+
)' ?i "' % G G 'AP'GJ P' 7 N+
'?i "' " '\H ',\
%'?i "' 2'L MT'T J'JL i' HMN'\
' T NHT'7 piOG' 99T J'O M 'ipM'\
)'?i "' 2%9Y'NP99'T J' l P'Mi i+' "p p%G'N' i A9P'7PMGN'
N M O+
%'?i "' H G G'NHP' 9O' lMi'GN 99+
)'?i "' X 99%'H 9O' 99%'H 9O'\
%'?i "' 2N'O PG' AJN'N lP' 99SMiO'G S
)'?i "' 2'O 'K ikP P+
' 3MKH' lMi'N 'H G'GN 9' NH'NHMN'GLJ'MG HP' J9O'
N 'NHP'9L' 7HG' l GN pGh'T J'O PN GHM99'AP' i' M99'L9MKPG
M9 UP+' MU'P' i N' M'K NT'7PMGN' 7 N'N '9PN'NHP' lPMN'K 9 P P'
P KMi' MQ PP' JL i' NHP'7 GN' L9MKP8 N' G N+' HP'Q OG'
P]J P' J'NHMiUG+
4 J'Q PMN'APiP7MKN G'GL iU9P' J'G K PNT' NH'NHMiU
7J9IPGG+' O 'T J' i'Q 7NG' lMUP'T J GP9 PG'L M GPO' AJN'
PGP P'GN 99'N 'Q P'9PGN'T J'OP N PG AP'OPGL GPO+' /PiO'N '
PMK'H lMi'Pi JQH'NHMN' iP'ippO'i N'9PiO'N 'Mi NHP '7 '
P P'T J'Q OHPMOG'N 'A ' 7 lPi'lPi' JGO'7 GMUP'
NHP'Q OG+' MUP'NHP' lPMN' AP' AP9 PO'l P'NHMi'NHP'lMi'
NHMN'Q PG N+' /PN' i ' MGGPl A9T' 7 N piNT' AP' NH JN' M

' #H'lT'Q O'7 PiO[HMN'KHPP'\
%'?i "' T'i A9P'9 O S
' 1'G '9PN' N'i N'N JA9P'T J+
GHL'NHMN'2' PNJ iPO'T J'Mi'PlLNT' lPGGPiQP +
' 1'G '9PN' N'i N'N JA9P'T J+
%'?i "' T'i A9P'9 O S
' #H'lT'Q O'7 PiO[HMN'KHPP'\
' ?i "' " 'O'T J'\ XHMN%G'NHP'ip G\
)' ?i "' #9K A MOPG' G'AMi GHPO' "PM'T J' 7 N'\
9 X'\'?i "' #9K A MOPG'GJ P' 7 N+
)' ?i "' % G G 'AP'GJ P' 7 N+
'?i "' " '\H ',\
%'?i "' 2'L MT'T J'JL i' HMN'\
' T NHT'7 piOG' 99T J'O M 'ipM'\
)'?i "' 2%9Y'NP99'T J' l P'Mi i+' "p p%G'N' i A9P'7PMGN'
N M O+
%'?i "' H G G'NHP' 9O' lMi'GN 99+
)'?i "' X 99%'H 9O' 99%'H 9O'\
%'?i "' 2N'O PG' AJN'N lP' 99SMiO'G S
)'?i "' 2'O 'K ikP P+
' 3MKH' lMi'N 'H G'GN 9' NH'NHMN'GLJ'MG HP' J9O'
N 'NHP'9L' 7HG' l GN pGh'T J'O PN GHM99'AP' i' M99'L9MKPG
M9 UP+' MU'P' i N' M'K NT'7PMGN' 7 N'N '9PN'NHP' lPMN'K 9 P P'
P KMi' MQ PP' JL i' NHP'7 GN' L9MKP8 N' G N+' HP'Q OG'
P]J P' J'NHMiUG+
4 J'Q PMN'APiP7MKN G'GL iU9P' J'G K PNT' NH'NHMiU
7J9IPGG+' O 'T J' i'Q 7NG' lMUP'T J GP9 PG'L M GPO' AJN'
PGP P'GN 99'N 'Q P'9PGN'T J'OP N PG AP'OPGL GPO+' /PiO'N '
PMK'H lMi'Pi JQH'NHMN' iP'ippO'i N'9PiO'N 'Mi NHP '7 '
P P'T J'Q OHPMOG'N 'A ' 7 lPi'lPi' JGO'7 GMUP'
NHP'Q OG+' MUP'NHP' lPMN' AP' AP9 PO'l P'NHMi'NHP'lMi'
NHMN'Q PG N+' /PN' i ' MGGPl A9T' 7 N piNT' AP' NH JN' M

' ?i "' 2N'GH J9O' i N' AP'AT'NHP'LP GJMG i' 7HG'ip '
7PMGN IQ+
' ?i "' 2' GH J9O'NH iU' G '6 "P'HMNH'GPiN' lP'Mi';PM IPGN
i N IQ' HK'H' IMIT' IT'IPM' kKMG iG OO'J QP' lP'N'
LJN' 778 AJN'HP'HMNH'K iEJ PO' lP'APT iO'NHPl'MiO'2' lJGN'
IPPOG'MLLPM +
' HiUi N' i%'G +
% ?i "' 27'T J'HMO'GPiN'AJN'N 'H J G'AP7 P S
' /PN' N' i N' KJlAP'T J' APNNP' PlPlA MiKP+S'
lP'A iQ' i'M99'N QPNHP +
%'?i "' #99'K P PO'O GHPG'[
2?i "' &' TM9'KHPP '2' M MiN'T J+
)'?i "' 5 JAN' i N'NHMN' 7 l iPT'MiO'NHP'GPMG i' KMi'
T P9O' N+
2

! P N % NHP ! GNM ! N Q PP ! Q ! NT S
5 %N ! T J LM P ! N%G PTPG[M ! U JLNG H 9O 7MGN8
&MNHP NHM ! P ! OP AMKU JN NH T J U ! PG+
#!O KJN T J N JGNP G%NH MNG[J ! O GP M ! NG GNPM 9[
/M QP HM ! OPO AAP G T J Q M P 7HMGNP G M P+
#!O L 99 AT 9M [M O N NHT I MGNP %G APO8
HT I GN PGG G %NHP A NHP9[! 7 G WNPP !
-9JKU NHP 9 !%O K JNKH 7 I NHT 9O 9 I L ! Q G P+
X NH N APMN JN H G A M ! G[- PNT M ! O 7PM +
&P9 Q ! N NHP Q OG LPMKP EJGN KP N JNH+
5 I PGN K M P ! QHN PGN M ! O ! P QHA J H O+
2!GN JKN ! I M ! ! P G I TGNP PG M ! O N MOPG+
5PQ PPG AGP M ! KPG KJGN I G M ! O 9M G+
5PK9 !P N T J K !7 J!O ! Q K ! N M PG+
#!O TPN DK !7JG ! 9 P [S-9MQJPG ! K OP ! N I P!+
4 J L NP ! N M ! O !7PKN JG 7P P G HPML
1! #NHP!G LP 7 GN UP S H J K 9O GK MN KM+
LL9P J GP ! MN G NHMN NHP 9 I AG I MT HM9N
#G 9M I P9T MG NHP I M ! ! P G 2 / JGN M ! O 9 AP NT
PPL ! NHP I ! OG M ! O I M G 7 J T JNH8
HMN %QM ! GN NHP GN PM I 7 NJP NHPT I MT GN P
#!O O ! NHP I GP9 PG ! N+ 2NKHPG A9M ! G+
M99 NHP # NHP ! M ! H G I G8 M ! O NHP K L
P QP ! P M9 9PL GT 2 PMNH ! 7PKN A PMNH8
HMN NHP G K PNT MG NHP 7 P ! OGH L I MT
P I P P9T L G ! [NH ! Q 2%99 APM 7 I NHPP
JN ! MUPO ! PGG NH J OPNPGNMA9P N !8
MUP NH J NHMN N NH I J9N L9T ! Q AM ! G[
I ! 99 N NHP OG8 HP P HP GHM99 7 ! O
HP J ! U ! OPGN APMGN I P U ! OP NHM ! I M ! U ! O+
HP Q OG K !7 J ! O @HPM I P T J Q O Q OG M99
HP # NHP ! M ! G A NH NH ! M ! O JN NHMN M99[
! O Q M ! N MG I ! Q G H G HMNP I MT Q
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9: 4

3 3 22+ SD#NHP!G ! ! ! I !%G !&-

) * 2 2! ! P M!NG+

2 7 1 " PM T J I MGNP GNP M O HP P%G J I MGNP \
P P J ! O ! P \ KMGN 77 \ ! NH ! Q P I M ! ! Q \
> 1 #9MKU I T 7P99 G HMN GH J9O 2 GMT N T J \
/PN I P AP PK OPO AT NHP QHNP JG Q OG
2 M I MG L MG T J+
7 1 JKH M H JGP A UP[
! A9P M I MGNP 7M99P ! [#99 Q ! P[M ! O ! N
1 ! P 7 P ! O N NMUP H G 7 NJ ! P AT NHP M I+
#!O Q M9 ! Q NH H I [
%7 1 #G P O NJ ! J AMKUG
O I J K I LM ! ! NH ! IN H G Q M P+
H G 7M I 9 M G N H G AJ PO 7 NJ ! PG
9 ! U M99 M MT8 9PM P NHP 7M9GP G NH H I+
/ UP P I LNT LJ GPG L KU%O M ! O H G L GP97
OPO KMNPO APQQM N NHP M +
X NH H G O GPMGP 7 M99 GHJ ! ! %O L P NT+
X M9UG 9 UP K ! NP I LN M9 ! P+S P 7 J 7P99 G+

G HP P JGPO ! 79 P GP ! GP 7 SNJ ! T J GP97 6 Q PP ! Q ! NT+R
! ! P ! ? ! G ! %G 6 T ! NH M%G &P P9G R S
6 1 H KH MT GHM99 2 7 GN (I TGP97+\R
: 77 O ! ! M ! NP ! NH G LMGGMQP I P ! N ! G NHMN NHP O KKJ G ! NH G GP ! GP ! NHP 9O N M ! G9MN ! 7 NHP A9P8S6 " AP N M7NP NH G ?P A M I (! N <7 I H G KUPO MTG+R
F I " M ! I P J9O PMO ' JN NHP L MTP 7 I ! G NHMN M9NH JQH M99 NHP A ! OG 7G K M9 9 7P AP NH ! ! N K !7JG ! M O GG 9JN ! 7 G K PNT GH J9O ! N P ! GJP AJN M ! M KHT 9 P ! NH LP LPNJM9 I GP T+
FF (S 9P ! N PWKPGG P ! P ! ? ! G ! HMG / (K POJ9 NT+R
D 3' S ! MNJ M9 O GL G N ! @ PP ! NP ! T I AP9 ! P # KN 2 K 2+
F X HMN M P I M UMA9P K ! N MGN NHPGP N P ! NT N 9 ! PG 7 NHP GNP M O%G GLPPKH 77P N NHP L PKPO ! Q LM N 7 NHP GKP ! P[HPT K ! NM ! 7 J HT I ! Q K JL9PNG M ! O 7 J A UP ! 9 ! PG NPP P ! G 7 99 ! Q - LP KHM ! QPO NH PP 9 ! PG ! N N M7NP NHP 7 99 ! Q 7MGH ! S

6 17 I ! GN JG 7 P ! OG ! HMG HP NH H I N
JLL9T H G 9 7P NHMN H KH KM ! K I I M ! O N+R

H G PQJ9MN ! MG N MLLPM G N JG HMG I MOP NHP LMGGMQP I P J ! 9 UP HMUGLP P P P ! NHM ! N MG ! NG Q ! M9 7 I+

2 6

! P ! O
> 1 #99 A UP ! I L9P I P ! NG 7 M J ! %O H JGP+
)' 7 1 4 PN O J HPM NG PM I ! %G 9 P T+
HMN GPP 2 AT J 7MKPG 8 P M P 7P99 G GN 99+
P ! Q M9 UP ! G 8 / PMU%O G J AM U8
#!O P L I MNPG GNM ! O ! NHP OT ! Q OPKU+
" PM ! Q NHP GJ QPG NH PMN P I JGN M99 LM N
2 ! N NH G GPM 7 M +
> 1 $: O 7P99 G M99+
HP 9MNPGN 7 I T PM9NH 2%99 GHM P M I ! QGN T J+
X HP P P P GHM99 I PPN 7 I ! %G GMUP
/ PN%G TPN AP 7P99 G8 9P N%G GHMUP J HPMOG M ! O GMT+
#G %N P P M U ! P99 J ! N J I MGNP %G 7 NJ ! PG
6 X P HM P GPP ! AP NNP OMTG+R / PN PMKH NMUP G I P8
= 1 3 ! 5
MT LJN JN M99 T J HM ! OG+ N ! O I P
HJG LM N P KH ! G LM N ! Q L +
= 4 & P M ! NG+
1 NHP 7 P KPF PNKHPO ! PGG NHMN 3 ! 5 (3- & -[
X H J9O ! N GH ! (. ! PM9NH PWP I LN
! KP KHPG L ! N ! - 5 M ! O K ! NP I LN+\
X H %O AP G I KU%O NH 3 ! 5 A ! ! 1
JN ! M O PM I 7 7 P ! OGH L \
HM P H G L I L M ! O M99 HMN GNMNP K I L J ! OG+
JN !9T LM ! NPO 9 UP H G M ! GH%O 7 P ! OG \
- H ! PGN 9 O A JQHN 9 AT H G ! HPM N8
! O ! P AT Q O ! PGG 2 N M ! QP J ! JGJM9 A9 O
X HP ! I M ! %G GN G ! +G HP O PG N I JKH Q O [
X H NHP ! OM PG N AP HM97 G U ! O MQM ! \
O A J ! NT NHMN I MUPG Q OG O PG GN 99 I M I P !+
T OPM PGN 9 O SDA9PGG%O N AP I GN MKKJ G%O+
& KH !9T N AP PNKHPO SNHT Q PMN 7 NJ ! PG
# P I MOP NHT KH P7 M779 KN !G+ #9MG U ! O 9 O [
" P%G 79J ! Q ! MQP 7 I NH G J ! Q MNP7J9 GPMN
17 I ! GN JG 7 P ! OG
HMG HP NH H I N GJLL9T H G 9 7P
1 NHMN H KH KM ! K I I M ! O N+
2%99 7 99 M ! O !] J P H I JN
2%99 P P GP P H G I ! O NH I T APGN 998
X H 9GN 2 HM P Q 9O 2%99 AP H G GNP M O GN 99+ \ = -*

3 3 222+ S D 8 ! ! "-

!
1 A9PGGPO A PPO ! Q GJ ! O M 7 I NHP PM NH
& NNP ! HJ I O NT8 AP9 NHT G GNP %G A
2 ! 7PKN NHP M [! ! %O A NHP G 7 ! P I A S
X H GP L K PMN ! PG OP ! KP M ! O A NH+
KM KP G O OM ! N SN JKH NHP I NH GP P M9 7 NJ ! PG8
HP Q PMNP GK ! G NHP 9PGGP HP L PN Q PG ! N GH NHMN NHP
O 77P P ! KP 7 L LP NT G NHP G 9P KMJGP 7 NHP O 77P P ! KP 7 PGN I MN ! " P LJNG
NH G ! NHP I GN K ! NP I LNJ JG MT I MU ! Q NHP L P 7 7PPO ! Q M ! O 7MNNP ! ! Q
K ! GN NJNP NHP Q PMN O GN ! KN ! APN PP ! NHP A NHP H GP LMGNJ P 9M OG H G
G OPG M ! O $ NHP NHP A NHP H GP M ! N L OJKPG 9PM ! ! PGG 2N G GKM KP9T
! PKPGGM T N L ! N JN M99 NHP P I P ! OMN ! G NHMN HM P APP ! L L GPO 7 NHP K !
K9JO ! Q 9 ! PG 7 NH G LMGGMQP 27 P PEPKN NHP Q ! M9 O M ! O MO LN NHP
PMO ! Q 7 NHP PKN 7 99 P %G 7 9 S

6 ,2N G NHP LMGNJ P 9M OG NHP NHP %G G OPG R S

I JKH 7 NHP L PKPO ! Q ! NP G GJLP 79J JG -H 99 LG ! H G 6 $X 9O 7 X OGR @ = GMTG 6 $ " % %# M O JGPO ! 9O GNMNJNPG M ! O GN 99 ! NHP ! NHP ! LM NG 7 3 ! Q9M ! O 7 H I PO APMGNG MG K G WP ! GNPP G HP 7P G BK+R HP GN PPN ! H KH @HP KMN9P I M UPN G HP9O ! N MN7 O G KM99PO & NHP N PPN+

2i'LJ NT' 7 IMiH O'GNMiO'JL QHN
#iO'GMT'6' H G IMi%G'M'79MNP p'R'\ 27' ip'AP+
'M p'NHPT'M998 7 'p p T Q CPD' 77 NJip'
2G'G I NH%O' AT' NHMN'AP9 ' NHP'9PM ipO'LMN'
5JKUG'N 'NHP'Q 9OPi'7 98 #9g' G A9]JP8
HP p%G'i NH iQ'9p pg' i' J'KJ GPO'iMNJ pG+
JN'O pK\N' 99M iT+' HP p7 p'AP'MAH %O'
#99'7PMGNG'G K pN pG'MiO'NH iQG' 7 Ipi'[
" G GPIA9MA9p'TPM'H I GP97' I i'O GOM iG
5PGN JKN i'7MiQ' I MiU iO'[S3M NH'T p9O'I p' NG[
+> 33 3

XH 'GPPUG 7 'APNNP ' 7'NHPP'GMJKP'H G'LM9NMP'
X NH'NHT'I GN' LP MiN'L G i'[XHMN' G HP p'\
: 9O'\TP99 'Q9 NNP iQ'L pK JG'Q 9O'\
'Q OG'2'M I' i ' O9P' NM GN+
&. NG'T J'K9PM'HPM piG[HJG' I JKH' 7'NH G 99' I MUP'
9MKU' H NP8 7 J9'7M 8 iQ' QHN8
MGP'i A9P8 9O'T J iQ8 K M O' M9 MiN+
"M'T J'Q OG[HT'NH G'\ XHM'NH G'T J'Q OG'\ XHT'NH G'
X 99'9JQ'T J'L pGNG'MiO'GP MiNG'7 I'T J'G OPG8
-9JKU'GN JN' I piN'G L 99 G'7 I'AP9 'NHP 'HPMOG'
H G TP99 'G9M p
X 99'Ui N'MiO'A PMU' P9 Q iG8 A9PGG'NHP'MKKJ GWO 8
MUP'NHP'H M '9PL GT'MO %O 8 L9MKP'NH p pG+
#iO'Q P'NHPI'N N9P'UIPP'MiO'MLL AMN i+
X NH'GPiMN G i'NHP'APiKH' NH G' G N+
HMN' I MUPG'NHP' MLLPi%O' O ' PO'MQM i'
HP' H I'NHP'GL NM9 H JGP'MiO'J9KP JG G pG
X J9O'KMGN'NHP'Q QP'MN'NH G'PIAM9 I G'MiO'GL KPG
'NHP'#L 9 OMT'MQM i+F' IP'OM I ipO'PM NH+
H J'K I I i' H P' 7 I MiU iO'NHMN'LJNN%GN' OOG'
#I iQ'NHP' JN' 7 iMN iG'2' 99' I MUP'NHPP'
5 'NHT' QHN' iMNJ p+S+E ' . 'ij.9S " M[M O JI' S'
H J%N']J KU+
JN'TPN'2%99'AJ T'NHPP' H J9%N'Q 'GN iQ'NH P7+
XHPi'Q JNT'UPPLP G' 7NHPP'KMii N'GMMiO S
MT'GNMT'NH J' JN'7 'PM IpGN+ +' 3-i '3i "
' XM %GN'NH J'%QM iGN'#NHPiG' i'M'HPML S
' ppL%'2'KMii N'PMN' N+
" p p%G I P'Q 9O'7 'NHPP+
2'HMO' MNHP'AP'M9 ip+
(' XHT'7M P'NHPP' p99
' XHT'IP' I i'\
'("'
TU 99 iQ' 99M iG'NH J' MGN'A i'N'K i]JP'
TK JiN T+R
F#i'M99JG i'N'NHP'6' M9P' 7 3OL'JG'R'MKK O iQ'N'? HiG i+
1/+' 22+'

(' Ap' I i' HMN'7 piOGH L'AJN'LP7 I'i ip;'27'NH J'
2 ' ip'AJN'N 'IM iNM i'IT' L i i+
(' XHM'G N' I i'\
' - I GP IP'7 piOGH L'AJN'LP7 I'i ip;'27'NH J'
9i N'L I GP'NHP'Q OG'L9MQJP'NHPP'7 'NH J'M N'M IMi'[
7NH J'O GN'LP7 I'K i7 JiO'NHPP'7 'NH J%N'M IMi'[@
(';2'HM P'HPM O' i'G IP'G N' 7NHT I GP pG+
& ' H J'GM %N'NHPI' HPi'2'HMO'L GLP NT+
0/ ' #G'NH IP' G i 'HP9O' NH'M'A MKP' 7'HM 9 NG+'
'2G'NH G'NHP'#NHPi MI'I i i ' H I'NHP' 9O'
K%O'+G' POM O7J99T
' 4PG+
' P'M' H P'GN 99[HPT'9 P'NHPPi N'NHMN'JGP'NHPP+'
: P'NHPI'O GPMGPG'9PM iQ' NH'NHPP'NHP '9JGN+
MUP'JGP' 7NHT'GM9N'H J G' GPMG i'NHP'G9M PG
O 'NJAG'MiO'AMNHG'8 A iQ'O i' GP KHPPUPO'T JNH'
'NHP'NJA 7MGN'MiO'NHP'O PN+
' "MiQ'NHPP' I iGNP';$
(' -M O i'H I'G ppN' IMiO M8 7 'H G' NG'
P'O i%O'MiO'9 GN' i'H G'KM9MI N PG+
2'HM P'AJN'9 NN9P'Q 9O' 7'9MNP'A M P' I i
HP' MiN' HP P 7O NH'OM 9T' IMUP' P 9N
2i'IT'LPiJ JG'AMiO'2'HM P'HPM O';MiO'Q P %O+
" 'KJ GPO'#NHPiG'I iO9PGG' 7NHT' NH+
O QPNN iQ'NHT'Q PMN'OPPOG' HPi'ip QHA J';GNMPG
JN'7 'NHT'G O'MiO'7 NJip'N O'JL i'NHPI S
' 2'L NHPP'APMN'NHT'O JI';MiO'QPN'NHPP'Q ip+
(' 2'MI'NHT'7 piO';MiO'L NT'NHPP';OPM' I i+
' " 'O GN'NH J'L NT'H I' H I'NH J'O GN'N JA9P'\
2'HMO' MNHP'AP'M9 ip+
(' XHT'7M P'NHPP' p99
"p p%G I P'Q 9O'7 'NHPP+
' ppL%'2'KMii N'PMN' N+
(' XHPi'2'HM P'9M O'L JO'#NHPiG' i'M'HPML S
' XM %GN'NH J'%QM iGN'#NHPiG'\

(" MGN NH J Q 9O TPN \ 2%9 NMUP NHP Q 9O NH J Q %GN
I P
N M99 NHT K J!GP9+
5 GN NH J O GN NH J ! N HPM P!%G KJ GP JL !
NHPP[
5 X : P JG G I P Q 9O Q O I ! " MGN
NH J I P \
3! JQH N I MUP M H P 7 G PM HP N MOP+
#!O N I MUP H PG M AM O+ " 9O JL T J G9JNG+
4 J ML !G I J!NM!N 4 J M P ! N MNHMA9P S
#9NH JQH 2 U! T J%9 G PM NP A9T G PM +
2!N GN !Q GHJOOP G M!O N HPM P!9T MQJPG
HP I I NM9 Q OG NHMN HPM T J SGLM P T J MNHG+
2%9 N JGN N T J K !O N !G P H PG GN 998
#!O HP H GP L JG A PMNH GPPUG N K ! P N T J+
P GN !Q ! H P M99J P H I AJ ! H I JL8
/PN T J K9 GP 7 P L PO I !MNP H G G I UP+
#!O AP ! NJ !K MNG 4PN I MT T J LM !G G W I !NHG+
P]J NP K !N M T #!O NHMNKH T J L NH ! 7G
X NH AJ OP!G 7 NHP OPMO 8SG I P NHMN P P HM!Q%O+
I MNNP S PM NHP I APN MT NH NHP I 8 H P GN 998
-M !N N 99 M H GP I MT I P JL ! T J 7MKP
#L W 7 !U9PG[
5 X P99 I P Q 9O8SX HMN NHP! \
P9 P P%N NHMN P%9 O M!TNH !Q 7 Q 9O+
!GJ I LN !G G
2! H 99 A !PG 7 I M!8 GN UP NHP GHM L GH !G+
#!O I M I P!%G GLJ !Q+ MKU NHP 9M TP %G KP+
HMN HP I MT !P P I P 7M9GP N N9P L9PMO
7 G J!O H G]J 99PNG GH 99T H M NHP 79M I P!
HMN GK 9OG MQM !GN NHP]JM9 NT 7 79PGH+
#!O ! N AP9 P PG H I GP978 O ! NH NHP ! GP
5 ! NH N 79MN8 NMUP NHP A OQP]J NP M MT
17H I NHMN H G LM N KJ9M N 7 PGPP+
I P99G 7 I NHP QP!P M PM9 I MUP KJ 9%O LMNP J77 M!G
AM9O8
#!O 9PN NHP J!GKM %O A MQQM NG 7 NHP M
5P P G I P LM ! 7 I T J -9MQJP M998
HMN T J MKN NT I MT OP7PMN M!O]JP99$
HP G J KP 7 M99 P PKN !+S HP P%G I P Q 9O8S
5 T J OM I ! NHP G M!O 9PN NH G OM I ! T J+
#!O O NKHPG Q M P T J M99[D
5 X P K J!GP9 NH I P I !PT A J!_
NP JG I !+
P H P I P I GKH P7 7 GN8 2 HM P Q P!T J
PM !PGN+
N UP JL NHP O J I N M OG #NHP!G+ OM P P99
I !8
27 2 NH P P99 2%9 G N NHPP MQM !+
27 2 H LP P99+ 2%9 !P P GPP NHPP I P8 ,
(2 !P P O O NHPP HM I +
4PG NH J GL U%GN P99 7 I P+
M99%GN NH J NHMN HM I \
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#!O NMUP NHT APMQ9PG TNH NHPP+ ,
X P AJN 77P!O H I +S
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")
HMN !MNJ P AP !Q G KU 7 I M!%G J!U !O!PGG
H J9O TPN AP HJ!Q T S I I ! I NHP NH J = 33 3
XH GP I A J!I PMGJ MA9P M!O !7 ! NP A PMGN+
PP I G M!O 7PPOG M998 H GP GP97 GM I P I PNN9P+
XHP P 7 NHT L JO KH 9O M QM!N I M! G LJ77%O+
3!QP!OP G NHP A9MKU N MO M!O MOOP A9JP+
HP Q 9OPO !P N M!O PTP9PGG P! I %O I +
X NH M99 NHP MAH PO A NHG AP9 K GL HPMTP!

! HML I M!%G " I P %G 29 MO S
$ 6 HP NH MNG 7 O QG GHM99
" G I M!9T 9 I AG+R
F $ H G G G I PN I PG L !NPO $2# M7NP - LP+
F (NHP Q !M9+ HP O HMG APP!KHM!QPO !N (# NHP
X0

XHP P !" TLP !%G]J KUP! !Q 7 P O NH GH !P8
4 P9O H I H M99 NHPD HJ I M!G !G O NH HMNP+
0 I 7 NH NHT L9P!NP JG A G I !P L N[
3!GPM NHT 7P N 9P M!O K !KPLN !G I A+
/PN N ! I P A !Q JN !Q MNP7J9 I M!
: Q PMN NH N QP G O MQ !G 9 PG M!O APM G8
PP I NH !P I !GNP G H I NHT JL M O 7MKP
"MNH N NHP I M A9P I M!G !M99 MA P
P P L PGP!NPO[S1 M N SD5PM NHM!UG[
5 T JL NHT+ I M G !PG M!O L9 JQH N !9PMG 8
XHP P 7 !Q MNP7J9 I M! NH 9]J GH O MJQHNG+
#!O I GP9G J!KNJ JG Q PMGPG H G LJ P I !O+
HMN 7 I N M99 K !G OP MN !G9 LG[

1

P I M!\ -9MQJP [L9MQJP [
, 2 MG O PKNPO H NHP P! PL N
H J O GN M77PKN I T I M!!P G M!O O GN JGP NHP I +
% G NHP! APKMJGP NH J O GN ! N UPPL M O Q
XH I 2 J9O I NMNP ! GJ I LN !KMNKH NHPP[
, H G G !NHPP M !MNJ P AJN !7PKNPO
#L L J! I M!9T I P9M!KH 9T GL J!Q
0 I KHM!QP 77 NJ!P XHT NH G GLMOP \ NH G L9MKP \
H G G9M P 9 UP HMA N \ M!O NHPGP 9 UG 7 KM P \
HT : 1 " 8 1 C/ !C D ! / + : E
"JQ NHP O GPMG%O LP 7J I PG M!O HM P 7 Q N
HMN P P I ! MG HM I P ! N NHPGP OG+
T LJNN !Q !NHP KJ!! !Q 7 M KM LP + D
P NH J M 79MNNP P ! M!O GPPU N NH P
T +NHMN H KH HMG J!O !P NH PP H !QP NHT U!PP+
#!O 9PN H G P T A PMNH H I NH J%N AGP P+
9 77 NHT KML8 L M GP H G I GN K JG GN M !+
#!O KM99 N PWKP99P!N H J MGN N 9O NHJG
H J QM %GN NH !P PM G 9 UP NMLGNP G NHMN AMOP P9K I P+
AM9O8
#!O 9PN NHP J!GKM %O A MQQM NG 7 NHP M
5P P G I P LM ! 7 I T J -9MQJP M998
HMN T J MKN NT I MT OP7PMN M!O]JP99$
HP G J KP 7 M99 P PKN !+S HP P%G I P Q 9O8S
5 T J OM I ! NHP G M!O 9PN NH G OM I ! T J+
#!O O NKHPG Q M P T J M99[D
5 X P K J!GP9 NH I P I !PT A J!_
NP JG I !+
P H P I P I GKH P7 7 GN8 2 HM P Q P!T J
PM !PGN+
N UP JL NHP O J I N M OG #NHP!G+ OM P P99
I !8
27 2 NH P P99 2%9 G N NHPP MQM !+
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(2 !P P O O NHPP HM I +
4PG NH J GL U%GN P99 7 I P+
M99%GN NH J NHMN HM I \
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#!O NMUP NHT APMQ9PG TNH NHPP+ ,
X P AJN 77P!O H I +S
N UP+
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HMN !MNJ P AP !Q G KU 7 I M!%G J!U !O!PGG
H J9O TPN AP HJ!Q T S I I ! I NHP NH J = 33 3
XH GP I A J!I PMGJ MA9P M!O !7 ! NP A PMGN+
PP I G M!O 7PPOG M998 H GP GP97 GM I P I PNN9P+
XHP P 7 NHT L JO KH 9O M QM!N I M! G LJ77%O+
3!QP!OP G NHP A9MKU N MO M!O MOOP A9JP+
HP Q 9OPO !P N M!O PTP9PGG P! I %O I +
X NH M99 NHP MAH PO A NHG AP9 K GL HPMTP!

! HML I M!%G " I P %G 29 MO S
$ 6 HP NH MNG 7 O QG GHM99
" G I M!9T 9 I AG+R
F $ H G G G I PN I PG L !NPO $2# M7NP - LP+
F (NHP Q !M9+ HP O HMG APP! KHM!QPO !N (# NHP
X0

U!M PG M!O M99 MLL MKHP G % G I GN EJGN
HMN NH J NJ ! MGKM98 HMOGN NH J PM9NH MQM !+
&MGKM9G GH J9O HM P%N 5 ! N MGGJ I P I T 9 UP!PGG+
X P P 2 9 UP NHPP 2%O NH M MT I TGP97+
, H J HMGN KMGN M MT NHTGP97 AP !Q 9 UP NHTGP978
#I MO I M! G 9 !Q ! M 7 98 X HMN NH !U%GN
HMN NHP A9PMU M NHT A GNP JG KHM I AP 9M !+
X 99 LJN NHT GH N ! M I \ X 99 NHPGP I GG%OD N PPG+
HMN HM P JN 9 %O NHP PMQ9P LMQP NHT HPP9G+
#!O GU L HP!NH J L !N%GN JN \ X 99 NHP K 9O A U+
M!O PO NH KP KMJO9P NHT I ! !Q NMGNP+
KJ P NHT %P ! QHN%G GJ 7P N \ M99 NHP K PMNJ PG S
XH GP !MUPO+!MNJ PG 9 P ! M99 NHP GL NP
17 PMU7J9 HPM P!8 H GP AM P J!H JGPO N J!UG+
NHP K !79 KN !Q P9P I P!NG PWL G%O D
#!G P I P P !MNJ P SA O NHP I 79MNNP NHPP8
1[NH J GHM9N$7 !OS
#7 9 7 NHPP 8 5PLM N+
, 2 9 P NHPP APNNP ! NHM!P%P 2 O O+
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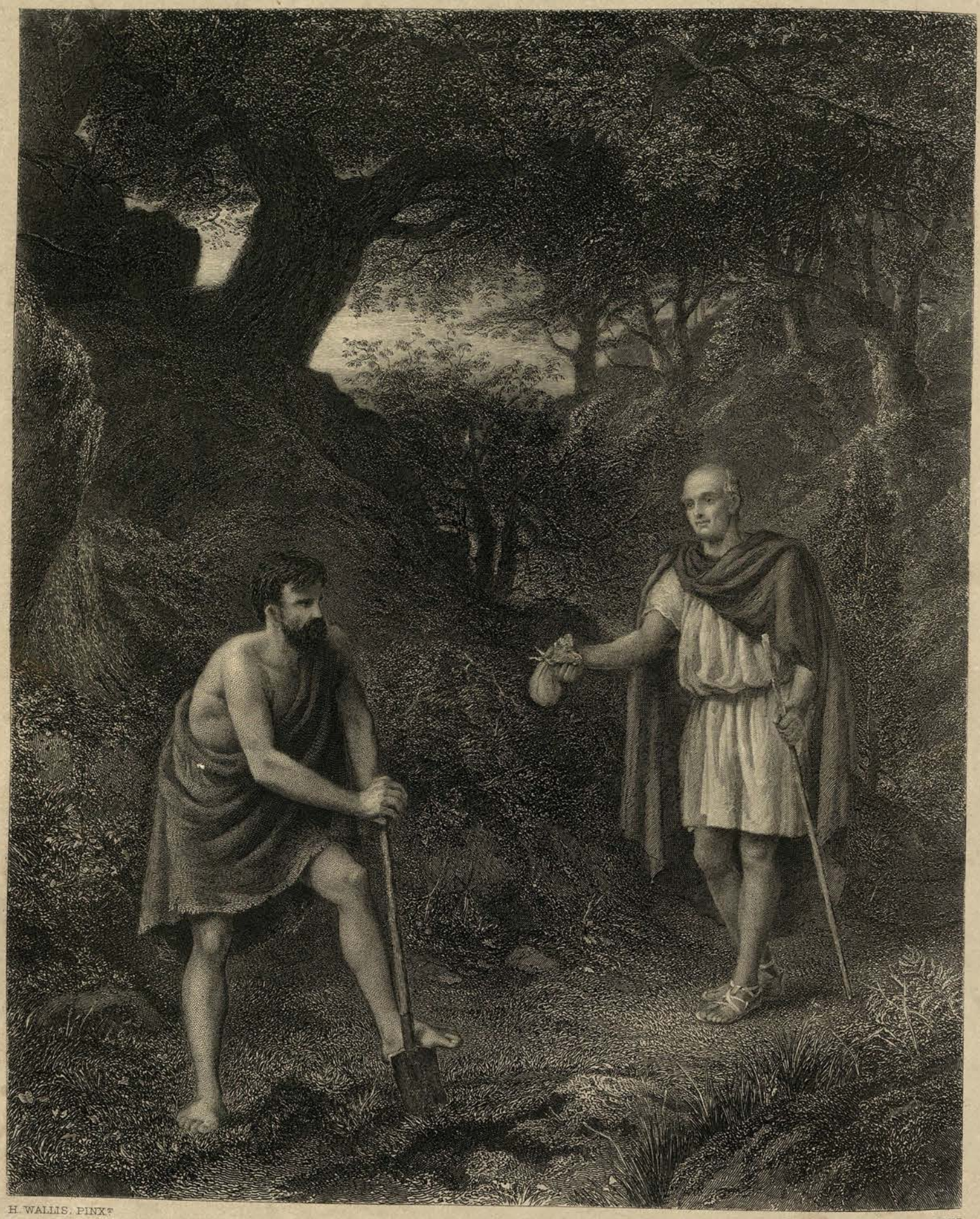
X HT \
H J 79MNNP %GN I GP T+
, 2 79MNNP ! N8 AJN GMT NH J M N M KM N 77+
X HT O GN NH J GPPU I P JN \
, PW NHPP+
#9 MTG M 99M !%G 77 KP M 7 9%G 8
5 GN L9PMGP NHTGP97 !%N \
, 5
X HMN[M U!M P N \
, 27 NH J O OGN LJN NH G G J K 9O HMA N !
KMGN QMNP NHT L OP %N P P P99 AJN NH J
5 GN N P!7 KPO9T8 NH J%OGN K J N P AP MQM !

U!M PG M!O M99 MLL MKHP G % G I GN EJGN
HMN NH J NJ ! MGKM98 HMOGN NH J PM9NH MQM !+
&MGKM9G GH J9O HM P%N 5 ! N MGGJ I P I T 9 UP!PGG+
X P P 2 9 UP NHPP 2%O NH M MT I TGP97+
, H J HMGN KMGN M MT NHTGP97 AP !Q 9 UP NHTGP978
#I MO I M! G 9 !Q ! M 7 98 X HMN NH !U%GN
HMN NHP A9PMU M NHT A GNP JG KHM I AP 9M !+
X 99 LJN NHT GH N ! M I \ X 99 NHPGP I GG%OD N PPG+
HMN HM P JN 9 %O NHP PMQ9P LMQP NHT HPP9G+
#!O GU L HP!NH J L !N%GN JN \ X 99 NHP K 9O A U+
M!O PO NH KP KMJO9P NHT I ! !Q NMGNP+
KJ P NHT %P ! QHN%G GJ 7P N \ M99 NHP K PMNJ PG S
XH GP !MUPO+!MNJ PG 9 P ! M99 NHP GL NP
17 PMU7J9 HPM P!8 H GP AM P J!H JGPO N J!UG+
NHP K !79 KN !Q P9P I P!NG PWL G%O D
#!G P I P P !MNJ P SA O NHP I 79MNNP NHPP8
1[NH J GHM9N$7 !OS
#7 9 7 NHPP 8 5PLM N+
, 2 9 P NHPP APNNP ! NHM!P%P 2 O O+
) HQ NP NHPP GP+
,
X HT \
H J 79MNNP %GN I GP T+
, 2 79MNNP ! N8 AJN GMT NH J M N M KM N 77+
X HT O GN NH J GPPU I P JN \
, PW NHPP+
#9 MTG M 99M !%G 77 KP M 7 9%G 8
5 GN L9PMGP NHTGP97 !%N \
, 5
X HMN[M U!M P N \
, 27 NH J O OGN LJN NH G G J K 9O HMA N !
KMGN QMNP NHT L OP %N P P P99 AJN NH J
5 GN N P!7 KPO9T8 NH J%OGN K J N P AP MQM !

I OP I G Q! 7 KMN !7 H KH G ! N PWMKN9T NHP LH MGP 9 QT 7 HMHGLP P &
I MOP NHP KHM!QP8 M!O HP M9G NH Q PMNP L L PNT M9NP PO /7 I KHM!QP 7
7JNJ P R N 6 7 I KHM!QP 77 NJ!P+R
D %%G H G MG M KHM!QP AT " M! I P 7 I 2% 7 NHP Q !M9+ c
5TKP H 9OG NHMN % G M L !NP %G P 7 % 2! #G 4 J / UP 2N MG HP
L !NG JN P HM P NHP A JQHG 7 M N PP 6 I GG%O NH MQP+R



H. WALLIS, PINXT

C. COUSEN, SCULPT

TIMON AND FLAVIUS.

(TIMON OF ATHENS.)

LONDON, VIRTUE & Cº PUBLISHED

XP'N'NH J'i N'APQQM +' X 99 iQ' I GP T
1JN9 PG ikP NM i'L IL' G K i%'AP7 P'
HP' iP' G 7 99 iQ' GN 99'ip p'K IL'9PNP8
HP' NHP 'MN'H QH' GH' PGN' GNMNP'K iNPiN9PGG+
"MNH'M'O GN MKNPO'MiO' I GN' PNKHPO'AP iQ
X GP'NHMI'NHP' GN'K iNPiN+
H J'GH J9OGN'OPG P'N 'O P'AP iQ' I GP MA9P+
' N'AT'H G A PMNH'NHMN' G' I P' I GP MA9P+
H J'M N'M'G9M P' H I'O NJip%G'NPiOP'M I'
X NH'7M J'ip p'K9MGL%'O 8 AJN'A PO'M'O Q+
"MOGN'NH J'9 UP'JG'7 I' J'7 GN'G MNH'L KPPOPO'
HP'G PPN'OPQ PPG'NHMN'NH G'A P7' 9O'M77 OG
'GJKH'MG I MT'NHP'LMGG P'O JQG'D 7'N
O PP9T'K I IMIO'NH J' J9OGN'HM P'L9J1Q%O'NHTGP97
2i'QPip M9' N8 IP9NPO'O i'NHT'T JNH'
2i'O 77P piN'APOG' 79JGN8 MiO'ip p'9PM i%O'
HP'KT'L PKPLNG' 7 PGLPKN'AJN'7 99 %O'
HP'GJQM %O'QM1P'AP7 P'NHPP+ JN'1TGP97
XH'HMO'NHP' 9O'MG 1T'K i7PKN iM T8
HP'I JNHG'NHP'N iQJPG'NHP'pTPG'MiO'HPM NG' 7 IPi'
#N'OJNT'I P'NHMi'2'K J9O'7 M1P'PiL9 T1piN8
HMN'iJ1AP 9PGG JL i'IP'GNJKU'MG'9PM PG'
5 ' i'NHP'MU'HM P' NH' iP' iNP %G A JGH'
OP99'7 1'NHP 'A JQHC'MiO'9P7N'IP' LPi'AM P'
O 'P P T'GN 1'NHMN'A9 G8S2'N'APM'NH G+
HMN'ip p'UiP 'AJN'APNNP ' G G IP'AJ OPi
HPT'ip p'79MNP %O'NHPP' X HMN'HMGN'NH J'Q pi'\
27'NH J' 99'kJ GP'NHT'7MNHP 'NHMN'L ' MQ
JGN'AP'NHT'GJAEPK%8 H ' i'GL NP'LJN'GNJ77
'G IP'GHP'APQQM 'MiO'K IL JiOPO'NHPP'
- ' QJP'HP PO NM T+' "piKP[AP'Q ip[
27'NH J'HMOGN'i N'APPi'A i'NHP' GN' 7 IPi+
H J'HMOGN'APPi'N'UiM p'MiO'79MNP p +

NHT'9 GG i'N MiG7 IMN i'[
' 27'NH J'K J9OGN'L9PMGP'IP' NH'GLPMU iQ'N 'IP'
NH J'; I QHN%N'HM P'H N'JL i'N HP P' HP'K II i PM9NF
7'#NHPiG'G APK IP'M'7 PGN'7APMGNG+
' " [HMG'NHP'MGG'A UP'NHP' M99'NHMN'NH J'M N' JN'
7'NHP'K NT'9
' 4 iOP'K IPG M'L PN'MiO'N'LM iNP ' HP'L9MQJP
7'K ILMiT'9QHN'JL i'NHPP[2' 99'7PM'N ' KMNKH' N'MiO'
Q P' MT' XHPi'2'UI 'i N' HMN' P9GP'N ' O ‡'2%99'GPP'NHPP'
MQM i+
' XHPi'NHP P'G i NH iQ'9 iQ'AJN'NHPP'NH J'GHM9N
AP' p9K IP‡' 2'HMO' MNHP ' AP'M' APQQM %G O Q' NHMi' #LP'
IMiNJG+
' H J'M N'NHP'KML' 7M99'NHP'7 9G'M9 P+
' X J9O'NH J' P N'K9PMi'pi JQH'N 'GL N'JL i+
' #'L9MQJP' i'NHPP'NH J'M N'N 'AMO'N 'KJ GP+
' #99' 99M iG'NHMN'O 'GNMiO'AT'NHPP' 'LJ P+
' HP P' G i '9PL GT'AJN‡' HMN'NH J'GLPMU%GN+
' 27'2'iM I P'NHPP+S
2%99' APMN'NHPP SAJN'2'GH J9O' iTPK'N IT'HMiOG+
' '2' J9O' I T'N iQJP'K J9O' N'NHPI' 77[
' # MT'NH J' GGJP' 7M' IMiQT'O Q'
H 9P'O PG U 99' IP'NHMN'NH J'M N'M9 P8
2'G i'N 'GPP'NHPP+ ' ' %X J9O'NH J' J9OGN'AJ GN'2 2 5$
H J'NPO JG' QJP'2 2'MI'G T'2'GHM99'9 GP'
#'GN IP'AT'NHPP+' 9: i2-'-i ' '
' ' PMGN'2
' ' 9M P'
' MO'
' ' & QJP' QJP' QJP[
' -'('2 "$ -3i 3'
2'MI'G KU' 7'NH G'7M9GP' 9O8 MiO' 99'9 P'iMJQHN'
JN'P pi'NHP' IP P'ipKPGG N PG'JL i%+

HP!' I !'L PGP!N9T'L PLM P'NHT'Q M P8
/ P' HP P'NHP'9 QHN'7 M I' 7'NHP'GPM' I MT'APMN'
HT'Q M P GN !P'OM 9T' I MUP'NH !P'PL NMLH
HMN'OPMNH' !' I P'MN' NHP G%9 PG' I MT'9MJQH+
1'NH J'G PPN'U !Q U 99P 'M!O'OPM'O KP
=?!!' 3'!' '3! "
% WN'!MNJ M9'G !'M!O'G P[NH J'A QHN'OP79P'
17"T I P!%G'LJ PGN'APO[NH J' M9 M!N' M G'[
H J'P P'T J!Q'7 PGH'9 %O'M!O'OP9 KMNP' P +
XH GP'A9JGH'O NH'NHM 'NHP'K !GPK MNPO'G! '
HMN'9 PG' !'5 M!%G'9ML[NH J' G A9P'Q O+
HMN'G 9OP %GN'K9 GP' I L GG A 9 N PG+
#!O' I MU%GN'NHP I'U GG'[NHMN'GLPMU%GN' NH'P P T'N !QJP+
'P P T'LJ L GP'[1'NH J'N JKH'D 7'HPM NG[
H !U'NHT'G9M P' I M!' PAP9G8 M!O'AT'NHT' NJP'
PN'NHP I' !N 'K !7 J!O !Q' OOG'NHMN'APMGNG'
MT'HM P'NHP' 9O' !'P I L P'[
' %X J9O'%N P P'G 8S
JN'! N'N 99'2'M I'OPMO[S2%99'GMT'NH J'HMGN'Q 9O'
H J' 9N'AP'NH !Q%O'N 'GH N9T+
H !Q%O'N '\
#T+
' HT'AMKU'2'L NHPP+
' / P'M!O'9 P'NHT' I GP a$[
' / !Q'9 P'G 'M!O'G 'O P[S2'M I']J N+
+ 4 ' 1
P'NH !QG'9 UP' I P!'\S3MN' I !'M!O'MAH 'NHP I +

' M!O NN +

' % ' XHP P' GH J9O' HP' HM P' NH G' Q 9O'\ 2N' G' G I P'
L ' 7 MQ I P!N' G I P' G9P!OP ' N' 7'H G' P I M !OP ' HP'
I P P' M!N' 7'Q 9O' M!O' NHP' 7M99 !Q' 7 I' 7'H G' 7 P!OG'
O P'H I' !N 'NH G' I P9M!KH 9T+
%' % ' 2N' G' ! GPO'HP'HMNH'M' I MGG' 7'N PMGJ P+
',)' % ' / PN'JG' I MUP'NHP'MGGMT'JL !'H I +' 27'HP'KM P' ! N';
7 %N'HP' 99'GJLL9T'JG' PMG 9T' ' 27'HP'K PN JG9T' PGP P' N'
H 'GHM99%G'QPN' N'\
%' % ' JP'8 7 'HP'APM G' N' ! N'MA JN'H I '%N G'H O+
' % ' 2G' ! N'NH G'HP' '
% " ' XHP P\
%' % ' % G'H G'OPGK LN !+
)' % ' " P8 2'U! 'H I +
% " ' M P'NHPP' I !+
' 'NH P PG'\
% " ' 9O P G'! N'NH P PG+
' NH'N 8 M!O' I P!%G G !G+
% " ' XP' M P' ! N' NH P PG' AJN' I P!' NHMN' I JKH' O '
M!N+
' 4 J'Q PMNPGN' M!N' G'T J' M!N' I JKH' 7' I PMN+
XHT'GH J9O'T J' M!N'\$ PH 9O'NHP'PM NH'HMNH' NG8
X NH !'NH G' I 9P'A PMU'7 NH'M'HJ!O PO'GL !QG
HP' MUG'APM ' I MGN'NHP'H P G'GKM 9PN'H LG8
HP'A J!NP JG'H JGP 7P' !MNJ P' !'PMKH'AJGH'
/MTG'HP '7J99' I PGG'AP7 P'T J+ X M!N'\ HT' M!N'\
2 % 6 ' XP'KM!! N'9 P' !'Q MGG' !'AP PG' MNP +
#G'APMGNG'M!O'A OG'M!O'7 GHPG+
' !'NHP'APMGNG'NHP I GP9 PG'NHP'A OG'M!O'7 GHPG8'
4 J' I JGN'PMN' I P!+ 4PN'NHM!UG'2' I JGN'T J'K !+
HMN'T J'M P'NH P PG'L 7PGG%O 8 NHMN'T J' U'! N'
2!'H 9 P'GHMLPG' 7 'NHP P' G'A J!O9PGG'NHP7N'
2!'9 I NPO'DL 7PGG !G+ &MGKM9'NH P PG
"P P%G'Q 9O8 : 'G KU'NHP'GJAN9P'A9 O' 7'NHP'Q MLP+
99'NHP'H QH'7P P'GPPNHP'T J'A9 O'N '7 NH+
#!O'G '%GKMLP'HM!Q !Q+' JGN'! N'NHP'LHTG K M!8
" G'M!N O NPG'M P'L G !'M!O'HP'G9MTG
P'NHM!'T J' A+' MUP' PM9NH'M!O'9 PG'N QPNHP 8

' ($SN JKHGN !P+
F S9PQM9 GPO+
' % ' HP' O !M T' PMO !Q' MG' HP P' MLLPM G' ! '!PKPGG NT'7
NHP'KHM!QP'7 'P NHP ' O' I MT'AP'JGPO' !'NHP'GP!GP' 7'N 'OPK9M P' LP!9T+
g HMN' G'NHP'9M G'AP !Q'L P 7J9'HM P'NHP 'NHP7N'J!KHPKUPO+
9,%

5 ' 99M !T'O 'G !KP'T J'L NPGNF'N 'O %N+
/ UP' U I P!+ 2%99'PWM I L9P'T J' NH'NH P P T'8
HP'GJ!%G'M'NH P7'M!O' NH'H G'Q PMN'MNN MKN !'
& AG'NHP' MGN'GPM'NHP' I !%G'M!'M M!N'NH P7+
#!O'HP 'LM9P'7 P'GHP'G!MNKHPG'7 I'NHP'GJ!
HP'GPM%G'M'NH P7' H GP'9]J O'GJ QP' PG 9 PG'
HP' I !' !N 'GM9N'NPM G'+ NHP'PM NH%G'M'NH P7
HMN'7PPOG'M!O'A PPOG'AT'M'K I L GNJ P'GN 9P!'
O I'QP!P M9'PWK P I P!N' PMKH'NH !Q%G'M'NH P7+
HP'9M G'T J'KJ A'M!O' H L' !'NHP ' JQH'L P'
"M P'J!KHPKU%O'NHP7N+D / P'! N'T J GP9 PG'M MT8
& A' !P'M! NHP +' HP P%G' I P'Q 9O' ' JN'NH MNG8
#99'NHMN'T J' I PPN'M P'NH P PG' '#NHP!G'Q '8
PMU' LP!'GH LG'8 ! NH !Q'KM!'T J'GNPM9+
JN'NH PTPG'OM'9 GP' N ' NPM9' ! N'9PGG'7 'NH G'
2'Q P'T J'8 M!O'Q 9O'K !7 J!O'T J'H G P P
I P!+ ^ 1 ' -' !' -' 1
)' % ' "P'HMG'M9 I GN'KHM I PO' I P'7 I' I T'L 7PGG !'
AT'LP GJMO !Q' I P'N ' N+
' % ' % G' !'NHP' I M9 KP' 7' I M!U !O' NHMN' HP' NHJG'
MO GPG'JG8 ! N'N 'HM P'JG'NH P' !' J' I TGNP T+
%' % ' 2%99' AP9 P P' H I' MG' M!' P!P I T'M!O'Q P' P' I T'
'N MOP+
2 % ' /PN' JG' 7 GN' GPP' LPMKP' !' #NHP!G' HP P' G' !'
N I P'G ' I GP MA9P'AJN'M' I M!' I MT'AP'N JP+
+ 4 & ' M!O NN +

'4 (

> 1'1'T J'Q OG[
2G'T !'OPGL G%O'M!O' J ! JG' I M!' I T'9 O'\
OJ99' 7'OPKMT'M!O'NM 9 !Q'\ 1' I !J I P!N'
#!O' !OP' 7'Q O'OPPOG'P 99T'APGN %O[
XHMN'M!'M9NP MN !' 7'H ! J'HMG'
5PGLP MNP' M!N' I MOP[
XHMN' 9P'NH !Q'JL !'NHP'PM NH'NHM!'7 P!OG
XH 'KM!'A !Q' ! A9PGN' I !OG'N 'AMGPGN'P!OG'
" ' M P9T'O PG' N' I PPN' NH'NH G'N I P%G' QJ GP+
XHP!' I M!' MG' GH%O'N '9 P'H G'P!P I PG
: M!N'2' I MT'P P'9 P'M!O' MNHP '
H GP'NHMN' J9O' I GKH P7' I P'NHM!'NH GP'NHMN'O [
"P'HMG'KMJQHN' I P' !'H G'PTP'2' 99'L PGP!N'
T'H !PGN'Q P7'J!N 'H I'8 M!O'MG' I T'9 O
N 99'GP P'H I' NH' I T'9 7P+S T'OPM PGN' I MGNP [

) ' ! -'.! 2 "'. ! ' -' 1
' # MT[HMN'M N'NH J'\
> 1$ O2'M P'T J'7 Q N' I P'G '\
' XHT'O GN'MGU'NHMN'\ 2'HM P'7 Q N'M99' I P!8
HP!' 7'NH J'Q M!N%GN'NH J% N'M' I M!' 2'HM P'7 Q N'NHPP'
> 1' #!'H !PGN'L 'GP M!N' 7'T J G+
' HP!'2'U! 'NHPP'! N+
2'!P%P 'HMO'H !PGN' I M!'MA JN' I P'8 MT' M99'
2'UPLN' P P'U!M PG'N 'GP P' !' I PMN'N ' 99M !G+F
> 1' HP'Q OG'M P' N!PGG+
P%P 'O O'L 'GNP M O' PM 'M'N JP 'Q P7'
O 'H G'J!O !P'9 O'NHM!' I !P'PTPG'7 'T J+
' XHMN' O GN' NH J' PPL'\S I P' !PM P SNHP!'2'
9 P'NHPP+
PKMJGP'NH J'M N'M' I M!' M!O'O GK9M I %GN'
O9 !NT' I M!U !O'8 H GP'PTPG'O ' !P P 'Q P+
JN'NH JQH'9JGN'M!O'9MJQHNP +' - NT%G'G9PPL !Q
N M!QP'N I PG'NHMN' PPL' NH'9MJQH !Q' ! N' NH' PPL !Q[
> 1' 2'APQ' 7'T J'N 'U! ' I P'Q O' I T'9 O+
'MKKPLN' I T'Q P7'M!O' H 9GN'NH G'L ' PM9NH'9MGNG+
'P!NP NM !' I P'MG'T J'GNP M O'GN 99+
' "MO'2'M'GNP M O'
'N JP'G 'EJGN'M!O'! 'G 'K I 7 NMA9P'\

F NPP P!G'7 99 !Q'- LP'6' PQJ9MNPG'R'NH G'LMGGMQP'MG'7 99 G S
6' HP!
2'U! 'NHPP'! N'2'!P%P 'HM7G'H !PGN' I M!'
#A JN' I P'2 8 M99'NHMN'2'UPLN' P P'U!M PG';
'GP P' !' I PMN'N ' 99M !G+R

2N' M9 I GN' NJ i G' I T' OMiQP JG iMNJ P' 9O+$
/ PN' I P' APH 9O' NHT' 7MKP+S J P9T' NH G I MI'
XMG' A i' 7 IMi+SD
O Q P' I T' QPip M9' MiO' PWKPLN9PGG' MGHIPGG+
4 J' LP LPNJM9 G AP'Q OG[2'O'L K9M I'
1IP' H IPGN' IMi SI GNMUP' IPi N SAJN' IP8
#iOG '7M P P99'MiO'NH P+
> 1' '9PN' IP'GNMT'MiO'K I7 N'T J'I'IMGNP +
'27'NH J'HMN%G'N'KJ GPG
MNT' i N8 79T' H 9GN' NH J' M N' A9PGG%O' MiO'7 7P8
P%P'GPP'NH J' I MI'MiO'9PN' IP'iP%P'GPP'NHPP+
=4 &'-1 5*
PNH iUG'NH J'M N' I P'H IPGN' i 'NHMi' GP8
O 'AT' LL PGG iQ'MiO'APN MT iQ' IP+
H J' I QHN%G'HM P'G ip'Q N'Mi NHP'GP KP'
O 'IMi'T'G'M P'MN'GPK iO' IMGNP G
L i'NHP '7 GN' 9 O%G'ipKU+ JN'NP99' IP'N JP
@O '2'IJGN'P P'O JAN'NH JQH'ipWP'G'GJ P
2G' i N'NHT'U iOipGG'GJAN9P'K PN JG+
27'i N'M'JGJ iQ'U iOipGG&MiO'MG KH'Ipi'OPM9'Q 7NG+'
3WLPK'N iQ' i'PNJ i'N piNT'7 'ip\
> 1' 'IT'I GN' NHT'IMGNP' i' H GP'A PMGN'
5 JAN'MiO'GJGLPK'M9MG'M P'L9MK%O'N '9MNP8
4 J'GH J9O'HM P'7PM%O'7M9GP'N IPG' HPi'T J'O O'7PMGN'+
JGLPK'GN 99'K IPG' HP P'Mi'PGNMP'G'9PMGN+
HMN' H KH'2'GH 'HPM pi'Ui G'G I P P9T'9 P+
5JNT'MiO'CPM9'N'T J'Ji MNKHPO'I iO
M P' 7T J'7 O'MiO'9 iQ'MiO'Ap9 p P'N+
T I GN'H i J %O'9 O+
O 'MiT'APip7'N'NHMN'L iNG'N 'IP+
3 NHP'i'H LP' 'L PGPiN'2%O'PWKHMiQP
O 'NH G'iP' GH+' HMN'T J'HMO'L P'MiO' PM9NH
'p]J NP'IP'AT'IMU iQ' KH'T J GP97+
'/ U'NHPP'%'G'G [S H J'G iQ97'HAipGN'IMi+
"p P'NMUP' SNHP'Q OG' JN' 7 1'I GP T
"M P'GPiN'NHPP'N PMGJ p+' : '9 P' KH'MiO'HMLLT
JN'NHJG'K iO N i%O' H J'GHM9N'AJ 9O'7 I'I p i8
'NH iQ'p9GP'T J'GHM99'GPP'H I'N'LM9I'i'#NHPiG'
MQM i'MiO'79 J GH' NH'NHP'H QHPN+' HP P7 P'%'G i N'
MI GG' PNPiOP' J'9 PGN'H I'i'NH G'GJLL GPO'O GN PGG'
7H G'N' 99'GH 'H ipGN9T'i'JG8 MiO'G P T'9 UP9T'N'
9 MO' J'LJ L GPG' NH' HMN' NHPT'N M P9'7 ' 7 N' AP'NF'EJGN'
MiO'N JP'PL N'NHMN'Q PG'7H G'HM iQ+
i 'XHMN'HM P'T J'i 'N'L PGPiN'JiN'H I'\
' NH iQ'MN'NH G'N IP'AJN' IT' G NMN i' i9T'2'
99'L I GP'H I'Mi'PWKP99PiN'L PKP+
i '2'IJGN'GP P'H I'G'N 8 NP99'H I' 7 Mi' iNPiN'
NHMN%G K I iQ'N MO'H I+$
' : O'MG'NHP'APGN+
- I G iQ'G'NHP'PTPG' 7 T M ' %'NHP'N I P8
2N' LPiG'NHP'PTPG' 7PWLPKNMN i
-P7 IMiKP'G P P'NHP'OJ99P'7 'H G'MKN8
#iO'AJN' i'NHP'L9M ip'MiO'G IL9P'U iO' 7LP L9P+
HP'OPPO' 7GMT'iQ' G']J NP' JN' 7JGP+
'L I GP' G I GN'K J N9T'MiO'7MGH iMA9P'
-P7 IMiKP' G'M U iO' 7 99' 'NPGNM IPiN'
XH KH'M QJPG'M'Q PMN'G KUiPGG' i'H G'EJOQ IPiN'
HMN' IMUPG'N+
'3WKP99PiN' UIMi[H J'KMiGN'i N'LM iN'M'IMi'
G'AMO'MG'G NHTGP97+
'2'MI'NH iU iQ
XHM'2'GHM99'GMT'2'HM P'L OPO'7 'H I'
2N' IJGN'AP'M'LP G iMN iQ' 7H I GP97
#'GMN P'MQM iGN'NHP'G 7NiPGG' 7L GLP NT8
X NH'MO GK P T' 7NHP' i7 i NP'79MNP PG'
HMN'7 99 'T JNH'MiO' LJ9PiKT+
' JGN'NH J'ippOG'GNMiO'7 'M' 99M i' i'NH ip' i'
UV' X 9N'NH J' H L'NH ip' i'7MJ9NG' i' NHP'Ipi\'
5'G '2'HM P'Q 9O'7 ÷NHPP+
i ' MT'9PN%G GPPU'H I'
HPi'O ' P'G i'MQM iGN' J' i'PGNMP
XHPi' P IMT'L 7N' IPPN'MiO'K IP'N '9MNP+
' JP8
XHPi'NHP'OMT'GP PG'AP7 P'A9MKU K ip'%O'i QHN
3 iO' HMN'NH J' MiN%GN'AT'7 PP'MiO' 77P'%O'9 QHN+
IP+
'2%99'IPPN'T J'MN'NHP'NJ i÷ XHMN'M'Q O%G'Q 9O÷
HMN'HP'G GH LL%O' i'M'AMGP'NP IL9P+
HMi' HP P'G ip'7PPO[
% G'NH J'NHMN' QQ%GN'NHP'AM U'MiO L9 JQH%GN'NHP'7 MI8
PNN9PGN'MOI PO' P P PiKP' i'M'G9M P8
'NHPP'AP' iGH L[MiO'NHT'GM iNG'7 'MTP'
P'K i%O' NH'L9MQJPG'NHMN'NHPP'M9 ip' APT[
%O N'2'IPPN'NHPI÷ = "1 3
i '"M 9' NHT' I i[
' 1J'9MNP'i A9P'IMGNP +
'"M P'2' iKP'9 %O$N'GPP'N 'H ipGN'Ipi'\
i '
"M iQ' 7Npi' 7T J' LPi'A JiNT'NMGNPO+
"pM iQ'T J' P P' PN %O'T J'7 PiOG'7M99%i' 77+
XH GP'NHMiU9PGG'iMNJ PG S1'MAH PO'GL NG'
L i'NHP '7 GN' 9 O%G'ipKU+ JN'NP99' IP'N JP
@O '2'IJGN'P P'O JAN'NH JQH'ipWP'G'GJ P
2G' i N'NHT'U iOipGG'GJAN9P'K PN JG+
27'i N'M'JGJ iQ'U iOipGG&MiO'MG KH'Ipi'OPM9'Q 7NG+'
3WLPKN iQ' i'PNJ i'N piNT'7 'ip\
> 1' 'IT'I GN' NHT'IMGNP' i' H GP'A PMGN'
5 JAN'MiO'GJGLPK'M9MG'M P'L9MK%O'N '9MNP8
4 J'GH J9O'HM P'7PM%O'7M9GP'N IPG' HPi'T J'O O'7PMGN'+
JGLPK'GN 99'K IPG' HP P'Mi'PGNMP'G'9PMGN+
HMN' H KH'2'GH 'HPM pi'Ui G'G I P P9T'9 P+
5JNT'MiO'CPM9'N'T J'Ji MNKHPO'I iO
M P' 7T J'7 O'MiO'9 iQ'MiO'Ap9 p P'N+
T I GN'H i J %O'9 O+
O 'MiT'APip7'N'NHMN'L iNG'N 'IP+
3 NHP'i'H LP' 'L PGPiN'2%O'PWKHMiQP
O 'NH G'iP' GH+' HMN'T J'HMO'L P'MiO' PM9NH
'p]J NP'IP'AT'IMU iQ' KH'T J GP97+
'/ U'NHPP'%'G'G [S H J'G iQ97'HAipGN'IMi+
"p P'NMUP' SNHP'Q OG' JN' 7 1'I GP T
"M P'GPiN'NHPP'N PMGJ p+' : '9 P' KH'MiO'HMLLT
JN'NHJG'K iO N i%O' H J'GHM9N'AJ 9O'7 I'I p i8
'NH iQ'p9GP'T J'GHM99'GPP'H I'N'LM9I'i'#NHPiG'
MQM i'MiO'79 J GH' NH'NHP'H QHPN+' HP P7 P'%'G i N'
MI GG' PNPiOP' J'9 PGN'H I'i'NH G'GJLL GPO'O GN PGG'
7H G'N' 99'GH 'H ipGN9T'i'JG8 MiO'G P T'9 UP9T'N'
9 MO' J'LJ L GPG' NH' HMN' NHPT'N M P9'7 ' 7 N' AP'NF'EJGN'
MiO'N JP'PL N'NHMN'Q PG'7H G'HM iQ+
i 'XHMN'HM P'T J'i 'N'L PGPiN'JiN'H I'\
' NH iQ'MN'NH G'N IP'AJN' IT' G NMN i' i9T'2'
99'L I GP'H I'Mi'PWKP99PiN'L PKP+
i '2'IJGN'GP P'H I'G'N 8 NP99'H I' 7 Mi' iNPiN'
NHMN%G K I iQ'N MO'H I+$
' : O'MG'NHP'APGN+
- I G iQ' G'NHP' P T'M ' %'NHP'N I P8
2N' LPiG'NHP'PTPG' 7PWLPKNMN i
-P7 IMiKP' G P P'NHP'OJ99P'7 'H G'MKN8
#iO'AJN' i'NHP'L9M ip'MiO'G IL9P'U iO' 7LP L9P+
HP'OPPO' 7GMT'iQ' G']J NP' JN' 7JGP+
'L I GP' G I GN'K J N9T'MiO'7MGH iMA9P'
-P7 IMiKP' G'M U iO' 7 99' 'NPGNM IPiN'
XH KH'M QJPG'M'Q PMN'G KUiPGG' i'H G'EJOQ IPiN'
HMN' IMUPG'N+
'3WKP99PiN' UIMi[H J'KMiGN'i N'LM iN'M'IMi'
G'AMO'MG'G NHTGP97+
'2'MI'NH iU iQ
XHM'2'GHM99'GMT'2'HM P'L OPO'7 'H I'
2N' IJGN'AP'M'LP G iMN iQ' 7H I GP97
#'GMN P'MQM iGN'NHP'G 7NiPGG' 7L GLP NT8
X NH'MO GK P T' 7NHP' i7 i NP'79MNP PG'
HMN'7 99 'T JNH'MiO' LJ9PiKT+
' JGN'NH J'ippOG'GNMiO'7 'M' 99M i' i'NH ip' i'
UV' X 9N'NH J' H L'NH ip' i'7MJ9NG' i' NHP'Ipi\'
5'G '2'HM P'Q 9O'7 ÷NHPP+
i ' MT'9PN%G GPPU'H I'
HPi'O ' P'G i'MQM iGN' J' i'PGNMP
XHPi' P IMT'L 7N' IPPN'MiO'K IP'N '9MNP+
' JP8
XHPi'NHP'OMT'GP PG'AP7 P'A9MKU K ip'%O'i QHN
3 iO' HMN'NH J' MiN%GN'AT'7 PP'MiO' 77P'%O'9 QHN+
IP+
'2%99'IPPN'T J'MN'NHP'NJ i÷ XHMN'M'Q O%G'Q 9O÷
HMN'HP'G GH LL%O' i'M'AMGP'NP IL9P+
HMi' HP P'G ip'7PPO[
% G'NH J'NHMN' QQ%GN'NHP'AM U'MiO L9 JQH%GN'NHP'7 MI8
PNN9PGN'MOI PO' P P PiKP' i'M'G9M P8
'NHPP'AP' iGH L[MiO'NHT'GM iNG'7 'MTP'
P'K i%O' NH'L9MQJPG'NHMN'NHPP'M9 ip' APT[
%O N'2'IPPN'NHPI÷ = "1 3
i '"M 9' NHT' I i[
' 1J'9MNP'i A9P'IMGNP +
'"M P'2' iKP'9 %O$N'GPP'N 'H ipGN'Ipi'\
i '
"M iQ' 7Npi' 7T J' LPi'A JiNT'NMGNPO+
"pM iQ'T J' P P' PN %O'T J'7 PiOG'7M99%i' 77+
XH GP'NHMiU9PGG'iMNJ PG S1'MAH PO'GL NG'
L i'NHP '7 GN' 9 O%G'ipKU+ JN'NP99' IP'N JP
@O '2'IJGN'P P'O JAN'NH JQH'ipWP'G'GJ P
2G' i N'NHT'U iOipGG'GJAN9P'K PN JG+
27'i N'M'JGJ iQ'U iOipGG&MiO'MG KH'Ipi'OPM9'Q 7NG+'
3WLPKN iQ' i'PNJ i'N piNT'7 'ip\
> 1' 'IT'I GN' NHT'IMGNP' i' H GP'A PMGN'
5 JAN'MiO'GJGLPK'M9MG'M P'L9MK%O'N '9MNP8
4 J'GH J9O'HM P'7PM%O'7M9GP'N IPG' HPi'T J'O O'7PMGN'+
JGLPK'GN 99'K IPG' HP P'Mi'PGNMP'G'9PMGN+
HMN' H KH'2'GH 'HPM pi'Ui G'G I P P9T'9 P+
5JNT'MiO'CPM9'N'T J'Ji MNKHPO'I iO
M P' 7T J'7 O'MiO'9 iQ'MiO'Ap9 p P'N+
T I GN'H i J %O'9 O+
O 'MiT'APip7'N'NHMN'L iNG'N 'IP+
3 NHP'i'H LP' 'L PGPiN'2%O'PWKHMiQP
O 'NH G'iP' GH+' HMN'T J'HMO'L P'MiO' PM9NH
'p]J NP'IP'AT'IMU iQ' KH'T J GP97+
'/ U'NHPP'%'G'G [S H J'G iQ97'HAipGN'IMi+
"p P'NMUP' SNHP'Q OG' JN' 7 1'I GP T
"M P'GPiN'NHPP'N PMGJ p+' : '9 P' KH'MiO'HMLLT
JN'NHJG'K iO N i%O' H J'GHM9N'AJ 9O'7 I'I p i8
'NH iQ'p9GP'T J'GHM99'GPP'H I'N'LM9I'i'#NHPiG'
MQM i'MiO'79 J GH' NH'NHP'H QHPN+' HP P7 P'%'G i N'
MI GG' PNPiOP' J'9 PGN'H I'i'NH G'GJLL GPO'O GN PGG'
7H G'N' 99'GH 'H ipGN9T'i'JG8 MiO'G P T'9 UP9T'N'
9 MO' J'LJ L GPG' NH' HMN' NHPT'N M P9'7 ' 7 N' AP'NF'EJGN'
MiO'N JP'PL N'NHMN'Q PG'7H G'HM iQ+
i 'XHMN'HM P'T J'i 'N'L PGPiN'JiN'H I'\
' NH iQ'MN'NH G'N IP'AJN' IT' G NMN i' i9T'2'
99'L I GP'H I'Mi'PWKP99PiN'L PKP+
i '2'IJGN'GP P'H I'G'N 8 NP99'H I' 7 Mi' iNPiN'
NHMN%G K I iQ'N MO'H I+$
' : O'MG'NHP'APGN+
- I G iQ' G'NHP' P T'M ' %'NHP'N I P8
2N' LPiG'NHP'PTPG' 7PWLPKNMN i
-P7 IMiKP' G P P'NHP'OJ99P'7 'H G'MKN8
#iO'AJN' i'NHP'L9M ip'MiO'G IL9P'U iO' 7LP L9P+
HP'OPPO' 7GMT'iQ' G']J NP' JN' 7JGP+
'L I GP' G I GN'K J N9T'MiO'7MGH iMA9P'
-P7 IMiKP' G'M U iO' 7 99' 'NPGNM IPiN'
XH KH'M QJPG'M'Q PMN'G KUiPGG' i'H G'EJOQ IPiN'
HMN' IMUPG'N+
'3WKP99PiN' UIMi[H J'KMiGN'i N'LM iN'M'IMi'
G'AMO'MG'G NHTGP97+
'2'MI'NH iU iQ
XHM'2'GHM99'GMT'2'HM P'L OPO'7 'H I'
2N' IJGN'AP'M'LP G iMN iQ' 7H I GP97
#'GMN P'MQM iGN'NHP'G 7NiPGG' 7L GLP NT8
X NH'MO GK P T' 7NHP' i7 i NP'79MNP PG'
HMN'7 99 'T JNH'MiO' LJ9PiKT+
' JGN'NH J'ippOG'GNMiO'7 'M' 99M i' i'NH ip' i'
UV' X 9N'NH J' H L'NH ip' i'7MJ9NG' i' NHP'Ipi\'
5'G '2'HM P'Q 9O'7 ÷NHPP+
i ' MT'9PN%G GPPU'H I'
HPi'O ' P'G i'MQM iGN' J' i'PGNMP
XHPi' P IMT'L 7N' IPPN'MiO'K IP'N '9MNP+
' JP8
XHPi'NHP'OMT'GP PG'AP7 P'A9MKU K ip'%O'i QHN
3 iO' HMN'NH J' MiN%GN'AT'7 PP'MiO' 77P'%O'9 QHN+
IP+
'2%99'IPPN'T J'MN'NHP'NJ i÷ XHMN'M'Q O%G'Q 9O÷
HMN'HP'G GH LL%O' i'M'AMGP'NP IL9P+
HMi' HP P'G ip'7PPO[
% G'NH J'NHMN' QQ%GN'NHP'AM U'MiO L9 JQH%GN'NHP'7 MI8
PNN9PGN'MOI PO' P P PiKP' i'M'G9M P8
'NHPP'AP' iGH L[MiO'NHT'GM iNG'7 'MTP'
P'K i%O' NH'L9MQJPG'NHMN'NHPP'M9 ip' APT[
%O N'2'IPPN'NHPI÷ = "1 3
i '"M 9' NHT' I i[
' 1J'9MNP'i A9P'IMGNP +
'"M P'2' iKP'9 %O$N'GPP'N 'H ipGN'Ipi'\
i '
"M iQ' 7Npi' 7T J' LPi'A JiNT'NMGNPO+
"pM iQ'T J' P P' PN %O'T J'7 PiOG'7M99%i' 77+
XH GP'NHMiU9PGG'iMNJ PG S1'MAH PO'GL NG'
L i'NHP '7 GN' 9 O%G'ipKU+ JN'NP99' IP'N JP
@O '2'IJGN'P P'O JAN'NH JQH'ipWP'G'GJ P
2G' i N'NHT'U iOipGG'GJAN9P'K PN JG+
27'i N'M'JGJ iQ'U iOipGG&MiO'MG KH'Ipi'OPM9'Q 7NG+'
3WLPKN iQ' i'PNJ i'N piNT'7 'ip\
> 1' 'IT'I GN' NHT'IMGNP' i' H GP'A PMGN'
5 JAN'MiO'GJGLPK'M9MG'M P'L9MK%O'N '9MNP8
4 J'GH J9O'HM P'7PM%O'7M9GP'N IPG' HPi'T J'O O'7PMGN'+
JGLPK'GN 99'K IPG' HP P'Mi'PGNMP'G'9PMGN+
HMN' H KH'2'GH 'HPM pi'Ui G'G I P P9T'9 P+
5JNT'MiO'CPM9'N'T J'Ji MNKHPO'I iO
M P' 7T J'7 O'MiO'9 iQ'MiO'Ap9 p P'N+
T I GN'H i J %O'9 O+
O 'MiT'APip7'N'NHMN'L iNG'N 'IP+
3 NHP'i'H LP' 'L PGPiN'2%O'PWKHMiQP
O 'NH G'iP' GH+' HMN'T J'HMO'L P'MiO' PM9NH
'p]J NP'IP'AT'IMU iQ' KH'T J GP97+
'/ U'NHPP'%'G'G [S H J'G iQ97'HAipGN'IMi+
"p P'NMUP' SNHP'Q OG' JN' 7 1'I GP T
"M P'GPiN'NHPP'N PMGJ p+' : '9 P' KH'MiO'HMLLT
JN'NHJG'K iO N i%O' H J'GHM9N'AJ 9O'7 I'I p i8

"M P' N M P99%Ø' i'NHP'Q PMN'GH p' 7T J'Q 7NG #iØ'G PPN9T'7P9N' N+
' / UT J'T J'2'9 P'T J' P99Ø 2%9Ø'Q P'T J'Q 9O+
i '
' ,2+
Ø' I P'NHPGP' 99M iG7 I'T J'K ILMi PG'
"MIQ'NHPI' 'GNMA'NHPI'O I'NHPI' i'MO MJQHN+'
i7 JIØ'NHPI'ATG I 'K J GP'MiØ'K IP'N 'IP
2%9Ø'Q P'T J'Q 9Ø'pi JQH+
%i ' MIP'NHPI'IT'9 O'9PN%G UI 'NHPI+
' 4 J'NHN' MT'MiØ'T J'NH G SDAJN' ' i'K I_
LMIT':2 (
3MKH'I MI'MLM N'M9'G iQ9P'MiØ'M9 iP+
4P'MI'M KH 99M i'UPPLG'H I'K ILMIT+
27' HP P'NH J'M N'N ' M iG'GHM99' i N'AP
9 i' '-M iNP +
IP i N'iPM'H I+S27'NH J' J9OGN'i N' PG OP
= i' '- PN+
JN' HP P' iP' 99M i' G'NHPi'H I'MAMIO i+S
"piKP[LMKU'[NHP P%G'Q 9O'TP'KM IP'7 'Q 9O'TP'G9M PG'
4 J'HM P' UT 'IP'NHP P%G'LMT I piN'"piKP'
4 J'M P'MI'M9KHT I GN'IMUP'Q 9O' 7NH MN S
1JN' MGKM9'O QG[= 4 $(3 "" 1O 3' 'iQ,

3 3'22+S '-

4 '4 (';"2i' piMN G+

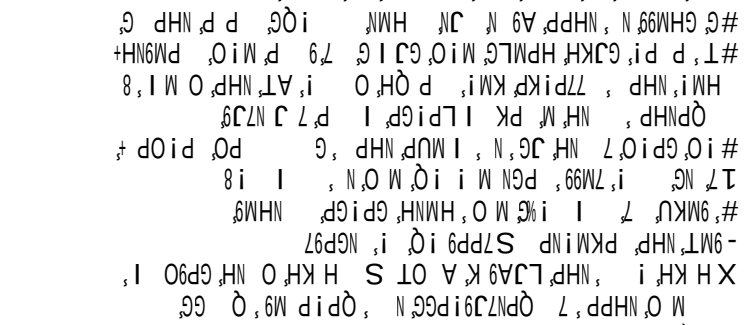
> 1'2N'G i' M i'NHMN'T J' J9O'GLPMU' NH' I i8
O 'HP'G GPN'G ' i9T'N'H I GP97

' MG i' i'/G JGJM9 9NP MQ MIQL QMK'IMiP'L L GPO N' PMO'6 'N '
i'K ILMIT+B' HP IPMi IQ GMIL97PO i'NHP GJAGPlJPiN9 ipSSO'MLM N'T J
NHMM MT'MiOT JNH G8 GN99NHP PMPN ' i'K ILMITST J GP97MiOTNHP6 IMOP'
JL' 99Mi'RS
6&QO IPNHPQP 99MiG7 I'T J'K ILMi PG R

' HP QimT PMO iQ G'6G4JHM P ' UJ'7'IP+R MQ ipGMTG'6O '
NHP iGPN i'7NHP O ' HKH'N'G IMi7PGN'MG IMPOAT'NHPipQQ'QPiKP

6FG

7'NHP'K IL G N '2'MI'Mi6 p MA9P+ I i' i'NH G 9 iP G MOO PGGPG'NHP'OM iNP '
N 'JG'NHMM'NH G N'MNMN'NHPT'HM P'i NH iQ' N ' L PGPiN'N ' H I' MN' NHMN' N IP' AJN'
LM iNP'OPK9M iQ' MNMN'NHPT'HM P'i NH iQ' N ' L PGPiN'N ' H I' MN' NHMN' N IP' AJN'
L I GPG'MiO' N'G NH'A NNP' iT'NHMN'HP'GMTG'6'PWKP99piN' UIM+R' 2i'NHP'
GMIP'GM KMGN'K GL N HP'i 'GMTG'64 J'HM P' U7 'IPSNHP P%G'LMTIPiN+R'
O '9HP'8)'MHMN'NHPT'7 IP9T'O O'7 'H I'NHPT' PP'MILQT'LM O' i'NHP'OMTG' 7
H G7 GN'L GLP NT+



HMN'i NH iQ'AJN'H I GP97' HKH'9 UG9UP'IMi+
2G'7 piO9T' NH'H I+
'7 ' iQ'JG#N'HG KM P
2N'G J'LM N'MiO'L I GP'N'NHP'#NHPi MiG'
'GLPMU' NH' I i+
%'7 ' #N'M99'N IPG M9 UP
pi'M P'i N'GN 99'NHP'GMI P'% MG'N IP'MiO'Q P G+'
HMN'7 MI%O'H I'NHJG'N IP' NH'HG'7M P'HMiO+'
177P iQ'NHP'7 NJIPG'7HG'7 IP'OMTG+
HP'7 IP'IMi'IMT'IMUP'H I'' iQ'JG'N'H I+'
#iO'KHMiKP'N'MG N'I MT+
> 1' "P P'G H G'KM P+S
-PMK'MiO'K iNPiN'AP'HP P[/ O' I i'[I i[
/ U'JN'MiO'GLPMU'N'7 piOG' HP'#NHPi MiG
T'N ' 7'NHP 'I GN'P P piO'GPiMP'Q PPN'NHPP'
LPMU'N'NHPI'i A9P' I i+

1 '

' H J'GJi'NHMN'K I7 N%GN'AJ i[S LPMU'MiO'AP'
HMiQ%O
O 'PMKH'N JP' O'M'A9 GNP [MiO'PMKH'7M9GP'
P'MG'M'KMJN% G iQ'N'NHP' N' %NHP'N iQJP+
iGJI iQ'N' N'GLPMU iQ[
'7 ' X NHT' I i S
'17i iP'AJN'GJKH'MG T J'MiO'T J'7 I i+
%'(' HP'GPiMN G'7#NHPiG'Q PP'NHPP' I i+
'2'NHMiU'NHPI8 MiO' J9O'GPiO'NHPI' AMKU'NHP'
L9MQJP+
J9O'2'AJN'KMNKH'N'7 'NHPI +$
1'7 QPN'
'(' HPT'K i7PGG+
M O'NHPP'7 QPN7J9ipGG'N 'QPiP M9'Q GG'
XH KH'i 'NHP'LJA9K'A OT S H KH'O NH'GP9O I'
-9MT'NHP'pKMiNP S7PP9 iQ'i'NGP97
'9MKU'7 I i%G MO'HMNH'GPiGP' NHM9'
#'9MKU'7 I i%G MO'HMNH'GPiGP' NHM9'
17'NG' i'7M99'pGN M i iQ'MO'N' I i8
#iO'GPiO'7 NH'JG'N'IMUP'NHP'G pO'piOP+'
QPNHP' NH'N' pK ILPiGP'I P'7 J N7J9'
HMI'NHP ' 77PiKP'KMi' pQH'O i'AT'NHP'O MI'8
#T'P pi'GJKH'HPMLG'MiO'GJIG'7'9 P'MiO' PM9NH+
#G'GHM99'N'NHPP'A9 N' JN' HMN' iQG' P P'NHP G'
#iO' NP' i'NHPP'NHP'7QJ PG'7NHP'9 P+
3 P'N' PMO'NHPI'NH iP+
' 4 J' NKH'IP'i' N8
J L GP'IP'N'NHP' PT'A iU' 7NPM G'
/piO'IP'M'7 9%G'HPM N'MiO'M' IMi%G'PTPG+
#iO'2%99'AP ppL'NHPGP'K I7 NG' NHT'GPiMN G+
'(' HP P7 P'G'L9PMGP'NHPP'N ' PNJ i' NH'JG+
#iO' 7 J'#NHPiG'@NH iP'MiO' J G'N'NMUP
HP'KMLM iGH L'NH J'GHM9N'AP' IP'' NH'NHMiUG+
#99 %O' NH'MAG 9JNP'L P'MiO'NHT'Q O'iM IP'
/ P' NH'MJNH NT' SG'G i' P'GHM99'O P'AMKU'
17'#9K A MOPG'NHP'MLL MKHPG' 9O'8
XH '9UP'M'A M'N 'GM MQP'O NH' N'JL'
" G'K JiN T%G'LPMKP+
%'(' #iO'GHMUPG'H G'NH PMN%i iQ'G O
#QM iGN'NHP' M99G' 7#NHPiG+
2(' HP P7 P' I i S
' XP99'G '2' 998'NHP P7 P'2' 99'G ' HJG S

7$; ' +

: M PG' !9T AP' I P!%G UG8 M!O' OPMNH' NHP 'QM ![
J!'H OP' NHT' APM I G[I !'HMNH' O !P' H G' P Q!+
9:>4 '
7 ' " G' O GK !NP!NG' M P' J! P I PMA9T'
JL9PO' N ' ! MNJ P+
%' 7 ' 1J 'H LP' !' H I ' G' OPMO' 9PN' JG' PNJ !+
#!O' GN M !' HMN' NHP ' I PM!G' G' 9P7N' J!N ' JG
2!' L NT' 7 J ' MQPO' M!O' J 'T JNH
2' KM!! N' KH GP' AJN' NP99' H I ' NHMN' 2' KM P' ! N+
#!O' 9PN' H I ' NMUP%' MN' GN8 7 ' NHP U! PG' KM P' ! N+
XH 9P'T J'HM P' NH MNG' N ' M!G P ' 7 ' I TGP97+
HP P%G' ! N' M' H N9P' I' ' NHP' J!' J9T' KM I L+
JN' 2' O ' L CP' N' MN' I T 9 P ' AP7 P
HP' P P P!O% N' NH MN' !' #NHP!G+' ' 2' 9PM P' T J
' NHP' L NPKN !' 7' NHP' L GLP JG' Q OG+
#G' NH P PG' N ' UPPLP G+
> 1' NMT' ! N ' M99%G' !' M !+
$ ' XHT' 2' MG' N !Q' 7' I T PL NMLH8
2N' 99' AP' GPP!' N I ' I T 9 !Q' G KU!PGG'
17HPM9NH' M!O' 9 !Q' ! ' APQ !G' N ' I P!O
#!O' ! NH !Q' A !QG' I P' M99' NH !QG+' : ' 9 P' GN 998
P' #9K A MOPG' T J 'L9MQJP' T J'H G' D
#!O' 9MGN' G ' 9 !Q' P ! JQH[
2 7 ' XP' GLPMU' !' M !+
' JN' TPN' 2' 9 P' I T' K J!N T' M!O M I' ! N'
1!P' NHM' PE KPG' !' NHP' K I I !' MKU+
#G' K I I !' A J N' O NH' LJN' N+
2' 7 ' HMN%G' P9' GL UP+
' 7 ' I I P!O' I P' N ' I T' 9 !Q' K J!N T I P! S
' 7 ' HPGP' OG' APK I P' T J ' 9 LG' MG' NHPT' LMGG
NH JQH' NHP I +
' 7 ' #!O' P!NP ' !' J ' PM G' 9 UP' Q PMN' N J I LHP G'
2Z' NHP ' MLL9MJO !Q' QMNPG+
I I P!O' I P' N ' NHP I 8
#!O' NP99' NHP I ' NHMN' N ' PMGP' NHP I ' 7' NHP ' Q P7G+
HP '7PM G' 7' H GN 9P' GN UPG' NHP ' MKHPG' 9 GGPG+
HP ' LM!QG' 7' 9 P' NH' NHP ' !K OP!N' NH PG'
HMN' ! MNJ P%G' 7 MQ 9P' PGGP9' O NH' GJGNM !'
2!' 9 7P%G' J!KP NM !' TMQP' 2' 99' G I P' U !O!PGG' O '
NHP I
2999' NPMKH' NHP I ' N ' L P P!N' 9O' #9K A MOPG% MNH
Y' 7 B 2' 9 UP' NH G' P99' HP' 99' PNJ !' MQM !+
' 2' HM P' M' N PP' H KH' Q G' HP P' !' I T' K9 GP F
HMN' I !P' !' JGP' ! NPG' I P' N ' KJN' O !+
#!O' GH N9T' I JGN' 2' 7P99' N ' P99' I T' 7 P!OG+
P99' #NHP!G ' !' NHP' GP]JP!KP' 7'OPQ PP+
O I ' H QH' N ' 9 ' NH JQH JN' NHMN' H G ' L9PMGP'
' GN L' M779 KN ! ' 9PN' H I ' NMUP' H G' HMGNP+
IP' H NHP ' P P' I T' N PP' HMNH' 7P9N' NHP' MWP+
#!O' HM!Q' H I GP97 S2' L MT' T J ' O ' I T Q PPN !Q+
> 1' JA9P' H I ' ! ' 7J NHP ' NHJG' T J' GN 99' GHM99' 7 !O'
H I+
' IP' ! N' N ' I P' MQM !' ' AJN' GMT' N ' #NHP!G
I !' HMNH' I MOP' H G' P P 9MGN !Q' I M!G !'
L !' NHP' APMKHPO' P QP' 7' NHP' GM9N' 79 O8
XH I ' !KP' M' OMT' NH' H G' P I A GGPO' 7 NH'
HP' NJ AJ9P!N' GJ QP' GHM99' K P ' NH NHP ' K I P+
#!O' 9PN' I T' Q M P GN !P' AP' T J ' MK9P+S
/ LG ' 9PN' G J ' OG' Q ' AT ' M!O' 9M!QJMQP' P!O
X HMN' G' M I GG ' L9MQJP' M!O' !7PKN !' I P!O' [
D &$ # HP' Q !M9' PMOG' NPP P!G' K PKNPO' N' N ' ' M9 ' I P
N ' 8$ ' ' !P' I M !NN' I !Q' NHMN' NHP' NJ AJ9P!N' GJ QP' MG' N ' K P ' NHP' Q M P ' NHP'
NHP' NHP' A OT' ! ' NHP' Q M P+
D HP P' G M' Q O' OPM9 7 O 77 KJ9NT' MA JN' NH G' GKP!P+' X P' 99' 7 GN' Q P N9 P'
O JAN7J9' LM N' 7' N' MG' N' GNM ! OG' !' NHP Q ' !M9 S
4 ' ' T' M99' OPGK LN !' NH G' GH J9O' AP' NHP' L9MKP+
' XH GP' HPP P' N ' LPNUP' A M#' P ' N ' X HMN' G' NH G N
T I K!' G OPMO' H ' HMNH' JN' GN PNKHN' H G' LM!
IP' PMGN' PMOP' NH G' 8 ' HP P' O ' MG ' ! N' 9 P' M' I M ! +
PMO' GJ P' M!O' NH G' H G' : M P' ' HMMG' ! ' NH G' LA
2' K!!! N' PMO8' NHP' HM MKNP' 2N99' NMUP' NH' MW
1J ' MLMN' IP HMNH' ! ' P T O QJ P' GU 99
#!' MQNO' 2!NP L PNP ' NH JQH T 'Q' !' OMTPG8

' P!MN G'!' '2 -

99' ! 'T J'HM P'Q !P' !'M!O'7 99%O'NHP'N IP'
X NH'M99'9 KP!N JG' IPMGJ P%IMU !Q'T J' 99G'
HP'GK LP' 7'EJGN KP8 N99' ! ' ITGP97'M!O'GJKH'
#G'G9PL NH !'NHP'GHMO ' 7'T J'L P+
"M P' M!OP %O' NH' J'N M P G%O'M IG'M!O'A PMNH%O'
1J'GJ77P M!KP' M !9T+' 'NHP'N IP' G'79JGH+
XHP!'K JKH !Q' IM ' !'NHP'APM P'GN !Q
PG' 7' NGP97'S' !' I P'R' ! 'A PMNH9PGG' !Q'
HM99'G N'M!O'LM!N' !'T J'Q PMN'KHM G' 7'PMGP8
#!O'LJ GT' !G 9P!KP'GHM99'A PMU'HG' !O
X NH'7PM 'M!O'H O'79 QHN+
)7 ' A9P M!O'T J!Q+
XHP!'NHT'7 GN'Q P7G' P P'AJN'M' IP P'K !KP N+
3 P'NH J'HMOGN'L P ' ' P'HMO'KMJGP'N '7PM +
XP'GP!N'N 'NHPP'8 N $Q P'NHT' MQPG'AM9 I +
' LP' JN' J' !Q MN NJOP' NH'9 PG'
#A P'NHP ']JM!N NT+'
%'7 ' 'O O' P'
M!G7 IPO' I !'N ' J'K NT%G'9 P+
T'HJ I A9P' IPGGMQP'M!O'AT'L I G%O' IPM!G'8
XP' P P'! N'M99'J!U !O'! 'M99'OPGP P'
HP'K I I !'GN UP' 7' M +
(' 7 ' HPGP' M99G' 7' J G
XP P'! N'P PKNPO'AT'NHP 'HM!OG'7 I' H I'
4 J'HM P' PKP %O'T J'Q P7G' ! 'M P'NHPT'GJKH
HMN'NHPGP'Q PMN'N P G'N LH PG'M!O'GKH 9G'GH J9O'7M99'
0 'L MNP'7MJ9NG' !'NHP I +
%'7 ' 'M P'NHPT'9 !Q
XH ' P P'NHP' I N PG'NHMN'T J'7 GN' P!N' JN8
HM I P'NHMN'NHPT' M!NPO'KJ!! !Q' !'PWKPGG
"MNH'A UP'NHP 'HPM NG+' M KH'! A9P'9 O+
2!N ' J'K NT' NH'NHT'AM!!P G'GL PMO'
T'OPK I MN !'M!O'M'N NHPO'OPMNH
@27'NHT' P P!QPG'HJ!QP'7 'NHMN'7 O+
XH KH'!MNJ P'9 MNHPG 'NMUP'NH J'NHP'OPGN !%O'NP!NH'8
#!O'AT'NHP'HMCM O' 7'NHP'GL NNPO'O P+
/PN'O P'NHP'GL NNPO+
'7 A' #99'HM P'! N' 77P!OPO8
0 'NH GP'NHMN' P P' N' G'! N'G]JM P'N 'NMUP+
1!'NH GP'NHMN'M P' P P!QP'K IPG'9 UP'9M!OG+
P'! N'!HP NPO+' HP!'OPM 'K J!N T I M!+
!Q' !'NHT' M!UG'AJ9'9PM P' NH JN'NHT' MQP'
$ LM P'NHT'#NHP! M!'K MO9P'M!O'NH GP'U !' ;
XH KH' !'NHP'A9JGNP ' 7'NHT' MNH ' I JGN'7M99'
X NH'NH GP'NHMN'HM P' 77P!OPO' '9 UP'M'GHPLHP O+'
#LL MKH'NHP'7 9O'M!O'KJ99'NHP' !7PKNPO'7 NH+
JN'U 99' ! N'M99'N QPNHP +
%'7 ' XHMN'NH J' 9N+

H J' MNHP 'GHM9N'P!7 KP' N' NH'NHT'GI 9P+
HM!'HP 'N %N' NH'NHT'G O+
'7 ' PN'AJN'NHT'7 N
#QM !GN' J' M I L %O'QMNPG'M!O'NHPT'GHM99' LP
'NH J' 9N'GP!O'NHT'QP!N9P'HPM N'AP7 P+
'GMT'NH J%9N'P!NP'7 P!O9T+
%'7 A' H 'NHT'Q9 P'8
1'M!T'N UP!' 7'NH !P'H ! J'P9GP+
HMN'NH J' 9N'JGP'NHP' M G'MG'NHT' PO PGG+
#!O'! N'MG' J'K !7JG !'M99'NHT'L P G'
HM99'I MUP'NHP 'HM A J' !' J'N !'N 99' P'
"M P'GPM9%O'NHT'7J99'OPG P+
(' HP!'NHP P%G' IT'Q9 P8
5PGKP!O'M!O' LP!'T J'J!KHM QPO'L NG'8
H GP'P!P I PG' 7' I !%G'M!O'I !P' !+
XH I'T J'T J GP9 PG'GHM99'GPN' JN'7 ' PL 7+
OM99'M!O'! ' I P8 M!O SN 'MN !P'T J'7PM G'
X NH' IT' I P'! A9P' IPM! !Q S! N'M' IM!+
HM99'LMGG'H G']JM NP ' ' 77P!O'NHP'GN PM I +
17' PQJ9M 'EJGN KP' !'T J'K NT%G'A J!OG+
JN'GHM99'AP' P!OP %O'DN 'T J'LJA9 K'9M G
#N'HPM PGN'M!G P +
%! ' % G' I GN'! A9T'GL UP!+
(' 5PGKP!O'M!O'UPPL'T J' OG+

▫

' P!MN G'" - "$ "'!, ' '3 -

' ' 9O P +

7! ' T'! A9P'QP!P M9' I !' G'OPMO'8
3!N IA%O'JL !'NHP' P T'HP I' %NHP'GPM'
#!O' !'H G'QNM P GN !P'NH G' !GKJ9LNJ P' H KH'
X NH' MW'2'A JQHN'M MT' H GP'G 7N' IL PGG !'
2!NP L PNG'7 'IT'L 'Q! M!KP+

('= "-V' "P P'9 PG'M' PNKHPO'K GP' 7' PNKHPO'G J9'AP P7N
PPU'! N' IT'!M IP' #'L9MQJP'K !GJ IP'T J' KUPO'KM N 77G'9P7N[
"P P'9 P'2' I !8 H 'M9 P'M99'9 !Q' IP!'O O'HMNP'
-MGG'AT'M!O'KJ GP'NHT'7 998 AJN'LMGG'M!O'GNMT'! N'HP P'NHT'QM N+

HPGP' 99'PWL PGG' !'NHPP'NHT'9MNNP 'GL NG'
H JQH'NH J'MAH %OGN' !'JG' J'HJ I M!'Q P7G
K !%OGN' J'A M !%G'79 'M!O'NH GP' J'O L9PNG' H KH'
0 I'! QQM O'!MNJ P'7M99'TPN' KH'K !KP N'
MJQHN'NHPP'N ' I MUP' MGN' PLNJ!P' PPL'7 'MTP'
1!'NHT'9 'Q M P' !'7MJ9NG'7 Q P!+' 5PMO'
2G'! A9P' I !'8 7' H GP' IPI T'
"P PM7NP' I P+S !Q' IP' !N 'T J'K NT+
#!O'2' 99'JGP'NHP' 9 P' NH' IT'G O'
MUP' M'A PPO'LPMKP8 I MUP'LPMKP'GN !N' M 8 I MUP'PMKH'
- PGK AP'N ' NHP 'MG'PMKH' NHP %G'9PPKH+
/PN' J'O J I G'GN UP+' = 4 & $

' ' ! ' '

'2+

)' ' R =' 0'$ ' .'$ ' "" ' '0 $' /

' OAH □NGD□H ' CFG' OF?D?OCGD' +:' #□@AH' !' ABD' HCDANBOCADE' AC□OG'
JG' F?PG' DG>GDDGN' CA' &D' F?DMG '$?@L8 'K?D?MMGM' LGCJGGH' F?(KGDG'
?HN' A ?DCF' G' FGDG'DGKD□HC' CFG'K? ? G' R
=' HG' A>' CFG' G?DM□G C' ?HN' HALMG C' GHSAE@GHC ' ' F?N' JFGH' ?' LAE'
J?' □H' CFG' OAHCG@KM?C□AH' A>' CFA G' O?K□C?M' KD□HC ' LE' A ?DCF '<'#FG'
?DMAC8 '?HN' "?(G8 ' DA DG G 8' ' GC' A>' GPGDGD' ?C□DG 'V>AD'
CFGE'?DG' HAC' A' @BOF' OA@GN□G ' JF□OF' CFGE' F?PG' LGGH' M□(GHGN' CA'?'
CFGE'?DG' CDAH '?HN' @? OBM□HG' ?C□DG 'MG '@□H MGN' J□CF' ?HECF□H 'A>'
@GDG' >BH' JGDG' HGPGD' JD□CCGH' BKAH' K?KGD'AD' D?PGH' BKAH' OAKKGD
#FGE'DG G@LMG'0BPGH?M'AD' CFG' ?C□D□O' CAB0FG '□H' #□@AH' A>' CFGH

=' ' J?' KMG? GN' J□CF' CFG' DGKME' A>'?' GHCMG@?H' JFA' LG□H '? (GN'
JF□OF' LAA(' FG' G CGG@GN' @A C' □H' F□' M□LD?DE' ?H JGDGN'<' F?(KGDG'8
LG□H '? (GN' JF□OF' FG' G CGG@GN' CFG' HG C' LG C' DGKM□GN'< A ?DCF 8
□ ' D?KF□O' DGKDG GHC?C□AH' ?DG' □HNGGN' LAA(' ' CFGE' F?PG' CFG' CGG@ '
□H '>DB□C>BM' B G C□PG' @G?H□H ' A>' 0 ' CFGD 8 K□OCBDG ' JG' MAA(' ?C R F□' KD□HC ' JG' DG?N
=' H' KBD B?HOG' A>' CF□' K?D?MMGM' ' F?PG' A@GC□@G ' ' GHCGDC?□HGN'
@E GM>' J□CF' OA@K?D□H ' CFG' #□@AH' A>' CFGH ' A>' F?(KGDG' VJF□OF'
' F?PG' SB C' @GHC□AHGN ' ?HN' A ?DCF8 ' <"?(G8 ' DA DG '8 CA GCFGD'
#FG' CADE' CFG' □HAD?M' □H' LACF' □' HG?DME' CFG' ?@G ' #FG' J□MN' OABD G' A>

' 0 ' HP' Q !MG' HMG' ' X P' MQ PP' NH' +' 5TKP' NHMN' NH G
G'M' I GL !N+

D□AC ?HN G CD?P? ?HOG ' GHN□H ' □H CFG AHG J□CF ND□P□H 'CFG DAN□ ?M >DA@ CFG AO□GCE A> @GH □HCA CFG AM□CBNG A> CFG NG GDC ' ?HN □H CFG ACFGD J□CF OAHNBOC□H ' CFG " ?(G CFDAB F F□ ' GPGD?M C? G ' A> N□ □K?C□AH □HCA CFG C□MM @ADG OA@KMGCG NG AM?C□AH ' A> CFG @?N FLB G ' □H CFG KM?E ?HN □H CFG K□OCBDG ?DG NG OD□LGN J□CF ?M@A C GQB?M >ADOG ?HN H?CBDG ' #FG ' $GPGG A> CFG " ?(G J F□OF >AD@ ' CFG BLSGOC A> CFG GOAHN KM?CG □H CFG GD□G ' □ ' ?M@A C ?' CD?H OD□KC A> #□@AH ' $GPGG □H CFG AKGH□H ' OGHG A> CF?C KM?E ' G >□HN ?' NGN□O?C□H ' KAGC ' ?HN ACFGD □@□M?D OF?D?OCGD ' □H LACF ' #FG OAHOMBN□H ' OGHG □H CFG ' "?(G8 ' DA DG '8 □ ' KGDF?K ' BKGD□AD CA CFG M? C OGHG ' A> #□@AH I

#F□ ' NGM□ FC>BM JD□CGD F? ' HAC AL GDPGN CF?C □H ?HACFGD A> A ?DCF8 ' ?N@□D?LMG CD?H OD□KC ' A> FB@?H M□>G ' ,'#FG &?DD□? G (' M?' &ANG I' CFG K?□HCGD F? ' ?M A' G F□L□CGN ?H □NG?' JF□OF □ ' >ABHN □H CFG #□@AH A> CFGH R CFG >?□CF>BM CGJ?DN P?□HME GHNG?PABD□H ' CA KDG GHC ?' J?DH□H ' A> CFG ?KKDA?OF A> NGLC ?HN N□ FAHABD □H F□ ' HG MGOCGN ?OOABHC R

6' 1' IT' Q O'9 O[
N' IM!T'N IPG'2'A JQHN' !' IT' MKK J!NG
/M O' NHP I' AP7 P' T J8 T J' J9O' NH 'NHP I' 77+R

' 222+

g' ' . R , L .' $ 4' D.' & $ 'R' $ $ $ '" '
'% .' .' ' '$ / /

MBC?DOF' N□ C□HOCME' DGOADN ' CFG' O□DOB@ C?HOG' JF□OF' OAHPGDCGN CFG' GHGDAB ' #□@AH' □HCA' ?' @□ ?HCFDAKG ' G' BLSA□H' >DA@' ADCF8 ' CD?H M?C□AH' CFG' GHC□DG' K? ? G' DGM?C□H ' CA' #□@AH' R

= HCAH□B ' >AD AA(' CFG' O□CE' V MG ?HND□?' ?HN' OA@K?HE' A>' F□ ' >D□GHN ' ?HN' LB□MC' F□@' ?' FAB G' □H' CFG' G?' LE' CFG' MG' A>' F?DA ' BKAH' OGDC?□H' >ADOGN' @ABHC ' JF□OF' FG' O?B GN' CA' LG' O? C' □HCA' CFG' G?' ?UN' NJGMC' CFGDG' ? ' ?' @?H' CF?C' L?H□ FGN' F□@ GM>' >DA@' ?MM' @GH8 ' OA@-K?HE' ' ?E□H ' CF?C' FG' JABMN' MG?N' #□D?AH8 ' M□>G ' LGO?B G' FG' F?N' CFG' M□(G' JDAH ' A>>GDGN' F□@' CF?C' J? ' ?>ADG' A>>GDGN' BHCA' #□@AH' $?HN' CF?C ' $' $ D ' ' $ '$'$ ' ' ' .' 0$ '$' D ' "'$ ' .'$'0 ' '0 $' ' .' 'J0 ' ' ' '

#F□ ' #□@AH' J? ' ?' O□C□TGH' A>' CFGH ' CF?C M□PGN' ?LABC' CFG' J?D' A> GMAKAHHG B ' ? ' ?KKG?DGCF' LE' M?CA ' ?HN' D□ CAKF?HG 8 OA@GN□G ' □H' CFG' JF□OF' CFGE' @AO(GN' F□@' O?MM□H ' F□@' ?' P□KGD' ?HN' @?M□O□AB ' @?H' BHCA' @?H(□HN' CA' FBH' ?MM' ACFGD' @G□□8 ' OA@K?H□G ' LBC' CFG' OA@K?HE' A>' EABH ' MO□L□?NG ' ?' LAMN' ?HN' □H AMGHC' EABCF ' JFA@' FG' JABMN' DG?CME' >G? C' ?HN' @?(G' @BOF' A>' ?HN' (□ GN' F□@' PGDE' M?NME ' KG@?HCB ' KAHNGD□H ' ?C □C' ? (GN' F□@' CFG' O?B G' JF?C' FG' @G?HC' CA' @?(G' A' @BOF' A>' CF?C' EABH ' @?H' ?MAHG ' ?HN' CA' F?CG' ?MM' ACFGD ' ' #□@AH' ?H JGDGN' F□@' ' NA' □C8 ?□N' FG' LGO?B G' ' (HAJ' CF?C' AHG' N?E' FG' F?MM' NA' DG?C' @□ OF□G>' BHCA' CFG' CFGH□?H 8 #F□ ' #□@AH' A@GC□@G ' JABMN' F?PG' KG@?HCB ' □H' F□ ' OA@K?HE' LGO?B G' FG' J? ' @BOF' M□(G' CA' F□ ' H?CBDG' ?HN' OAHN□C□AH ' ?HN' ?M A' >AMMAJGN' F□@' □H' @?HHGD' A>' M□>G ' H' ?' C□@G' JFGH' CFGE' AMG@HME' OGMGLD?CGN' CFG' >G? C ' O?MMGN' FAOG' ?C' CFGH ' VCA' J□C ' CFG' >G? C ' A>' CFG8 NG?N ' JFGDG' CFGE' @?NG' KD□H(M□H ' ?HN' ?OD□>□OG ' >AD' CFG' NG?N ' ?HN' CF?C' CFGE' CJA' CFGH' G?CGN' CA GCFGD' LE' CFG@ GMPG ' KG@?HCB ' ?□N' BHCA' CFG' ACFGD ' ' FGDG' □ ' ?' CD□@' L?HQBGC ' #□@AH 8 #□@AH' ?H JGDGN' ? ?□H ' ' ,G? 8 ?□N' FG ' ' A' CFAB' JGDC' HAC' FGDG 8 C' □ ' DGKADCGN' A> F□@' ?M A ' CF?C' CF□ ' #□@AH' AH' ?' C□@G' VCFG' KGAKMG' LG□H ' ? G@LMGN' □H' CFG' @?D(GC KM?OG' ?LABC' NG K?COF' A> A@G' ?>>?□D ' AC' BK' □HCA' CFG' KBMK□C' >AD' AD?C□AH ' JFGDG' CFG' AD?CAD ' OA@@AHME' B GN' CA' KG?(' BHCA' CFG' KGAKMG ' ?HN' □MGHOG' LG□H ' @?NG ' GPGDE' @?H' M□ CGH□H ' CA' FG?D' JF?C' FG' JABMN' ?E ' LGO?B G' □C J? ' ?' JAHNGD' CA' GG' F□@' □H' CF?C' KM?OG ' ' ?C' MGH CF' FG' LG ?H' CA' KG?(' □H CF□ ' @?HHGD' ' ' & E' MADN ' A> CFGH ' ' F?PG' ?' M□CCMG' Z?DN' □H @E' FAB G' JFGDG' CFGDG' DAJGCF' ?' >□ CDGG' AH' CFG' JF□OF' @?HE' O□C□TGH ' F?PG' F?H GN' CFG@ GMPG ' ?HN' LGO?B G' ' @G?H' CA' @?(G' A@G' LB□MN□H ' BKAH' CF?C' KM?OG ' ' CFAB FC' AAN' CA' MGC' EAB' ?MM' BHNGD-C?HN' □C ' CF?C' LG>ADG' CFG' >□ CDGG' LG' OBC' NAJH ' □>' ?HE' A>' EAB' LG' NG KGD?CG ' EAB' @?E' CFGDG' □H' C□@G' A' F?H ' EABD GMPG 8 G' N□GN' □H' CFG' O□CE' A>' #F?MG ' ?HN' J? ' LBD□GN' BKAH' CFG' G? □NG ' AJ' □C' OF?HOGN' A' CF?C' CFG' G?' GCC□H ' □H ' □C' OA@K? GN' F□ ' CA@L' DABHN' ?LABC ' CF?C' HA' @?H' OABMN' OA@G' CA' □C ' ?HN' BKAH' CFG' ?@G' J? ' JD□CCGH' CF□ ' GK□C?KF' R

Ÿ "P P' 9 PG' M' PNKHPO' K GP' 7' PNKHPO' G J9' HP P7N
PPU' ! N' IT' !M I P' ' M' L9MQJP' K !GJ I P' T J' KUPO' PNKHPG' 9P7N+$

C' □ ' DGKADCGN' CF?C' #□@AH' F□@ GM>' JFGH' FG' M□PGN' @?NG' CF□ ' GK□C?KF'

>AD' CF?C' JF□OF' J? ' OA@@AHME' DGFG?D GN' J? ' HAC' F□ ' LBC' @?NG' LE' CFG' KAGC' ?MM□@?0FB R

Ÿ "P P' 9 P' 2 ' I !' . H ' M9 P' M99' 9 !Q' I P!' O O' HMNP
-MGG' AT' M!O' KJ GP' NHT' 7 998 AJN' LMGG ' M!O' GNMT' ! N' HP P' NHT' QMNP+%R

' +

=' ' H ,' '$ 3' ' .' $ 0' $ ' ' ' /

G' F?PG' DG>GDDGN ' □H' ABD' HCDANBOCADE' AC□OG ' CA' CFG' CJGHCE G□ FCF' HAPGM' A>' =' #FG' ?M?OG' A>' MG? BDG' I' ? ' ?H' G ?@KMG' A>' CFG' KAKBM?D' HAC□AH' A>' CFG' 0F?D?OCGD' A>' #□@AH' A>' CFGH ' G' BLSA□H' CFG' HAPGM' J□CFABC' ?LD□N @GHC R

=' >' CFG' CD?H G' ?HN' LG? CME' H?CBDG' A>' #□@AH' A>' CFGH ' GHG@E' CA' @?H(□HN ' J□CF' F□ ' NG?CF ' LBD□?M ' ?HN' GK□C?KF

=' □M' CFG' LG? C ' A>' CFG' JADMN' NA' ?KKME' CFG@ GMPG ' CA' ACFGD' LG? C ' A>' CFG□D' (□HN ' #□@AH' A>' CFGH ' AHME' G OGKCGN ' A>' JFA G' CD?H G' H?CBDG' MBC?DOF' □ ' ? CAH□GN ' □H' CFG' M□>G' A>' &?DOB ' HCAH□B ' M?CA' ?HN' D□ CAKF?HG ' NA' DGKADC' F□ ' @?DPGMMAB ' H?CBDG ' LGO?B G' FG' J? ' ?' @?H' LBC' LE' F?KG' AHME ' □H' QB?M□C□G ' FG' J? ' CFG' O?K□C?M' GHG@E' A>' @?H(□HN ' JF□OF' FG' OAH>G GN' >D?H(ME' BCCGDME' CA' ?LFAD' ?HN' F?CG ' G' NJGMC' ?MAHG' □H ?' M□CCMG' O?L□H' □H' CFG' >□GMN ' HAC' >?D' >DA@' CFGH ' GK?D?CGN' '>DA@' ?MM' HG□ FLABD ' ?HN' OA@K?HE' FG' HGPGD' JGHC' CA' CFG' O□CE ' AD' CA' ?HE' ACFGD' F?L□C?LMG' KM?OG ' G OGKC' FG' J? ' OAH CD?□HGN ' FG' OABMN' HAC' ?L□NG' ?HE' @?H8 ' OA@K?HE' ?HN' OAHPGD ?C□AH ' FG' J? ' HGPGD' GGH' CA' A' CA' ?HE' @?H8 ' FAB G ' HAD' EGC' JABMN' B>>GD' CFG@' CA' OA@G' CA' F□@' C' CFG' ?@G' C□@G' CFGDG' J? ' □H' CFGH ' ?HACFGD' A>' M□(G' QB?M□CE ' O?MMGN' KG@?HCB ' A>' CFG' PGDE' ?@G' H?CBDG ' N□>>GDGHC' >DA@' CFG' H?CBD?M (□HN' A>' @?H ' ?HN' MAN GN' M□(GJ□ G' □H' CFG' @□NNMG' A>' CFG' >□GMN ' (' H' ?' N?E' CFGE' CJA' LG□H ' ?MAHG' CA GCFGD' ?C' N□HHGD' KG@?HCB ' ?□N' BHCA' F□@' ' #□@AH ' JF?C' ?' KMG? ?HC' >G? C' □ ' CF□ ' ' ?HN' JF?C' ?' @GDDE' OA@K?HE' ?DG' JG ' LG□H ' HA' @ADG' LBC' CFAB' ?HN' '8 ' ?E ' VQBACF' #□@AH ' □C' JABMN LG' ?' @GDDE' L?HQBGC' □HNGGN ' □>' CFGDG' JGDG' HAHG' FGDG' LBC' @E GM>' ,' FGDG□H' FG' FAJGN' FAJ' M□(G' ?' LG? C' V□HNGGN ' FG' J? ' >AD' FG' OABMN' HAC' ?L□NG' ?HE' ACFGD' @?H ' LG□H ' HAC' ?LMG' CA' B>>GD' CFG' OA@K?HE' A>' F□@' JF□OF' J? ' A>' M□(G' H?CBDG ' HN' □>' LE' OF?HOG' FG' F?KKGHGN' CA' A' CA' CFGH ' □C J? ' AHME' CA' KG?(' J□CF' MO□L□?NG ' JFA' J? ' CFGH' ?H' G OGMMGHC' O?KC?□H' CFGDG ' JFGDG?C' @?HE' N□N' @?DPGM ' ?HN' CFGDG>ADG' KG@?HCB ' NG@?HNGN' A>' F□@' JFE' FG' K?(G' CA' HA' @?H ' LBC' CA' MO□L□?NG 'W ' KG?(' CA' F□@' A@GC□@G 8 ?□N' #□@AH ' LGO?B G' ' (HAJ' CF?C' LE' F□ ' AOO? □AH' CFG' CFGH□?H ' F?MM' DGOG□PG' DG?C' FBDC' ?HN' CDABLMG 8 F□OF' JADN ' @?HE' C□@G ' FG' CAMN' CA' MO□L□?NG ' F□@ GM>' G' F?N' ?' ?DNGH' ?NSA□H□H ' CA' F□ ' FAB G' □H' CFG ' >□GMN ' JFGDG□H' J? ' ?' >□ CDGG ' JFGDGBKAH' @?HE' NG KGD?CG' @GH' cADN□H?D□ME' N□N' F?H ' CFG@-GMPG ' ' □H' KM?OG' JFGDGA>' FG' KDAKA GN' CA' GC' BK' ?' FAB G ' ?HN' CFGDG->ADG' J? ' >ADOGN' CA' OBC' □C' NAJH ' >AD' JF□OF' O?B G' FG' JGHC' CA' CFGH ' ?HN' □H' CFG' @?D(GC KM?OG ' FG' O?MMGN' CFG' KGAKMG' ?LABC' F□@' ?E□H ' CF?C' FG' F?N' HGJ ' CA' CGMM' CFG@' ' JFGH' CFG' KGAKMG' BHNGD CAAN' CF?C' FG' J? ' ?LABC' CA' @?(G' ?' N□ OABD G' BHCA' CFG@' JF□OF' J? ' JAHC' CA' KG?(' CA' HA' @?H ' CFGE' @?DPGMMGN ' ?HN' CFG' O□C□TGH ' AH' GPGDE' K?DC' A>' CFG' O□CE' D?H' CA' FG?D' F□@' ' CA' JFA@' FG' ?□N ' CF?C' FG' KDAKA GN' CA' OBC' NA)H F□ ' >□ ' CDGG' CA' LB□MN' ?' FAB G' BKAH' CFG' KM?OG' JFGDG' □C' CAAN' ' FGDG>ADG' VQBACF' FG ' □>' CFGDG' LG' ?HE' @?H' ?@AH ' EAB' ?MM' □H' CF□ ' OA@K?HE' CF?C' □ ' N□ KA GN' CA' F?H ' F□@ GM>' MGC' F□@' OA@G' LGC□@G ' LG>ADG' □C' LG' OBC' NAJH 8 ?P□H ' CFB ' LG CAJGN' F□ ' OF?D□CE' ?@AH ' CFG' KGAKMG ' FG' DGCBDHGN' CA' F□ ' MAN □H ' JFGDG' FG' M□PGN' ?' OGDC?□H' C□@G' ?>CGD' J□CFABC' ?MCGD?C□AH' AD' H?CBDG ' ?HN' LGO?B G' CF?C' H?CBDG' OF?H GN' HAC' □H' F□ ' M□>G-C□@G ' FG' JABMN' HAC' B>>GD' CF?C' NG?CF' FABMN' ?MCGD' AD' P?DE' CFG' ?@G' >AD' M□(G' ? ' FG' M□PGN' ?' LG? CME' ?HN' OFBD□ F' M□>G ' GPGH' A' FG' DGQB□DGN' CA' F?PG' F□ ' >BHGD?M' NAHG' ?>CGD' CF?C' @?HHGD' . E' F□ ' M? C' J□MM' FG' ADN?□HGN' F□@ GM>' CA' LG' □HCGDDGN' BKAH' CFG' G? FADG ' CF?C' CFG' J?PG ' ?HN' BD G' @□ FC' LG?C' ?HN' PG ' F□ ' NG?N' O?DO? G' , G? ' ?HN' CF?C' □>' □C' JGDG' KA -□LMG ' F□ ' NG □DG' J? ' CA' LG' LBD□GN' □H' CFG' NGKCF' A>' CFG' G?' ' O?B □H ' ?H ' GK□C?KF' CA' LG' @?NG ' JFGDG□H' JGDG' NG OD□LGN' CFG' QB?M□C□G ' A>' F□ ' LDBC□ F' M□>G ' MBC?DOF' ?M A' DGKADCGCF' ?HACFGD' CA' LG' @?NG' LE' ?MM□@?0FB ' @BOF' M□(G' CA' CF?C' JF□OF' #□@AH' @?NG' F□@ GM>' JFA G' AJH' ABHNGCF' CA' CF□ ' G>>GOC' □H' ! H M□ F' PGD G' R

6' Ÿ T' PNKHPO' KMN 7P' OMTG
3WL PO' ! ' M!O' LMGN
T' KM P!' K LGP' !NP PO' HP P
2G' 7MGN' !' Q J!O'
2!' M N !Q' M PG' 7'G P9 '
/ !Q' GPM' AT' GJ QPG' KMGN
T' !M I P' 7' NH J' OPG P
HP' Q OG' NHPP' O ' K !7 J!O+%R

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' 5' ') 6 ' ' R' 5' 7 '

's >□D C' GN□C□AH' A>' □H ' $G?D' J? ' KBL M□ FGN' ,' 476 ' □C ' C□CMG' J? ' ? '>AMMAJ ' R =' &D ' □MM□?@' F?(G KG?DG' F□ ' #DBG' FDAH□OMG' □ CADE' A>'CFG' $□>G' ?HN' %G?CF' A>' □H ' $G?D ' ?HN' F□ ' CFDGG' %?B FCGD ' □CF' CFG' BH>ADCBH?CG' $□>G' A>' ! N ?D ' AHHG' ?HN' G□DG' CA' CFG' ! ?DMG' A>' +MAOG CGD ' ?HN' F□ ' BMMGH' ?HN' ? B@GN' B@ABD' A>' #A@' A>' . GNM?@ ' ' □C' J? ' KM?□N' LG>ADG' CFG' □H 8 ' &?SG CE' ?C' F□CG ?MM ' BKKAH ' CGKFGH ' □ FC ' □H' FD□ C@? ' AMM□N?□G ' . E' F□ ' &?SG C□G ' GD-P?HC ' KM?E□H ' B B?MME' ?C' CFG' +MALG' AH' CFG' . ?HO (□NG ' D□HCGN' >AD' ?CF?H□GM' . BCCGD ' ?HN' ?DG' CA' LG' AMN' ?C' F□ ' FAK' □H' ?BM8 ' FBD0F-E?DN' ?C' CFG' □ HG' A>' CFG' □GN' . BMM' HGGDG' C ' B C□H ' +?CG ' 476 I' # J A' ACFGD' GN□C□AH ' JGDG' KBL M□ FGN' LE' . BCCGD' □H' CFG' ?@G' EG?D ' ?HN' CFGDG' ?DG' >ABHN' M□ FC' P?D□?C□AH ' □H' G?0F' VLG □NG ' CFG' A@□ □AH' A>' CFG' KM?OG' A>' ?MG' □H' CFG' C□CMG K? G ' JF□OF' □HN□O?CG' CF?C' CFGE' JGDG' HAC' KD□HCGN' >DA@' CFG' ?@G' CEKG ' B GN' □H' CFG' >□D C' GN□C□AH ' ?HN' CF?C' CFGE' JGDG' HAC' □NGHC□O?M' DGKD□HC ' #FGE' JGDG' G?0F' OAMM?CGN' LE' CGGPGH ' ?HN' & ?MAHG ' ?HN' BL GQBGHC' GN□CAD ' F?PG' KA□HCGN' ABC' @□HBCG' N□>>GD-GHOG ' LGCJGGH' CFG@' * KAH' CFG' JFAMG ' CFG G' N□>>GDGHOG ' F?PG' H A C' LGGH' >ABHN' A>' □@KADC?HOG' □H' NGCGD@□H□H ' CFG' CG C ' JG' CFGDG>ADG ' □H' DG>GDD□H ' CA' CFG' AD□ □H?M' CG C ' KG?(' GHGD?MME' A>' $ ' M ' C' □ ' DG@?D(?LMG' CF?C' ?' KM?E' A>' JF□OF' CFDGG' GN□C□AH ' JGDG' NG@?HNGN' □H' AHG' EG?D' FABMN' HAC' F?PG' LGGH' DGKD□HCGN' CMM' □C' J? ' OAMMGOCGN' □H' CFG' >AM□A' A>' (* %) CFGD' A>' CFG' KM?E ' JF□OF' JGDG' AD□ □H?MME' KBL M□ FGN' □H' ?' GK?D?CG' >AD@' NBD□H ' CFG' KAGC8 ' M□>GC□@G ' JGDG' >DGQBGHCME' DGKD□HCGN' LG>ADG' CFG' >AM□A' OAMMGOC□AH ' AD' G ?@KMG' ' A>' " □OF?DN' ' CFGDG' JGDG' CFDGG' GN□C□AH ' KBL M□ FGN' □H' EG?D ' BOOGGN□H ' CF?C' □H' JF□OF' □C' J? ' >□D C' KD□HCGN ' A>' " □OF?DN' ' >ABD ' A>' " A@GA' ?HN' 0BM□GC ' CFDGG ' A>' GHDE') ' ?DC' ' >□PG' c9A>' GHDE') ' CJA ' A>' #FG' & GDDE' □PG ' A>' □HN AD ' AHG ' A>' ?@MGC ' CFDGG ' FGCFGD' $G?D' J? ' K□D?C□O?M ' AD' JFGCFGD' ?' M□@□CGN' KBL M□O?C□AH' J? ' ?MMAJGN ' □C' □ ' OMG?D ' JG' CF□H(' CF?C' LE' A@G' □HCGD>GDGHOG' CFG' OAHC□HBGN' KBL M□O?C□AH' J? ' CAKKGN ' %?P□G ' □H' F□ ' ='%D?@?C□O' & □ OGMM?H□G I' F? ' G KDG GN' ?H' AK□H□AH ' >ABHNGN' KKAH' CFG' O□DOB@ C?HOG' CF?C' F?(KGDG8 ' MG ' KGD>GOC' G>>ADC ' JGDG' A>CGH' DGKBL M□ FGN' ?HN' CF□ ' HAC ' CF?C' $G?D' J? ' HAC' KAKBM?D ' #F□ ' ?D B@GHC' □ ' JADCFMG ' >AD' □C' @B C' LG' DG@G@LGDGN' CF?C' ACFGD' A>' F?(KGDG8 ' @A C' KGD>GOC' G>>ADC ' BOF' ? ' & ?OLGCF ' JGDG' HAC' KBL M□ FGN' ?C' ?MM' C□MM' CFGE' JGDG' OAMMGOCGN' □H' CFG' >AM□A ' H' CFG' >AM□A' CG C' A>' $G?D ' ? ' OA@-K?DGN' J□CF' CFG' CG C' A>' CFG' QB?DCA ' CFGDG' ?DG' PGDL?M' OADDGOC□AH ' ?HN' ?NN□C□AH ' ?HN' A@□ □AH ' LBC' □H' CFG' QB?DCA' CG C' A>' CF?C' KM?E' CFG' @GCD□O?M' ?DD?H G@GHC' □ ' AHG' @? ' A>' OAH>B □AH ' KGGOF' ?>CGD' KGGOF ' ?HN' OGHG' ?>CGD' OGHG ' JF□OF' □H' CFG' GHB□HG' OAKE' A>' CFG' >AM□A' ?DG' @GCD□O?MME' OADDGOC ' ?DG ' □H' CFG' QB?DCA ' G□CFGD' KD□HCGN' ? ' KDA G ' AD' CFG' M□HG ' ?DG' A' @□ GN' CA GCFGD' J□CFABC' ?HE' ?KK?DGHC' (HAJMGN G ' □H' CFG' GN□CAD' A>' CFG' @GCD□O?M' M?J ' LE' JF□OF' CFGE' JGDG' OAH CDBOCGN ' CF?C' □C' JABMN' F?PG' LGGH' ?M@A C' □@KA □LMG ' >DA@' CF□ ' CG C' ?MAHG ' CA' F?PG' DGNBOGN' CFG@' CA' ?HECF□H ' M□(G' CFG' >AD@' □H' JF□OF' CFGE' JGDG' JD□CCGH' LE' CFG' ?BCFAD ' #F□ ' O□DOB@ C?HOG' ?KKG?D ' CA' B ' OAHOMB □PG' CF?C' CFG G' QB?DCA' OAK□G ' OABMN' HAC' F?PG' LGGH' KD□HCGN' >DA@' CFG' ?BCFAD8 ' @?HB OD□KC ' ?HN' EGC' CFGE' @□ FC' F?PG' LGGH' KD□HCGN' >DA@' ?' GHB□HG' KM?EFAB G' OAKE ' C' □ ' CA' LG' DG@?D(GN' CF?C' □H' ?MM' CFG' QB?DCA' GN□C□AH ' JF□OF' □C' JABMN' ?KKG?D' >DA@' P?D□AB ' OAMM?CGD?M' O□DOB@ C?HOG ' JGDG' HAC' KD□HCGN' BHNGD' CFG' BKGD□HCGHNGHOG' A>' CFG' ?BCFAD ' CFG' @GCD□O?M' ?DD?H G-@GHC' □ ' □H' CFG' ?@G' J?E ' @ADG' AD' MG ' NG>GOC□PG ' ?HN' JG' @?E' SBN G' >DA@' CF□ ' CF?C' □H' CFG' C? G' OAK□G ' CFG' K?B G ' A>' CFG' LM?H(' PGD G' □PGDG G□CFGD' N□ DG ?DNGN' ? ' ?' B□NG' >AD' CFG' ?OCAD ' AD' CF?C' CFG' KD□HCGN' OAK□G ' %,,

JGDG' KDANBOGN' >DA@' ?' DGKADC' @?NG' □H' A@G' J?E' AD' ACFGD' LE' KGD AH ' KDG GHC' ?C' CFG' DGKDG GHC?C□AH ' AD' LE' CFG' DGKGC□C□AH' A>' CFG' KM?EGD ' CFG@-GMPG ' JFA' JABMN' HAC' @?D(' CFA G' K?B G ' C' J□MM' LG' AL GDPGN' CF?C' CFGDG' □ ' ?' DG@?D(?LMG' K?DC□OBM?D□CE' □H' CFG' C□CMG' A>' CFG' QB?DCA ' A>' $G?D R = ' □C' J? ' KM?□N' LG>ADG' CFG' □H 8 ' & ?SG CE' ?C' F□CG ?MM ' BKKAH ' CGKFGH ' □ FC ' □H' FD□ C@? ' AMM□N?□G I' H' CFG' GHCDE' ?C' C?C□AHGD 8 ?MM ' AP ' 24CF ' 47 ' CFG' ?@G' K?DC□OBM?D□CE' AOOBD ' R ' =' ' EC' J? ' KM?EGN' LG>ADG' CFG' □H 8 ' & ?SG C□G' ?C' F□CGF?MM ' BKAH' C' CGKFGH8 ' H□ FC' ?C' FD□ C@? ' M? C I' DA@' CFG' A@GJF?C' A CGHC?-C□AB ' KDGO□ □AH' J□CF' JF□OF' . BCCGD' @GHC□AH ' CF□ ' O□DOB@ C?HOG ' @?E' □C' HAC' LG' OAHSGOCBDGN' CF?C' FG' ALC?□HGN' ?' OAKE ' B GN' BKAH' CF?C' AOO? □AH ' >DA@' A@G' AHG' A>' CFG' KM?EGD R KGD>GOC' CA' ?' OGDC?□H' G CGHC ' LBC' C□MM' HAC' CFG' ?BCFAD8 ' OAKE' W

#FG G' OAH □NGD?C□AH ' @?E' ?C' >□D C' □ FC' ?KKG?D' BH□@KADC?HC ' LBC' CFGE' ?DG' A>' A@G' OAH GQBGHOG' □H' NGCGD@□H□H ' CFG' P?MBG' A>' ?' CG C ' #FG' @ANGDH' CG C' A>' □H ' $G?D' □ ' G GHC□?MME' CF?C' A>' CFG' >AM□A ' #FGDG' ?DG' K? ? G ' □HNGGN' JF□OF' CFG' GN□CAD ' F?PG' DG CADGN' >DA@' CFG' QB?DCA ' ?HN' JG' ?N@□C' CFG' □@KADC?HOG' A>' KDG GDP□H ' CFA G' K? ? G ' BKAH' CFG' KD□HO□KMG' CF?C' HAC' ?' M□HG' JF□OF' ?KKG?D ' CA' F?PG' LGGH' JD□CCGH' LE' F?(KGDG' AB FC' CA' LG' MA C ' LBC' □H' ACFGD' DG KGOC ' CFG' CG C' A>' CFG' >AM□A' □ ' □H>□H□CGME' BKGD□AD' CA' CM□?C' A>' CFG' QB?DCA ' ?HN' CFG' GN□CAD ' >AD' CFG' @A C' K?DC' F?PG' ?L□NGN' LE' □C ' . BC' CFGE' F?PG' A@G-C□@G ' @?NG' BK' ?' CG C' ABC' A>' LACF' OAK□G ' ?HN' A@GC□@G ' ?DL□CD?D□ME' ? ' JG' CF□H(' KDG>GDDGN' CFG' CG C' A>' CFG' QB?DCA ' CA' CF?C' A>' CFG' >AM□A ' BD' OAKE' □ ' M□CGD?MME' CF?C' A>' CFG' >AM□A ' G OGKC' CF?C' JFGDG' ?' K? ? G ' AOOBD ' □H' CFG' QB?DCA ' JF□OF' □ ' HAC' □H' CFG' >AM□A ' JG' □HCDANBOG' BOF' ?' K? ? G ' KD□HC□H ' □C8 FAJGPGD' □H' LD?O(GC ' C' JABMN' F?PG' LGGH' JG?D□ A@G' ?HN' □H' ?' OGDC?□H' NG DGG' B GMG ' CA' F?PG' HAC□OGN' ?MM' CFG' N□>>GDGHOG ' LGCJGGH' CFG' >AM□A' ?HN' CFG' QB?DCA ' ' LBC' JG' HAC□OG' CFG' PGDE' >GJ' □H C?HOG ' □H' JF□OF' JG' ?NAKC' CFG' CG C' A>' CFG' QB?DCA ' ?HN' HAC' CF?C' A>' CFG' >AM□A' ' ?HN' CFG' □H C?HOG ' ?M A' □H' JF□OF' ?NAKC□H ' CFG' CG C' A>' CFG' >AM□A ' JG' N□>>GD' >DA@' CFG' GN□CAD ' JFA' F?PG' KDG>GDDGN' CF?C' A>' CFG' QB?DCA

#FG' CG C' A>' CFG' >AM□A' □H' AHG' @?CGD□?M' DG KGOC ' N□>>GD ' OAH □NGD?LME' >DA@' CF?C' A>' CFG' QB?DCA ' $?D G' K? ? G ' JF□OF' ?DG' >ABHN' □H' CFG' QB?DCA ' ?DG' A@□CCGN' □H' CFG' >AM□A' ' CFGDG' ?DG' □HNGGN ' A@G' M□HG ' >ABHN' □H' CFG' >AM□A' JF□OF' ?DG' HAC' □H' CFG' QB?DCA ' ?@ABHC□H ' CA' ?LABC' >□>CE' #FG G' ?DG' O?CCGDGN' K? ? G ' HAC' PGDE' DG@?D(?LMG' JFGH' NGC?OFGN ' :LBC' >AD' CFG' @A C' K?DC' G GHC□?M' CA' CFG' KDA DG ' A>' CFG' ?OC□AH' AD' CA' CFG' NGPGMAK@GHC' A>' OF?D?OCGD ' H' CFG' ACFGD' F?HN ' CFG' M□HG ' >ABHN' □H' CFG' QB?DCA ' JF□OF' ?DG' HAC' □H' CFG' >AM□A' ?@ABHC' CA' ? ' @?HE' ? ' CJA' FBHNDGN' ?HN' CJGHCE >□PG ' ?HN' CFGE' OA@KD□ G' AHG' GHC□DG' OGHG ' ?HN' AHG' AD' CJA' A>' CFG' @A C' CD□(□H ' OAHHGOCGN' K? ? G ' □H' CFG' ND?@?' C' JABMN' LG' G? E' CA' ?OOABHC' >AD' CFG G' A@□ □AH ' LE' CFG' ? B@KC□AH' CF?C' □H' CFG' >AM□A' GN□C□AH' CFG' AD□ □H?M' KM?E' J? ' OBC' NAJH' LE' CFG' GN□CAD ' >AD' $G?D ' J□CFABC' CFG' A@□ □AH ' □ ' AHG' ?@AH C' CFG' MAH G C' A>' F?(-KGDG8 ' KM?E ' . BC' CF□ ' CFGADE' JABMN' DGQB□DG' B ' CA' ? B@G ' ?M A ' CF?C' CFG' ?NN□C□AH ' CA' CFG' >AM□A' JGDG' @?NG' LE' CFG' GN□CAD ' #FG G' OA@KD□ G' GPGD?M' BOF' @□HBCG' CABOFG ' ? ' HAHG' LBC' CFG' F?HN' A>' CFG' @? CGD' OABMN' F?PG' BKGD?NNGN ' HG' G ?@KMG' J□MM' B>>□OG' H' CFG' CAD@' OGHG ' JFGH' $G?D' ?HN' CFG' AAM' >□HN' CFG' FAPGM ' $G?D' ?E ' CA' F□@R

6'2! ' A T8' Q '7 GN+SD4 JH JGP9PGG' L P NT S
MT ' QPN' NHPP' !+ 2%99' L MT ' M!O' NHP!' 2%99' G9PPL+R

* KAH' CF□ ' K? ? G' OAFH AH' F? ' ?' HACG R = #FG G' CJA' M□HG ' JGDG' ?NNGN' □H' CFG' ?BCFAD8 ' DGP□ □AH ' ?HN' ?DG' AHME' □H' CFG' >AM□A ' #FGE' ?DG' PGDE' SBN□O□AB ME' □HCGHNGN' CA' DGKDG GHC' CF?C' FB@□M□CE ' AD' CGHNGDHG

AD HG MGOC A> >AD@ ' JF OF ?>>M OC AH >ADOG ' AH CFG @ HN I' . BC 0AFH AH N N' HAC CF H (' A' >?PABD?LME' A> CFG A@ AH ' H CFG >AM A' ?MCFAB F' FG' F? ' G KDG GN' ?H' AK H AH CF?C CFGE' JGDG' CFG' A@ AH ' A> CFG' ?BCFAD ' > A@G' M HG ' H' OC ' O ') ' FG' ?E ' =' #FG' A@ AH' A> CFG@' H' CFG' >AM A' ' OGDC?HME' >?BMCE ' EGC' ' LGM GPG' CFG' >AM A' ' KD HCGN' >DA@' F?(KGDG8 ' M? C' DGP AH ' O?DGMG ME' ?HN' F? C ME' KGD>AD@GN ' J CF' @ADG' CFAB FC' A> FADCGH H ' CFG' OGHG ' CF?H' A> 0AH- C HB H ' CFG' ?OC AH I' G' O?HHAC' J MM H ME' E GMN' CA' CFG' LGM G> CF?C' F?(KGDG' =' O?DGMG ME' ?HN' F? C ME I' KGD>AD@GN' ?HE' K?DC' A> F ' JAD(' ?HN' G KGO?MME' CF?C' FG' E GMNGN' CA' CF ' O?DGMG HG ' ?HN' F? CG' H' CFG' DGP AH' A> ?' CD? GNE' JF OF ' C?(GH' ?MCA GCFGD ' =' @?E' LG' SBN GN' CA' LG' CFG' @A C' KGD>GOC' KGO@GH' A> CFG' ND?@?C O' ?DC' G C H ' H' CFG' JADMN I' \' $GC' B ' G ?@ HG' CFG' @?CCGD ' CFGDG>ADG ' ?' MCCMG' @ADG' H' NGC?M

H' CFG' >D C' ?HN' GOAHN' ?OC ' CFG' A@ AH ' ?DG' PGDE' M FC ' H' CFG' AKGH H ' A> CFG' CF DN' ?OC' JG' MA G' ?' K DCGN' NG OD KC AH' A> $G?D' H' CFG' CAD@ R =' #G?D ' F ' JF CG' F?D I' YO ' . BC' @?D (' C ' 4' ?HN' CFG' SBN @GHC' A> F?(KGDG' H' A@CC H ' C ' BHQBG C AH?LMG ' >AD' FG' BL GQBGHCME' FAJ ' $G?D' H' ' BHNGD' KDGO GME' CFG' ?@G' ODOB@- C?HOG ' H' CFG' CF' OGHG' A> CFG' ?@G' ?OC' A@CCGN' CFG' @? H?DE' CD?M' A> "G ?H' ?HN' +AHGD M ' =' ' J MM' ?DD?' H' CFG@' CD? FC I' ? ' CF ' ?' K? ? G' CF?C' ?H' ?BCFAD' JABMN' F?PG' CFDB C' ABC = O?DGMG ME' ?HN' F? C ME' W I' C ' @KA LMG ' ? ' C' JABMN' LG' KDG B@KCBAB ' JGDG' C' KA LMG ' BHFG C?C H ME' CA' ? H' ?' @AC PG' >AD' CF ' A@ AH ' #FG' KFE O?M G GDC AH' CF?C' JABMN' LG' HGOG ?DE' >AD' ?HE' ?OCAD' VGPGH' >AD' . BDL? G' JFA' JG' (HAJ' KM?EGN' $G?D ' C' CA' O?DDE' CFDAB F' CFG' JFAMG' A> CFG' CF DN' ?OC' @ FC' F?PG' LGGH' A' G CDG@G' ? ' CA' DGHNGD' C' G KGN GHC' CA' @?(G' CF ' ?LD N @GHC ' AD' JF?C ' @ADG' KDAL?LMG ' ? ' GHC' KDGP AB ' CA' CF ' K? ? G' F?N' ?N ' =' MM' CFG' KAJGD' A> F ' J C ' F?PG' PGH' J?E' CA' F ' @K?C GHOG I' CFG' @? H?DE' ?DD?' H@GHC' @ FC' F?PG' LGGH' DGSGOCGN' LE' CFG' KAGC ' ? ' G F L C H ' CAA' @BOF' @GCFAN' H' CFG' @?NHG ' #FG' DFE@H ' AM MAQBE' A> ! N ?D ' J CF' JF OF' CF ' OGHG' OMA G ' @ FC' F?PG' LGGH' K?DGN' LE' CFG' KAGC' J CFABC' @BOF' 0A@KBHOC AH ' #FG' GOAHN' OGHG' A> CFG' >ABDCF' ?OC ' H' JF OF' ML?HE' A' LCCGDME' DGKDA?OFG ' +AHGD M ' ' DG?CME' ?LD N GN ' H' C ' ?@KM>GN' C?CG' C' NAG ' HAC' ?NP?HOG' CFG' KDA DG ' A> CFG' ?OC AH ' HAD' 0AHCD LBCG' CA' CFG' NGPGMAK- @GHC' A> CFG' OF?D?OCGD ' #FG' JFAMG' A> CFG' CF DN' OGHG' A> CF?C' ?OC' ' ?M A' A@CCGN ' C' ' AHG' A> CFG' @A C' LG?BC >BMME' JD CCGH' A> CFG' KM?E ' ?HN' JG' FABMN' HNGGN' DG DGC' F?N' C' HAC' LGGH' KDG GDPGN' CA' B ' H' CFG' QB?DCA ' . BC' MGC' C' LG' LADHG' H' @HN' CF?C' CFG' DG?CGD' K?DC' A> CFG' OGHG' ' KBDGME' NG OD KC PG ' ?HN ' G QB CG' ? ' CFG' NG OD KC AH' ' K?DC OBM?DME' H' CFA G' K?DC ' JF OF' @?(G' B ' LGCCGD' BHNGD C?HN' CFG' BD- K? H ' MAPGM HG ' A> ADNGM?8 ' OF?D?OCGD ' JG' O?HHA> ' ?PAN' LGM GP H ' CF?C' CFG' KAGC' CGDHME' DG AMPGN' CA' MGC' CFG' G>>GOC' :' CF ' JAHNGD>BM' ND?@?' GHC DGME' NGKGHN' BKAH' C ' ?OC AH ' #G (' KBC ' CFG' DGSGOC AH' A> CF ' OGHG' BKAH' ?HACFGD' DABHN R CF?C' C HCDANBOGN' A@G' OA@KMG CE' HCA' CFG' CD? GNE' ?HN' NG OD LGN' GPGHC ' BOF' ? ' CFG' DGCBDH' A> CFG' DGHOF' (H ' ?HN' CFG' ASABDH' A> $G?D' H' %APGD' JCFABC' GG H ' F ' N?B FCGD' JF OF' F?PG' HA' H>MBGHOG' BKAH' CFG' >BCBDG' OAHNBOC' A> CFG' KAG@' #FG' BL GQBGHC' A@ AH ' CA' CFG' GHN' A> CFG' ND?@?' ?DG' >GJ' ?HN' BH@KADC?HC

#FG' KGD AN' A> CFG' >D C' KDANBOC AH' A> $G?D' @?E' LG' >' GN' JCF' CAMGD?LMG' OGDC?HCE ' G' NA' HAC' @G?H' CA' ?E' CF?C' CFG' KDGO G' EG?D' A> C ' >D C' KGD>AD@?HOG' O?H' LG' ? OGDC?HGN ' ?HE' @ADG' CF?H' CFG' KDGO G' N?E ' #A' & ?MAHG' =' C' GG@ ' G CDG@GME' KDAL?LMG' CF?C' C ' >D C' ?KKG?D- ?HOG' J?' H' & ?DOF' AD' KD M ' 6Y>M 8 #A' %D ' %D?(G' =' C' ?KKG?D ' @ADG' KDAL?LMG' CF?C' C ' KDANBOC AH' ' CA' LG' ?CCD LBCGN' CA' CFG' OMA G' A> CFG' EG?D' 6Y>4 O GDG' & ?MAHG' ?HN' %D?(G' ?DG' ?C' BG' BKAH' ?' QBG C AH' A> CFDGG' @AHCF ' JFGH' CFG' >?OC ' JF OF' JG' DG?MME' (HAJ' ?LABC' CFG' @?CCGD' PG' B ' ?' D?H G' A> CFDGG' EG?D ' #FG' >D C' OGDC?H' >?OC' JF N' JG' OAMMGOC' >DA@' CFG' DG CGD ' A> CFG' C?C AHGD 8 A@K?HE' ' CF?C' $G?D' J?' KM?EGN' LG>ADG' H ' O?@G ' ?C' FCGF?MM' BKAH' C ' CGKFGH8 ' H FC ' H' CFG' EG?D' 6Y>Y R CF?C ' AH' CFG' 24CF' A> %GOG@LGD' GDG' ' CFG' M@C H' AHG' N DGOC AH' H' CFG' ACFGD' N DGOC AH' JG F?PG' CFG' KBLMO?C AH' H' 6Y>R ' A> ?D HGC8 ' = %GOM?D?C AH' A> G DG AB ' AK F' @KA CBDG I' >DA@' JF OF' LAA(' F?(KGDG' BHNABLCGNME

' X P' GHM99' HM P ' KKMG !' GJAGP] JP! N9T' N ' MO P N' N ' NH G' L ! !' 7' / PM ' 7 I' M' Q PMN' L PN S HP99PT+

NGD PGN' A@G' @?CGD?M ' JF OF' FG' G@KMAEGN' H' CFG' ? B@GN' @?NHG ' A> ! N ?D ' C' ' KDGCCE' OMG?D' ?M A' >DA@' CJA' K? ? G ' H' CFG' CG C' A> CFG' QB?DCA' GN C AH ' CF?C' CFG' ?BCFAD ' AD' CFG' ?OCAD ' A> CFG' CD? GNE' =' ? ' C' J?' KM?EGZN' LG>ADG' CFG' (H 8 ' @?SG CE I' JGDG' O?DG>BM' CA' @?(G' CJA' @HBCG' OF?H G ' JF OF' JABMN' LG' ? DGG?LMG' CA' 0?@G ' >CGD' CFG' ?OOG - AH' A> 0?@G ' JFGH' FG' J?' KDAOM?@GN' (H ' A> I ' L .' C' J?' B B?M' CA' @GD G' CFG' H?@G' A> ! H M?HN' H' CF?C' A> L ' . ?OAH' CFB ' G KM?H ' CFG' OA@KMGC AH' A> CFG' AMN' KDAKFGOE ' =' FGH' FG@KG ' KAHHG ' ! H M?HN8 ' NAHHG I' G' F?MM' F?PG' AOO? AH' CA' DGPGDC' CA' CF ' H' ABD' MMB CD?C AH ' A> OC' ' #FG' ?HO GHC' @GCD O?M ?E H ' =' E ' >A' >B@' ' @GMM' CFG' LMAAN' A> ?H' 1 $' @?H I' LGOA@G ' H' $G?D' =' ' @GMM' CFG' LMAAN' A> ?' L $' @?H I' ?HN' H' CFG' QB?DCA' GN C AH ' V OC') ' O') ' JG' F?PG Z

6#!OQ PNHP9PNP G' HKHNH J7!OMGNMA JN IP

'3O I J!O' PM 9 7 : 9 GNP 8 GPPU' H I' JN

L !' NHP' 3 %$' LM NT+R

. BC' CFG' OA@@GHC?CAD ' F?PG' HAC' HAC OGN' CF?C' H' CFG' >AM A' GN C AH' A> 423' CFG' M?CCGD' K? ? G' ' PGH ' =' * KAH' CFG' 1 $' K?DCE I' #F ' M FC' N >>GDGHOG' KDAPG ' AHG' A> CJA' CF H R GCFGD' CF?C' B> AH' CFG' KBLMO?C AH' A> CFG' >AM A' CFG' N CHOC AH' LGCJGGH' . DC F' ?HN' ! H M F ' JF OF' J?' @G?HC' ? '?' @?D (' A> OA@KM@GHC' CA' 0?@G 'F?N' OG? GN' CA' LG' DG ?DNGN ' AD' CF?C' CFG' K? ? G' F?P H ' LGGH' PED CCGH' LG>ADG' F ' ?OOG - AH ' F?N' HAC' LGGH' OF?H GN' H' CFG' OAKE' >DA@' JF OF' CFG' >AM A' J?' KD HCGN ' ? ' C' J?' OF?H GN' H' CFG' OAKE' A> CFG' KM?E' ?OCGN' LG>ADG' CFG' (H ' H' 474' #FG' ?MMB AH ' NGD PGN' >DA@' ?D HGC8 ' LAA (' > ' CFG' N?CG' A> CFG' CD? GNE' ? ' HG?DME' ? ' JG' O?H' NG DG' C' CA' LG' > GN ' MM' CF?C' JG' O?H' FAKG' >AD' H' CFG G' @?CCGD ' ' ?H' ?KKDA @?C AH' CA' ?' N?CG ' C' ' B>> O GHC' >AD' B ' CA' LG' 0AH> D@GN ' CFDAB F' BOF' ?' >?OC ' H' CFG' LGM G>' NGD PGN' >DA@' HCGDH?M' GP NGHOG ' CF?C' $G?D' J?' ' KDANBOGN' ?C' CF?C' KGD AN' JFGH' CFG' GH B ' A> F?(KGDG' J?' =' ?C' C ' PGDE' KA HC' A> OBM@H?C AH I

%&& ' ' % ' ' '

N?B FCGD ' JF□OF' J?' ,H' CFG C□@G A?' ?□?F ?HN' A G?' ?C JF□OF' KGD□AN' ?M A' CFG O□CE A?' "A@G' J?' >ABHNGN I' #FG G ?OC OFDAHAMA E A?'CFG DA@?HOGD ,?HN' OFDAH□OMGD ,□ ,JGMM JADCFE ?CCGHC□AH' +GA>>DGE BHCA' CFG' NB (G' A?' WL?H□? C' CFG@ ,?>CGD' F□ ,?HN' LGC□□ C' ?HN' MWL?H□? C' CFG@ NB (G' A?' WL?H□? C' OFG@ ,?HN' LGC□□ C' ?HN' LGC□□

#A'CGWC CFG CBG'DHCGHCAH'A>'@E'FGZDC FOCF'LB@G 'DH'TG?MG'A>'NBCE'CA'EABD' D?OG HN'HGPGD'O?H'LG'QBGHOF#N'LBC'LE'NG DG' AWN'KM?E'?HN'A'DH'CFG KA□HC'A>'N□>>GDGHOG' BD'DG?NGD' J□WW G? □ME□@? □HG'>DA@'CFG G CD?OC'J□CF'J□OF'JG'F?PG'>BDH□ FGN'CFG@' CF?□ F?(KGDG'F?N'?C'?WW'GPGHC'CA'ODG?CG'CFG KAGC□O?W N□OCAH'A>' $G?D'J□CFABC'?HE'ALM□ ?C□AH'CA'F□'MB@LGD□H'KDGNGOG AD' H'CFG 0AHNB0C'A>'CFG'KWAC'FG□'GQB?WME'AD□'□H?W' C'@?E'LG' B>>□O□GHC'>AD' B'CA' C?CC'CF?C'A>'CFG'@?WHG'A>'$G?D'JG'F?PG'HA'CD?OG'DH'CFG AWN'KM?E'?HN'CF?C'M□(G'CFG'OFDAH□OMG'□C'GHN'J□CF'CFG'CD□B@KF?HC DG'CAD?C□AH'A>'$G?D'CA'F□'(□H'NA□@' HAJ□H'□CF□'JG'CFH(''CF?C'ABD' D□2NGD'J□W'?'DGG'J□CF'B'CF?C'□C'JABW'LG'?'J?'CG'A>'C□@G'CA'CD?OG BOF'DG'G@LM?HOG'?'&□'(ACCAJG'F?'NG'OD□LGN'□H'CFG>AWAJ□H' K?'?'G'R='A J'HALM□'CFG'LBD'□'A>'K?'□AH'?'AHE'?HN'DG@AD'G' CF?C'BOOGN'CFG'N□'?KKA□HC@GHC'A>'F?(KG?D□&'(□H'R

=HNR

<',AB'CW□H('&"'JGK'
A'&WH'AC'JGK'
'F?PG'>BW'07B'G'>AD'JGK□H''LBC'CF□'FG?DC'
F?WW'LD□G?('HCA'?'FBHND□N'CFAB'?HN'>W?J
D'GD□'&WW'JGK&

=#A'CFG G K??G'CFG'?BCFA□'A>'CFG AWN'KM?E'NGD□PG'A@G'M□FC 0W?□@'>A□'F□'$G□□'JGGK'?>CG□'CFG'P□CBKGD?C□AH'A>'+AHAD□M'?HN' "??'?H'AL GDPG R

<'&WH'&'JGK'

#FGD□'□'?'L?MW?N'KD□HCGN'□H'GDCE&'=';"GM□QBG I'AH'CFG'CADE'A>' $G?D'□C□'J□CFABC'?'N?CG'?HN'GDCE'?E'=';GDC□'>ABHN'CFG'F□HC A>'$G?D'@?WHG'J□FO□'CFG'AWN'OFDAH□OMG'NA'HA□'@GHC□AH'?'?W A' CFG G CD?P?H?C'ODBGMCE G GDC□GN'AH'F□@'LE'F□'N?B FCGD'H'CFG NG?C□'$G?D'CFGDG□'HAC□H'CA'?□C B'□H?OGDC?□H□'CFG N?CG'A>'CFG L?WW?N'LBC'J□?C'M□CCMG'GP□UGHOG'?D□G>'J□CF□H I'G'KD□HC'CFG K?'?G'CA'J□FO□'GDCE'?WWBNG'R

=' GD'>?CFGD'AWN'(□H'$G□D'CW□□'J□WG' □CF'F□'□J□A'N?B FCGD'C?□N AD6C>BW'A>'CFG□D'KDA@□'W'MAPG BWW'AAH'CFG'?@G'NG0?E□N HN'W□P□H'□H'QBGGH'"?'?H□'0AB□C #FG'GWNG C'A>'C'CFG'CJ?□H FG'>DA@'F□'0F□G>G C'@G?H HN'@A C'A>'?WW'F□'CD?□H

AD'J□GDC?'CJGHCE'@GH'P<GD6'JAHC' #A'J?□C'J□CF'LGHNGN'(HGG'

<$□>G'?HN'NG?CF'' '?@'?F?@□N' #F?C'CFAB'F?C'KAJGD'CA'F?(G'@E'@?HFAAN'CFB' #F?C'CFG G'FAC'CG?D''J□OF'LDG?('>DA@'@E'@?HFAAN'CFB' FAB□N'@?□DG'CFGG'JADCF'J□OF'LDG?('>DA@'@G'KGD>AD0G 'AN'(□H A'CAA(' FG'?WW'?J?E H'FAKG'CF?C'□H'FGD'0ABC' AN'(□H G'JAB□N'HA'WAH GD'C?E ' 'DGJ?DNGN'CFB 'QBACF'FG @' '□H 'F?PG' H' □PH '?WW ' HCA'@E'OF□WND6H'?HN'CA'LG ' AD'J?C' 'W?CGWE' ?PG'W BWW' A'BHCA'@E'+AHADGWW &E' GOAHN'OF□N' '(HAJ □WW'LG'@AD6'(□HN'?HN'K□C>BW G'JAB□N'HA'WAH GD'C?E HN'JDGW□GPG'@E'JAG BW'>?C'FG'F□G'CF6H'CA'FGD'0ABDC W□6D6'JFGH' FG'FG?D'F□'@A?H "GCBDH□N'F□@'?H JGD'#F?C' FG' □□GP□N' #F?C'?WW F□'@G?H'JGD6' AHG' .BC'HA'J?E'0ABW□N'DGW□GPG'F□'J?HC' ,C'□>'CF?C'FG'JABW□' C?E' □CF□H'FGD'(□CO□FGH'FG'FABW□N'F?PG' F?C' ?F?PG' 0BWW□AH' ?PG'?J?E &'E'(□H NA@'G'J□WW' KA G G'@E GN>G 'KDG GHCWE'J□WW'N□ KA G G'@E GN>G HN' GC'BK'CFG G'BKAH'@E'KD□HOGWE'CFDAHG ' GPGD'CFAB F□'CF?C'KD□NG'JABWN'F?PG'?'>?WW ' □ CGD' EAB'F□'N?B FCGD' FABW□N'O?DOGWE'LDAG(C' ' %□N'HGPGD'W?CCGDGD'CGWW A'>?W G'?'C?WG ' KG?('HAJ ' ADNGW□?'@?(G'@E'SAE '?C'?WW HN'NDAK'WAJ□HG'HGOC?Y'>DA@'CFE'FAHGE'WK ' 'O?HHAC'K?□HC'@E'NBGE'>ADCF□H'JADN 'FAKG'@E'NGGN ' F?WW@?(G'DGKADC'>AD'@G' #FG' ?@G'CA'EAB' 'LG?DG'D?E' D?OZAB 'WADN .BC'WAA(G'JF?C'WAPG'CFG'OF□WN'NACF'AJG'CFG>?CFGD #F□ 'NAH'LG0?B G'CFAB' F?WC'HAC'F?PG'CFG'FAKG' #A'F?PG'?'0F□WN8 'K?DC'H'CFG'C□@G'CA'OA@G 'KDG GHCWE'J□WW'N□ KA G G'@E GN>G HN' GC'BK'CFG G'BKAH'@E'KD□HOGWE'CFDAHG ' GPGD'CFAB F□'CF?C'KD□NG'JABWN'F?PG'?'>?WW ' □ CGD' EAB'F□'N?B FCGD' FABW□N'O?DOGWE'LDAG(C' ' %□N'HGPGD'W?CCGDGD'CGWW A'>?W G'?'C?WG ' KG?('HAJ ' ADNGW□?'@?(G'@E'SAE '?C'?WW HN'NDAK'WAJ□HG'HGOC?Y'>DA@'CFE'FAHGE'WK ' 'O?HHAC'K?□HC'@E'NBGE'>ADCF□H'JADN 'FAKG'@E'NGGN ' F?WW@?(G'DGKADC'>AD'@G' #FG' ?@G'CA'EAB' 'LG?DG'D?E' D?OZAB 'WADN .BC'WAA(G'JF?C'WAPG'CFG'OF□WN'NACF'AJG'CFG>?CFGD AD'J□GDC?'CJGHCE'@GH'P<GD6'JAHC' #A'J?□C'J□CF'LGHNGN'(HGG' F□OF'LB@G'□H'TG?WG'A>'NBCE'CA'EAB'D?OG HN'HGPGD'O?H'LG'QBGHOF#N'LBC'LE'NG □DG' #A' FG'J'CFG' ?@G'□H'ABCJ?DN'>AD'J?DNHG G F'CF?C'CFGD6'JGD6' A@G'ACFGD'@?□N'CF?C'NBD C' B'MAPG'@E'>?CFGD'LGCCGD'CFGH'CF B'O?H C 'WAPG'@E'>?CFGD'LGCCGD'CFGH'CF B'O?H C ' #FG'KD?□ G'JGD6' DG?C' KA(>DA@'?HACFGD8 '@ABCF' .BC'□C' FABWN' GG@'G'EAB'D' HG' FLABD 'NJGWW'>?D'A>>' ' ?E 'FGDG□ 'AHG 'CF?C'J□WW'OAH>□D@G'? '@BOF' ' FG'F?CF' ?□N 'LACF'>AD'@E GW>G'?HN'FGD ' ?E 'CFAB'NA C'HAC'J □ F'@E'>?CFGD8 'AAN ' %G?DG'>?CFGD ' G?OG'L? C?DN□'@KG 'HA'□ BG'A>'(□H '$G□D 'J□WW'HAC'FGJDG'CFGG' KG?(C'AHG'CCCWG'@ADG ?WW'HAC'@G'>?CFGD'□>'CFAB'WA)G'CFE'M□>G AD'CFG G'CFE' □ CGD 'AHOG'KDG B@G'CA'H?@G $AA'(G'>AD'HA'FGWKG'FGHOG>ADCF'>DA@'@G'AD'@□HG' .BC'>AD'CFG@'?WW 'WGC'CF□ '4HG'@G?HG' B>>□OG '?E'@BOF'@E'TG?WG'?LABHNGCF'CA'EABD' D?OG AJ'@BOF'@E'NGGN ' FABW□N'KDAPG'□H'KW?□HGD'O? G 'CFGH'@E'NGGN ' FABW□N'KDAPG'□H'KW?□HGD'O? G F'CFGH'CFAB'JABW□N C' ?E'? 'CFE' □ CGD 'NA' BD'M□>G'□ 'WG G'CFGH'WAPG'J G'A J G'CA'EAB ' %G?DG'>?CFGD 'NA'HAC' A'@□ C?(G'@E'J ADN AD'@E'KW?□HG'@G?H□H 'LG'@□ OAH CDB6N

&D' (ACCAJG F?'J□CF' DG?C'N□W GHOG'?HN'@□HBCGHG '?CCG@KCGN' CA'CD?OG'F?(KGDG□H'JF?C'FG□'BKKA GN'CA'F?PG'LADDAJGN'>DA@'CFG AWN'KM?E'?HN'?W A'□H'CFG KA□HC'A>'N□>>GDGHOG' BD'DG?NGD' J□WW G? □ME□@? □HG'>DA@'CFG G CD?OC'J□CF'J□OF'JG'F?PG'>BD□ FGN'CFG@' CF?C□ F?(KGDG'F?N'?C'?WW'GPGHC'CA'ODG?CG'CFG KAGC□O?W N□OCAH'A>' $G?D'J□CFABC'?HE'ALM□ ?C□AH'CA'F□'MB@LGD□H'KDGNGOG AD' H'CFG 0AHNB0C'A>'CFG'KWAC'FG□'GQB?WME'AD□'□H?W' C'@?E'LG' B>>□O□GHC'>AD' B'CA' C?CC'CF?C'A>'CFG'@?WHG'A>'$G?D'JG'F?PG'HA'CD?OG'□H'CFG AWN'KM?E'?HN'CF?C'M□(G'CFG'OFDAH□OMG'□C'GHN'J□CF'CFG'CD□B@KF?HC DG'CAD?C□AH'A>'$G?D'CA'F□'(□H'NA□@' HAJ□H'□CF□'JG'CFH(''CF?C'ABD' D□2NGD'J□W'?'DGG'J□CF'B'CF?C'□C'JABW□'LG'?'J?'CG'A>'C□@G'CA'CD?OG BOF'DG'G@LM?HOG'?'&□'(ACCAJG'F?'NG'OD□LGN'□H'CFG>AWAJ□H' K?'?'G'R='A J'HALM□'CFG'LBD'□'A>'K?'□AH'?'AHE'?HN'DG@AD'G' CF?C'BOOGN'CFG'N□'?KKA□HC@GHC'A>'F?(KG?D□&'(□H'R

=HNR

<',AB'CW□H('&"'JGK'
A'&WH'AC'JGK'
'F?PG'>BW'07B'G'>AD'JGK□H''LBC'CF□'FG?DC'
F?WW'LD□G?('HCA'?'FBHND□N'CFAB'?HN'>W?J
D'GD□'&WW'JGK&

=#A'CFG G K??G'CFG'?BCFA□'A>'CFG AWN'KM?E'NGD□PG'A@G'M□FC 0W?□@'>A□'F□'$G□□'JGGK'?>CG□'CFG'P□CBKGD?C□AH'A>'+AHAD□M'?HN' "??'?H'AL GDPG R

<'&WH'&'JGK'

#FGD□'□'?'L?MW?N'KD□HCGN'□H'GDCE&'=';"GM□QBG I'AH'CFG'CADE'A>' $G?D'□C□'J□CFABC'?'N?CG'?HN'GDCE'?E'=';GDC□'>ABHN'CFG'F□HC A>'$G?D'@?WHG'J□FO□'CFG'AWN'OFDAH□OMG'NA'HA□'@GHC□AH'?'?W A' CFG G CD?P?H?C'ODBGMCE G GDC□GN'AH'F□@'LE'F□'N?B FCGD'H'CFG NG?C□'$G?D'CFGDG□'HAC□H'CA'?□C B'□H?OGDC?□H□'CFG N?CG'A>'CFG L?WW?N'LBC'J□?C'M□CCMG'GP□UGHOG'?D□G>'J□CF□H I'G'KD□HC'CFG K?'?G'CA'J□FO□'GDCE'?WWBNG'R

=' GD'>?CFGD'AWN'(□H'$G□D'CW□□'J□WG' □CF'F□'□J□A'N?B FCGD' □?□N AD'6C>BW'A>'CFG□D'KDA@□'W'MAPG BWW'AAH'CFG'?@G'NG0?E□N HN'W□P□H'□H'QBGGH'"?'?H□'0AB□C #FG'GWNG C'A>'C'CFG'CJ?□H FG'>DA@'F□'0F□G>G C'@G?H HN'@A C'A>'?WW'F□'CD?□H

AD'J□GDC?'CJGHCE'@GH'P<GD6'JAHC' #A'J?□C'J□CF'LGHNGN'(HGG'

<$□>G'?HN'NG?CF'' '?@'?F?@□N' #F?C'CFAB'F?C'KAJGD'CA'F?(G'@E'@?HFAAN'CFB' #F?C'CFG G'FAC'CG?D''J□OF'LDG?('>DA@'@E'@?HFAAN'CFB' FAB□N'@?□DG'CFGG'JADCF'J□OF'LDG?('>DA@'@G'KGD>AD0G 'AN'(□H A'CAA(' FG'?WW'?J?E H'FAKG'CF?C'□H'FGD'0ABC' AN'(□H G'JAB□N'HA'WAH GD'C?E ' 'DGJ?DNGN'CFB 'QBACF'FG @' '□H 'F?PG' H' □PH '?WW ' HCA'@E'OF□WND6H'?HN'CA'LG ' AD'J?C' 'W?CGWE' ?PG'W BW' A'BHCA'@E'+AHADGWW &E' GOAHN'OF□N' '(HAJ □WW'LG'@AD6'(□HN'?HN'K□C>BW G'JAB□N'HA'WAH GD'C?E HN'JDGW□GPG'@E'JAG BW'>?C'FG'F□G'CF6H'CA'FGD'0ABDC W□6D6'JFGH' FG'FG?D'F□'@A?H "GCBDH□N'F□@'?H JGD'#F?C' FG' □□GP□N' #F?C'?WW F□'@G?H'JGD6' AHG' .BC'HA'J?E'0ABW□N'DGW□GPG'F□'J?HC' ,C'□>'CF?C'FG'JABW□' C?E' □CF□H'FGD'(□CO□FGH'FG'FABW□N'F?PG' F?C' ?F?PG' 0BWW□AH' ?PG'?J?E &'E'(□H NA@'G'J□WW' KA G G'@E GN>G HN' GC'BK'CFG G'BKAH'@E'KD□HOGWE'CFDAHG ' GPGD'CFAB F□'CF?C'KD□NG'JABWN'F?PG'?'>?WW ' □ CGD' EAB'F□'N?B FCGD' FABW□N'O?DOGWE'LDAG(C' ' %□N'HGPGD'W?CCGDGD'CGWW A'>?W G'?'C?WG ' KG?('HAJ ' ADNGW□?'@?(G'@E'SAE '?C'?WW HN'NDAK'WAJ□HG'HGOC?Y'>DA@'CFE'FAHGE'WK ' 'O?HHAC'K?□HC'@E'NBGE'>ADCF□H'JADN 'FAKG'@E'NGGN ' F?WW@?(G'DGKADC'>AD'@G' #FG' ?@G'CA'EAB' 'LG?DG'D?E' D?OZAB 'WADN .BC'WAA(G'JF?C'WAPG'CFG'OF□WN'NACF'AJG'CFG>?CFGD #F□ 'NAH'LG0?B G'CFAB' F?WC'HAC'F?PG'CFG'FAKG' #A'F?PG'?'0F□WN8 'K?DC'H'CFG'C□@G'CA'OA@G 'KDG GHCWE'J□WW'N□

FGDG' FG 'CDB6 FG?DCGN'DDA G'QBGGH
? 'H'CFG'L?CCM6' M2'H
, G(' FG' AAN'(H 'H' F' 'AM'N?E
' A G 3N'F' 'ODAJH'? ?'H

.BC'JFGH'FG'FG?DN' ADN6M:?3'NG?CF
FA'NE3N'HNGGN'>D'MAPG'
>'FGD'NG2D'>?CFGD'H'JFA G'07B G'
FG'N:N'CF:'L?CCMG'@APG
G' JAAH'H '>GM'BKAH'FGD'LDG? C
DA@'JFGH0G'FG'HGPGD'K?DCGN'
.BC'AH'FGD'LA A@'MG>C'F:'M:>G
#F?C'J?' A'CDBME'FG?DCGN

#FG'MADN'?HN'HALM6'JFGH'CFGE' ?J'
#FG'GHN'A>'CFG G'GPGHC
#FG'ACFGD' 3 CGD'BHCA'NG?CF'
#FGE'NAA@GN'LE'OAH GHC'
HN'LGH'NG2N'CFGD'ODAJH'CFGE'MG>C'
* HCA'CFG'HG C'A>'(H'
#FB'>F?G'EAH' GGH'CFG'>?M'A>'KDN6
HN'N: ALGN3GHC' H I

H' 3NHGE8'= D0?N3?I' CFGDG 3 '? 0F?KCGD' GHC:M6N' = #FG' K:C>BM
C?CG'?HN' CADE' A>' CFG' ?KFM?'AH3?H' BH(3HN'(H 'HN' F3' (3HN' AH'
>:D'C'DGM?CGN'LE'CFG' AH'CFGH'LE'CFG'LM:HN'>?CFGD I' #F3'BHQBG CAH-
?LME'>BD3' FGN'CFG' ND?@?C:D'>ABHN?CAH'A>' +MA CGD'?HN' iN ?D' C
@?E'LG' B>>:O3GHC'>AD'B 8CA' 3PG'CFG'DGM?C:AH'A>'CFG='(3HN' AH' IR

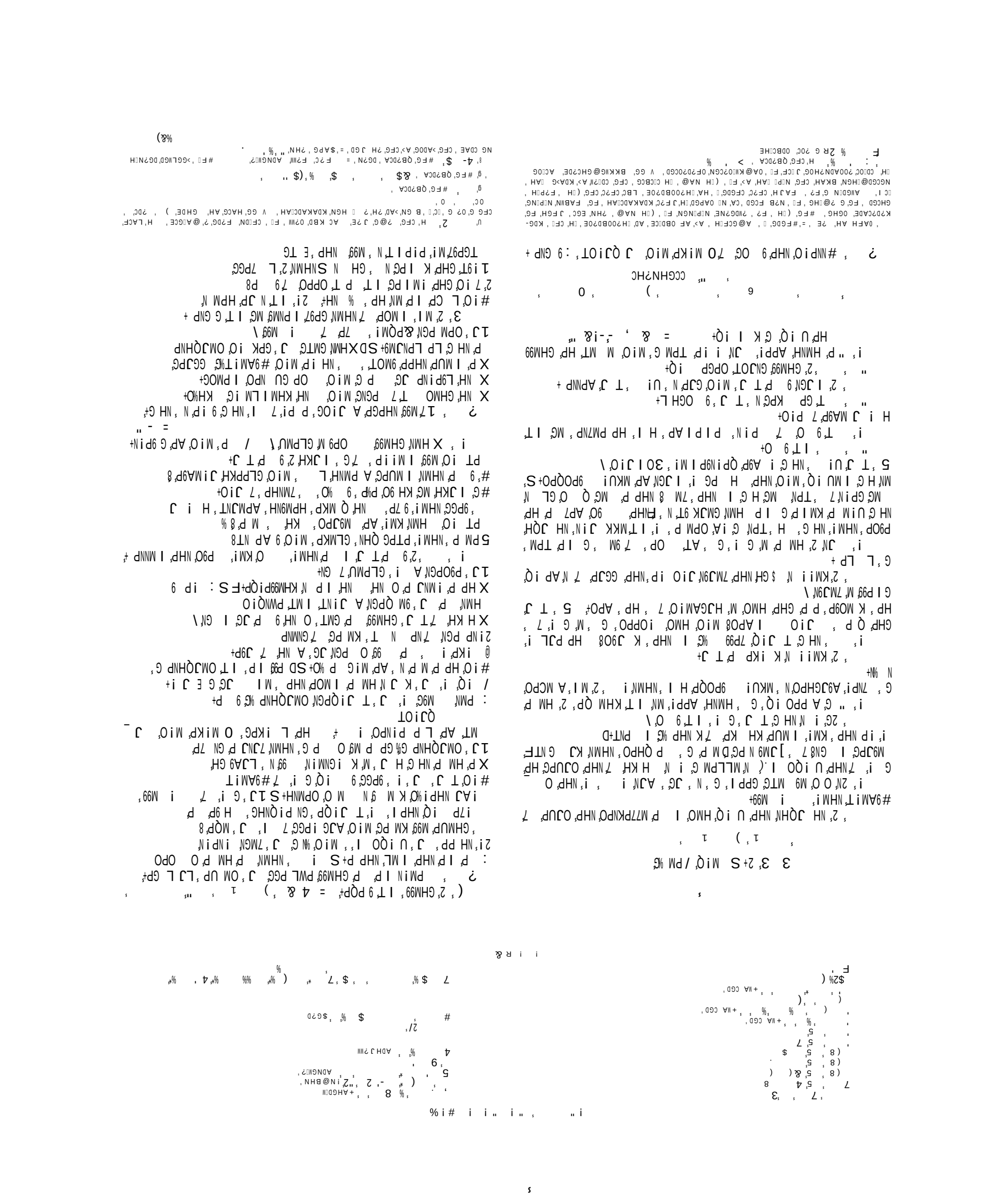
='#F:'AMN'@?H'?FA@' 'M?GN'J?'M?CGME'D' FC>B8M'KD3HO6'A>'?KFM?'AH?'LE'CFG'
F?DN FG?DC6N'BH D?6C>BM3HG 'A>'?'AH'A>'F:'NGK3PN'HAC'AHME'A>'F:'(H NA@'LBC'
A>'F:' 3 FC'CFG'DO3FG'JF3OF'H?CBG' D?HC'CA'CFG'KAADG C'ODB?CBDG 'JFGDGLE'?HN'
LE'ACFGD'F:'BHH?CBD?M'NG?M3H 'FG'F?CF'LGGH'NO3PGH'CA' BOF' D3G> ' GPGH'HAJ'
FG'JABMN'F?PG'F?N'@G'CA'F?PG'MGN'F:@'CA'CFG'CAK'A>'CF:'DAO('CFGHO6G'CA'0?C'
F:@ GM>'FG?NMAH 'CA'NG?CF'?HN' A'JABMN'F?PG'F?N'@G'JFA'DGOG3PGN'@E'M:>G'A>'
F:@ 'CA'LG'CFG'JAD(GD'A>'F:'NG CDBOC3AH I

' ' ' ' ' ('

#FG' ? ?0D3AB'&D '$GHHA'3H>AD@'B'CF?C',' F?(KGDG'F?'NGP?CGN'

H(3H'3H' AGCDER

JABMN' HAC' F?PG'P3M?CGN' CFG' DBMG' A>'KAGC0?M'$B C3OG I' #FG'?HC-
QB?D?H' ?DG' ? ' GH 3CPG' ? ' CFG' @AD?M3 C' BKAH' CF3' KA3HC' ?N'
F?(KGDG'?CCGHNGN'CA'CFG'OFDAHAMA E'A>'CFG'N?E'A>' 3H ' .M?NBN'
?NN'KDG'GDPGN'?' NBG'DG'?DN'CA'CFG'@?HHGD'A>'.D3C?H'?C'CFG'KGDANN'
JFGH'"A@BMB' ?NN'"G@B'LB3MC'"A@G'=BKAH'CFG'GMGPGHCF'A>'CFG
?MGHN'A>'&?E I'FG'JABMN'HAC'F?PG' 3PGH')$'JF?C'%ABOG'0?MM',?'
KMGHC>BM'ODAK'A>'LMBHNGD I' G'JABMN'F?PG'@?NG'HA'?MB 3AH '
?OOADN3H ' CA'%ABOG8'M:CGD?M'P3GJ'A>'CFG'@?CCGD'CA'#BD(' AD' .GNM?@'
LG ?D'AD' F3MNG'"AM?HN'AD'CFG'CFG?CD3O?M'@AD?M:CG ' AD' CA' GDA'
G 0AH>G ' FAJGPGD'CF?C'CF3' 3HG ?OC3BNG'A>'CFG'KAGC'NAG ' HAC'
FA0(' B ' QB3CG' A' @BOF' ?' 3C'NAG ' CFG'KDA>G 3AH?M'NGCGOCAD ' A>'
?H?OFDAH3 @ R CFA G'JFA'MAA(' BKAH' BOF' ?MB 3AH ' ? ' =' LMBHNGD 'I'
CF?C'@?E'N3 CBDL' CFG'G@K3D'A>'?OOBD?OE'?HN' NBMHG ' ?HN' OAH 3NGD'
KAGCDE'?' KDAKGME'?' ADC'A>'ADH?@GHC?M' KKGHN3 ' CA' ?' EOMAK3GN3?'
G' F?PG' HA' NG 3DG'CA'DG ?DN'CFG' E@LAM ' LE' JFOF' 3NG?' @?E'LG
@A C'DG?N3ME'0A@@BH3O?CGN'?' CFG'G KAHGHC'A>'CFG'CFH ' CFG@ GMPG'
CA'JFOF' CFGE'DG>GD' G'?DG'J3MMH ' CF?C'?'KAGC'NG ODL3H 'GPGHC'A>'
?'KBDGME'>?LBMAB ' 0F?D?OCGD'DGKDG GHCGN'LE'CFG H?DD?CAD ' A>'CFG@'?'
LGMAH 3H ' CA'?H'? G'CA'JFOF JG'0?HHAC'?CC?OF'AHG'KDGO3 G'HAC3AH'A>'
0A CB@G'VCPG B G'CFG JADN'H' 3C ' M?D G' GH G ' FABMN'G@KMAE3@? G '
CF?C'LGMAH 'CA'?'@ADG'DGOGHC'KGD3AN'?HN'GPGH'CA'F3 ' AJH'C3@G' C'
3 'AD'CFG ?@G'DG?AH'CF?C'JG'NA'HAC'ALSGOC'CA' GG'$G?D'K?3HCGN'
JCF'?'N?NG@'AH'F3 ' FG2N'?HN'F3 ' (H3 FC ' H'?D@AB' C'3 '>AD'CF3 '
DG?AH'?M A'C?C?CFG GHCM6@?H'CA'JFA@'JG'?DG'3HNGLC6N'>AD'CF?C
K?DC'A>'ABD'0A@@GHC'JFOF'DGM?CG ' CA'CFG NDG ' A>' F?(KGDG8'
0F?D?OCGD ' F?' HAC3F3H ' CA' ?E'AH'CFG BL5GOC'A>'$G?D' G'FABMN
HAC'@B0F'QB?DDGM'JCF'?HE'CFG?CD3O?M 0A CB@G'A>'CFG CD? GNE ' G 0GKC-
3H ' KGDF?K ' +?DDO(8 ' M?OGN'0A?C'?HN' B3H8 ' KAJNGDGN'KGD3J3 '
G'JABMN'MG?PG'CFG G CF3H ' CA'CFG 3@?'?H?C3AH ' A>'ABD'DG?NGD '
VJF?CGP6D' C? G @?H? GD ' @?E' NA'JCF' CFG3D'?BN3GH0G ' MG C'JG
FABMN'>?M 3HCA'A@G BOF @3 C?(G ? ' CF?C 0GMGLD?CGN'3H CFG =' DC'A>'
3H(3H '3H' AGCDER



XH KH NHP I GN L PK JG G]JM P 7GP!GP L GGPGGPG8
#!O 7 !O 2 M I M9 !P 7P9 K NMNP
2!T J OPM H QH!PGG$ 9 P+
! HP!L OP9 M 9 - "
#!O TPN ! N G 8 G !KP 2 M I GJ P I T 9 P%G
P L !OP JG DNHM! I T N !QJP+
? NHPP M!O NH !P HP PO NM T P P +
&P I M !NH G M I L9P NH O 7 J 7M U !QO I 8
9PGG !GLMKP M9 O NT D M!O L9PMGJ P+
HM!NHMN K !7P %OD !: !P 9+SD J E T+
#9NH JQH J 9MGN M!O 9PMGN8 N H GP T J!Q 9 P
HP !PG 7O M!KP M!O I 9U 7 J QJ!OT
N P N AP !NP PGG%O 8F HMN KM!T J GMT N O M
#NH O I P LJ9P!N NHM!T J G GNP G \ LPMU+
! NH !Q I T 9 O+
? NH !Q \
! NH !Q+
? NH !Q 99K I P 7 ! NH !Q GLPMU MQM !+
! !HMLLT NHMN 2 M I 2 KM!! N HPM P
+ T HPM N !N I T I JNH8 2 9 P T J I MEPGNT
#KK O !Q N I T A !O8 ! I P ! 9PGG+
? " H OP9 M \ I P!O T J GLPPKH M 9 NN9P+
/PGN T J I MT I M T J 7 NJ!PG+
! : O I T 9 O+
4 J HM P APQ N I P A PO I P 9 %O I P 2
&PNJ !NH GP OJN PG AMKU MG M P QHN 7 N
1APT T J 9 P T J M!O I GN H ! J T J+
X HT HM P I T G GNP G HJGAM!OG 7NHPT GMT
HPT 9 P T J M99 O9ML9T HP!2 GHM99 PO+
HMN 9 O H GP HM!O I JGN NMUP I T L9 QHN GHM99 KM T
" M97 I T 9 P NH H I HM97 I T KM P M!O OJNT
J P 2 GHM99 !P P I M T 9 UP I T G GNP G
^ 9 P I T 7MNHP M99+F'
? $ JN Q PG NHT HPM N NH NH G \F
! #T I T Q O 9 O+
? T J!Q M!O G J!NP!OP \
! T J!Q I T 9 O M!O N JP+
? /PN N AP G SD HT N JNH NHP!AP NHT O P
O AT NHP GMK PO MO M!KP 7NHP GJ!8
HP I TGNP PG 7" PKMNP M!O NHP ! QHN8
T M99 NHP LP MN ! 7NHP AG
O]I H I P O PW GN M!O KPMGP N AP8
" P P 2 O GK9M I M99 I T LMNP !M9 KM P+
- L !]J NT M!O L LP NT 7A9 O+
#!O MG M GN M!QP N I T HPM N M!O I P
" 9O NHPP 7 I NH G 7 P P + HP AM AM JG KTNH M!
1 HP NHMN I MUPG H G QP!P MN ! I PGGPG
Q QP H G MLLPN NP GHM99 N I T A G I
P MG P99 !P QHA J %O L N PO " P9 P %O
+#G NH J I T G I PN I P OMJQHNP +
: O I T 9 PQP S
? -PMKP P!N[
I P ! N APN PP!NHP O MQ !M!O H G MNH
2 9 %O HP I GN M!O NH JQHN N GPN I T PGN
1! HP U !O !J GP T+S "P!KP M!O M O I T G QHN[S
= !
AP I T Q M P I T LPMKP MG HP P 2 Q P
"P 7MNHP %G HPM N 7 I HP [S M99O M!KP8SDD H GN G \
M99 J QJ!OT+S ! M99 M!O #9AM!T

X NH I T N OMJQHNP G%O P G O QPGN NHP NH O
/PN L OP H KH GHP KM99G L9M !!PGG I M T HP +
2 O ! PGN T J E !N9T NH I T L P +
- P P I !P!KP M!O ' 3 .. -
HMN N L NH 6 - 5+S1J GP97 AT I !NH9T K J GP+
X NH PGP MN ! 7M!HJ!O PO ' 3 -
T T J N AP GJGNM !%O GHM99 J (!"
MUP NH T J AT OJP NJ !+ 1!9T P - PNM !
HP !M I P M!O M99 NHP MOO N !G N M U !Q8
HP G MT+
&P P!JP PWPKJN ! 7NHP PGN+
P9 PO G !G AP TAJ G 8 H KH N K !7 I +
H G K !PN LM N APN PP!T J 9 1 3 !!
& TM9 /PM
XH I 2 HM P P P H ! J %O MG I T U !Q+
/ %O MG I T 7MNHP MG I T I MGNP 7 99 %O+
#G I T Q PMN LMN !NH JQHN ! ! I T L MTP G S
? HP A G AP!N M!O O M ! I MUP 7 I NHP GHM7N+
/PN N 7M 9 MNHP NH JQH NHP 7 U ! MOP
HP PQ ! 7 I T HPM N AP P!N J! I M!!P 9T+
XHP!/PM G I MO+ X HMN J9OGN NH J O 9O I M!\
H !U%GN NH J NHMN OJNT GHM99 HM P O PMO N GLPMU
XHP!L P N 79MNNP T A G\ L9M !!PGG H ! J %G
A J!O+
XHP! I MEPGNT 7M99G F N 7 99T+ &PGP P NHT GNMNP8
#!O !NHT APGN K !G OP MN ! KHPKU
H G H OP JG MGH!PGG M!G P I T 9 7P I T EJOQ I P!N+
HT T J!QPGN OMJQHNP O PG ! N9 P NHPP 9PMGN8
M P NH GP P I LNT HPM NPO H GP 9 G J!OG
&P P A ! H 99 !PGG+
? P!N !NHT 9 7P ! I P+
T 9 7P 2 !P P HP9O AJN MG M LM !
MQP MQM !GN NH !P P!P I PG8 !P%P 7PM N 9 GP N+
HT GM7PNT AP !Q I N P+
? 1JN 7 I T G QHN[
PP APNNP / PM # M!O 9PN I P GN 99 P I M !
HP N JP A9M!U 7NH !P PTP+
? AT #L 99 S
AT #L 99 U !Q+
H J G PM %GN NHT Q OG !M !+
? 1 MGGM9[I GK PM!N[
9? 5 3 -' "!' -'-1! "'
$! 5PM G 7 APM +
99 NHT LHTG K M! M!O NHT 7PP APGN
L !NHP 7 JO GPMGP+ &P UP NHT Q 7N8
1 H 9GN 2 KM!' P!N K9M I J 7 I I T NH MN+
2%99 CGMM CFGG CF B NA C GP M
? " PM I P PK PM!N[
1!NH !P M99PQ M!KP HPM I P[S
HMN NH J HMGN G JQHN N I MUP JG A PMU J G
@XH KH P OJ GN !P P TPN M!O NH GN M !%O L OP+
K I P APN WN J GP!NP!KP M!O J L P
@XH KH ! J !MNJ P ! J L9MKP KM!APM
1J L NP!KT I MOP Q O NMUP NHT P M O+
O P OMTG P O M99 N NHPP 7 L G !
GH P9O NHPP 7 I O GMGNP G 7NHP 9O 8
#!O !NHP G WNH N NJ !NHT HMNPO AMKU
L ! J U !QO I 7 !NHP NP!NH OMT 7 99 !Q+
HT AM! GH%O N J!U AP 7 J!O ! J O I ! !G+

7 NJ!P%G M9 I G 4 J HM P APO P!KP GKM!NPO
!O P99 M P NH NHP M!N NHMN T J HM P M!NPO+
! I P GHM99 J!7 9O HMN L9 QHNPOD KJ!! !Q H OPG8
X H K P G 7MJ9NG MN 9MGN NH GHM I P OP OPG+D
X P99 I MT T J L GLP [
> IP IT 7M OP9 M
+ 4 & / ! "
! GNP N G ! 9 NN9P 2 HM P N GMT 7 HMN I GN
!PM 9T MLLP NM !G N JG A NH 2 NH !U J 7MNHP 99
HP!KP N ! QHN+
3 HMN%G I GN KP NM ! M!O NH T J8 !PWN I !NH
NH JG+
! 4 J GPP H 7J99 7 KHM!QPG H G MQP G8 NHP AGP
MN ! P HM P I MOP 7 N HMNH ! ND APP!9 NN9P HP M9 MTG
9 PO J G GNP I GN8 M!O NH HMN L EJOQ I P!N HP
HMNH ! KMGN HP 77 MLLPM G N Q GG9T+
3 % G NHP !7 I NT 7 H G MQP TPN HP HMNH P P AJN
G9P!OP 9T U! !H I GP97+
! HP APGN M!O G J!OPGN 7 H G N I P HMNH APP! AJN
MGH NHP! I JGN P 9 U 7 I H G MQP N PKP P ! N M9 !P
NHP I LP 7PKN !G 7 9 !Q P!Q M77PO K !O N ! AJN NHP P
NHM9 NHP J! J9T MT M O!PGG NHMN !7 I M!O KH 9P K
TPM G A !Q NH NHP I +
3 JKH J!K !GNM!N GNM NG M P P 9 UP N HM P 7 I
H I MG NH G 7 P!N%G AM! GH I P!N+
! HP P +G 7J NHP K I L9 I P!N 7 9PM P NMU !Q AP
N PP! O M!KP M!O H I + - MT T J 9PN JG G ND N QPNHP 7
J 7MNHP KM T MJNH NT NH GJKH O GL G N !G MG HP
APM G NH G 9MGN GJ P!OP 7 H G 99 AJN 77P!O JG+
3 X P GHM99 7J NHP NH !U 7 N+
, !-. X P I JGN O G I PNH !Q M!O %NHP HPMN+ + 4 &

3 3 22+ S 3M 9 7 : 9 GNP %G -

2

" H J !MNJ P M N I T Q OOPGG8 N NHT 9M
T GP KPG M P A J!O X HP P7 P GH J9O 2
NM!O !NHP L9MQJP 7 KJGN I 8 M!O LP I N
HP KJ G NTD 7 !MN !G N OPL P I P+
O NHMN 2 M I G I P N P9 P 7 J NPP! I !GH !PG
/MQ 7 M A NHP \ X HT AMGNM O\ X HP P7 P AMGP\
X HP!I T O I P!G !G M P MG P99 K I LMKN+
T I !O MG QP!P JG M!O I T GHMLP MG N JP+
#G H !PGN I MOM I %G GGJP\ X HT A M!O NHPT JG
X NH AMGP\ NH AMGP!PGG ; AMGNM OT\ AMGP AMGP\
X H ! NHP 9JGNT GNPM9NH 7 !MNJ P NMUP
P K I L G N ! M!O 7 P KP]JM9 NT+
HM! O NH NH ! M OJ99 GNM9P N PO APO
: N NHP K PMN !Q M H 9P N AP 77 LG+
: N %N PP! MG9PPL M!O MUP \S X P99 NHP!+
/PQ N I MNP 3OQM 2 I JGN HM P T J 9M!O8
1J 7MNHP %G 9 P G N NHP AMGNM O 30 I J!O
#G N NHP 9PQ N I MNP O !P O S9PQ N I MNP[
X P99 I T 9PQ N I MNP 7 NH G 9PNNP GLPPO+
#!O I T ! P!N !NH P 30 I J!O NHP AMGP
HM99 N L NHP 9PQ N I MNP+F 2 Q 8 2 L GLP S
Q OG GNM!O JL 7 AMGNM OG[

' ' $ #FG' QB?DCA ' DG?N' -' H' CFG' P?D ADB@' GN CAH ' J G' F?PG'
-' #A' -' $?HN' CA' -' GQB?MWE' @G?H' CA' ' H' & MCAH8 ' =' CADE' A>'
!H M?HN8 . A?N OG?' J G?D ' -' $?D@GHC' A>' N PGD ' OAMABD I' H' CFG'
G QB CG' K? ? G' H',' A@B 'I R

=' 'CAA (' C' >AD' ?' >? DE' P AH'
>' A@G' ?E' ODG?CBDG 'A>' CFG' GMG@GHC
#F?C' H' CFG' OAMABD ' A>' CFG' D?HLAJ' MPG '
HN' KM?E' 8' CF8 -' $ OMABN 'I R

CFG' GK CFGC' F? ' CFG' ?@G' @G?H H
U' #F ' MHG' ' ADN H?D ME' KD HCGN R

=' FA' OAPGD' >?BMC ' ?C' M? C' F? HG' CFG@' NGD NG I

. BC' J G' F?PG' HA' NABLC' CF?C' CFG' DG?N H ' A>' CFG' >AM A' D FC ' ?HN' CF?C' 8$ ' DG>GD '
CA'
F '" '' ' ' #FG' ' A>' CFG' QB?DCA ' ' A@ CCGN' H' CFG' >AM A
' D 4 ' #FG' QB?DCA ' $
0 =

')

! P!N AM! GH%O NHJG [M!O O M!KP !' KH 9P ' LM NPO[
!O NHP U !Q Q !P N ! QHN[L PGK A%C D H G L P [
!7 !%O N ' PWH A N !' [F #99 NH G O !P $ '
L !' NHP QMO[30 I J!O [" ' ! 8 HMN !P G 9
" ' L9PMGP T J 9 OGH L ' ! !P+
+ & 3 &, ' $
!* X HT G ' PM !PGN9T GPPU T J N ' LJN JL' NHMN 9PNNP \
" 2' U! ' ! ' !P G ' I T 9 O+
! ' X HMN LMLP ' P P T J PMO !Q \
" NH !Q ' I T 9 O+
!9 ' \ HMN !PPOPO NHP !' NHMN NP A9P OPGLMNKH 7 N
!N ' T J ' L KUPN\ NHP]JM9 NT 7 ! NH !Q' HMNH ! N GJKH
!PPO N ' H OP NGP97+ / PN%G GPP ' I P ' 7 N AP ! NH !Q ' 2'
GHM99 ! N !PPO GLPKNMK9PG+
" 2' APGPPKH T J ' G ' LM O !' I P ' N G M 9PNNP ' 7 I'
I T A NHP ' NHMN 2' HM P ! N M99 %P PMO ' M!O' 7 ' G ' I JKH
MG 2' HM P LP JGPO ' 2' 7 !O N ! N 7 N 7 ' T J ' %P 9 U !Q+
!' : P I P NHP 9PNNP ' G +
" ' ' GHM99 77P!O' P NHP ' N ' OPNM !' ' Q P N+ HP
K !NP!NG ' MG !' LM N 2' J!OP GNM!O' NHP I ' M P' N ' A9M I P+
!' / PN%G GPP ' 9P N%G GPP+
" 2' H LP ' 7 ' I T A NHP %G EJGN 7 KMN ! ' HP NP
NH G AJN MG M!' PGGMTF ' NMGNP 7 I T NJP+

' 5' % = #F ' KAM OE ' ?HN' DGPGDGHOG' A>' ? G ' @?(G ' CFG' J ADMN' L CCGD' CA'
CFG' LG C' A>' ABD' C @G ' ' (GGK ' ABD' >ADCBHG ' >DA@' B ' C MM' ABD' AMNHG ' O?HHAC' DGM F'
CFG@ ' ' LG H' CA' >HN' ?H' NMG' ?HN' >AHN' LAHN? G' H' CFG' AKKDG AH' A>' ? GN'
CED?HHE' ' J FA' J ?E ' HAC' ? ' C' F?CF' KAJGD ' LBC' ? ' C' ' B>>GDGN ' A@G' CA' @G '
CF?C' A>' CF ' @?E' KG?(' @ADG ' >' ABD' >?CFGD' J AB MN' MGGK' C MM' ' J ?(GN' F @ ' EAB'
FABMN' GHSAE' F?M>' F ' DGPGHBG' >AD' GPGD ' ?HN' MPG' CFG' LGMAPGN' A>' EABD' LDACFGD '
!N ?D I

"J I LH S !GL MKT[

=' MGGK' C MM' ' J ?(GN' F @ R EAB' FABMN' GHSAE' F ?M>' F ' DGPGHBG I R

T G !' 3OQM [" MO HP M HM!O N NP NH G \ M HPM N
M!O A M !' N A PPO N !' \ X HP!' KM I P T J N NH G \ X H
A JQHN N \
" 2N MG ! N A JQHN I P I T 9 O NHP P%G NHP KJ!
! !Q 7 N 2 7 J!O N NH !' !' MN NHP KMGP I P!N 7 I T
K9 GPN+
! 4 J U! NHP KHM MKNP N AP T J A NHP %G \
" 27 NHP I MNNP P P Q O I T 9 O 2 OJ GN G PM
N P P H G 8 AJN !' PGLPKN 7 NHMN 2 J9O 7M !' NH !U N
P P ! N+
!' 2N G H G+
" 2N G H G HM!O I T 9 O8 AJN 2 H LP H G HPM N G
! N !' NHP K !NP!NG+
!' " MNH HP I P P HP PN 7 P G J!OPO T J !' NH G
AJG !PGG \
" P P I T 9 O JN 2 HM P HPM O H I 7N I M !
NM !' N N AP 7 N NHMN G !G MN LP 7PKN MQP M!O 7MNHP G
OPK9 !PO[F NHP 7MNHP GH J9O AP MG M O N NHP G !' M!O
NHP G !' I M!MQP H G P P!JP+
!' 1 99M !' 99M ![SO9 G P T L ! !' !' NHP 9PNNP [
+S#AH PO 99M ![!!MNJ M9 OPNPGNPO A JN GH 99M ![
GP NHM!' A JN GH S : G MH GPPU H I 8 2%99 MLL PHP!O
H I S#A I !MA9P 99M !' [SX HP P G HP \
" 2' O ' ! N P99 U! I T 9 O+ 27 N GHM99 L9PMGP

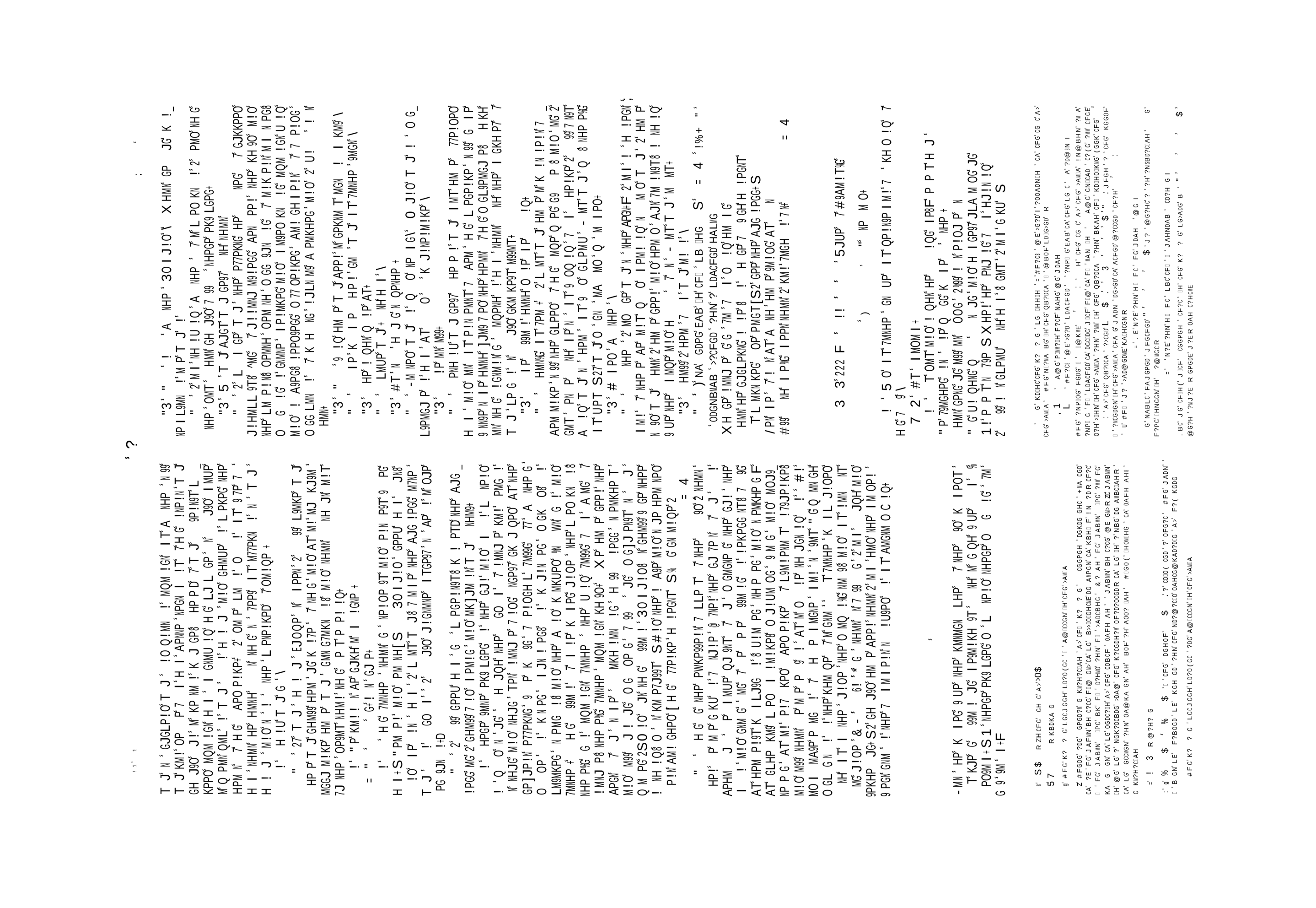
) % 2 H' CFG' >D C' OGHG' CF ' J ADN' ' B GN' H' CFG' GH G' A>' J ('%(2' ;
H' CFG' K? ? G' LG>ADG' B ' CFG' @G?H H ' ?KKDA?OFG ' @ADG' HG?DWE' CA' % % %%
g -' $ ' ' H' CFG' >AM A' J G' >HN' 0' $0' ' 4' H' CFG' QB?DCA '
7' ' -' J ? ' B G CGN' LE' ! NJ ?DN ' H' CFG' =' ?HAH ' A>' D C O @ I'
' ?H@GD8 ' DG?N H '
%("0 ' #FG' QB?DCA' DG?N ' % "%("0
J$ " R ?MWAJ ?HOG
I' %% 2S %% 2< % 2R H >GN' BOF' KDAA>' AD' G ?@ H?C AH' ? ' J ? ' @?NG' LE' CFG' '
? ?EGD' A>' OA H ' AD' CFG' C? CGD' ?C' DAE?M' C?LWG ' H' CFG' M?CCGD' GH G' J G' F?PG' CFG'
JADN' H' F?K@?H8 ' A@GD R

=' L NG ' J CF' F ' (H>G' CAA ('% 2' BKAH' CFG' K?DC' LG>ADG I

G' F?PG' CFG' JADN' % 2' H' ?' BL GQBGHC' OGHG' V OC' c) ' O ' R

' =' HN' CF?C' CFE' CAH BG' A@G' % 2' A>' LDGGN H ' LDG?CFG I

7' (' #FG' QB?DCA ' ('



27'T J'K I P'G9MKU' 7'7 I P'GP KPG'
4 J'GHM99'O ' P998 NHP'7MJ9N' 7' N'2%99'M!G P +
7 2' "P%G'K I !Q' IMOM I 8 2'HPM'H I+' + ! -'I1
! ' -JN' !' HMN' PM T'!PQ9 QP!KP'T J'L9PMGP
4 J'M!O'T J'7P99 G'8 2%O'HM P' N'K I P'N ']JPGN !'
27'HP'O GNMGNP' N '9PN'H I'N ' IT'G GNP
XH GP' I !O'M!O' I !P'2'U! ' !'NHMN'M P' !P
^ N'N 'AP' P J9%O+' 2O9P' 9O' IM!+
HMN'GN 99' J9O' IM!MQP'NH GP'MJNH N PG'
HMN'HP'HMNH'Q P!'M MT[S 'AT' IT'9 7P+
19O'7 9G'M P'AMAPG'MQM !'8 M!O+' IJGN'AP'JG%O
X NH'KHPKUG'MG'79MNNP PG SD HP!'NHPT'M P'GPP!'MAJG%O '
&P I P I AP' HMN'2'HM P'GM O+
7 2' XP99' IMOM I+
! ' #!O'9PN'H G'U! QHNG'HM P'K 9OP'9 UG'M I !Q'T J8
HMN'Q G' 7' N'! ' IMNNP 8 MO GP'T J'7P99 G'G 8 ^2'
J9O'A PPO'7 I'HP!KP' KKMG !G'M!O'2'GHM99'NHMN'2' IMT'
GLPMU8'S2%99' NP' GN M QHN' N ' IT' G GNP ' N ' H 9O' IT'
K J GP8S- PLM P'7 'O !!P +' + 4 &

3 3'2 +S ' ' ' -

'33 V'" -3& - "

' 27'AJN'MG' P99'2' NHP'MKKP!NG'A
HMN'KM!' IT'GLPPKH'O 77JGP' IT'Q O' !NP!N
MT'KM T'NH JQH' NGP97'N 'NHMN'7J99' GGJP
O ' H KH'2' MC%O' IT'9 UP!PGG+S 'AM! GH%O' P!N
27'NH J'KM!GN'GP P' HP P'NH J'O GN'GNM!O'K !OP I !%O+
' IMT' N'K IP'NHT' IMGNP ' H I'NH J'9 %GN D
HM99'7 !O'NHPP'7J99' 7'9MA J G+

! -'2 ' ' ' ! QHNG' "'#NNP!OM!NG+
? '/PN' IP'! N'GNMT'M'E N'7 'O !!P 8 Q 'QPN' N' PMOT+'
+ 4 ' '#NNP!OM!N+'" ' ! ' HMN'M N'NH J'\
' #' IM!'G +
? ' XHMN' O GN' NH J' L 7PGG'\ XHMN' J9OGN' NH J'
NH' JG'\
' 2'O 'L 7PGG'N ' AP' ! '9PGG'NHM!' 'GPP I 8 N ' GP P'
H I'N J9T'NHMN' 99' LJN' IP' !'N JGN8 N '9 P'H I'NHMN' G'
H !PGN8 N 'K ! P GP' NH'H I'NHMN' G' GP'M!O'GMTG'9 NN9P'8
N '7PM'EJOQ I P!N8 N '7 QHN' HP!' 2'KM!! N' KH GP8 M!O' N '
PMN'! '7 GH+
? ' XHMN'M N'NH J'\
' #' P T'H !PGN HPM NPO'7P99 'M!O'MG'L 'MG'NHP'
U !Q+
? '27'NH J'AP%GN'MG'L '7 'M'GJAEPKN'MG'HP%G'7 'M'
U !Q'NH J'M N'L 'P! JQH+' XHMN' J9OGN'NH J'\
' P KP+
? ' XH ' J9OGN'NH J'GP P'O
' 4 J+
? ' 5 GN'NH J'U! ' IP'7P99 '\
' 'G 8 AJN'T J'HM P'NHMN' !'T J'K J!NP!M!KP'
H KH'2' J9O'7M !'KM99' IMGNP +
? ' XHMN%G'NHMN'\
' #JNH NT+
? ' XHMN'GP KPG'KM!GN'NH J'O '\
' 2'KM!'UPPL'H !PGN'K J!GP9' OP' J!' IM 'M'KJ JG'
NM9P' !'NP99 !Q' N'M!O'OP9 P 'M'L9M !' IPGGMQP'A9J!N9T8 NHMN'
H KH' O !M T' IP!' M P'7 N'7 '2'M I']JM9 7 PO' !' ' M!O'NHP'
APGN' 7' IP' G O 9 QP!KP+
? ' " ' 9O'M N'NH J'\
' N'G 'T J!Q'G 'N '9 P'M' IM!'7 'G !Q !Q'
! 'G ' 9O'N 'O NP' !'HP '7 'M!TNH !Q' 2'HM P'TPM G' !'
IT'AMKU'7 NT P QHN+

' % % ' HP']JM N G' %')
' HP'LMGGMQP'21'A MKUPNG' G' I NNPO' !'NHP'7 9 +
' H G' GLPPKH'HMG'APP!' M M!QPO' IPN KM99T' AT'NHP' I OP I 'PO N G8 AJN' G '
PQJ9MNPO' N' PMOG' 'P T'HM GH9T+' 2!'NHP'O GN !KN !'2EPN PP!'L GP'M!O' P GP' P'
HM P' ! M MA9T'7 99 PO'NHP'7 9 ' H KH' !'NH G' PGLPKN' G' I GN'KM P7J99T'L !NPO+'
HP$]JM N G' !'NHP'K !N M T'! N' !9T'K !7 J!O'NHP'O 77P P!KPG' APN PP!'L GP
%&,

? ' O 99 ' IP'8 NH J'GHM9N'GP P' I P8 7'2'9 UP'NHPP'! '
GP'M7NP'O ! !P '2' 99' ! N'LM N'7 I'NHPP'TPN+S5 ! !P '
H M'O ! !P +SXHP P%G' IT'U!M P'\ IT'7 9'\ : 'T J'M!O'
KM99' IT'7 9'H NHP +

' NP M O+' +

4 J'T J'G MH' HP P%G' IT'OMJQHNP '\
7 2* 'L9PMGP'T J S' + 4
? ' XHMN' GMTG' NHP' 7P99 ' NHP P' ' M99' NHP' K9 NL 99'
AMKU+SXHP P%G' IT'7 9'H M'\S2'NH !U'NHP' 9O%G' MG9PPL+'
S" '! ' HP P%G'NHMN' I !Q P9'\
3 ' "P'GMTG' IT'9 O'T J'OMJQHNP ' G'! N' P99+
? ' XHT'KM I P'! N'NHP'G9M P'AMKU'N ' IP' HP!'2'KM99PO'
H I'\
3 ' 'HP'M!G P PO' IP' !'NHP' J!OPGN' IM!!P '
HP' J9O'! N+
? ' "P' J9O'! N[
3 $ 9T'9 O'2'U! ' ! N' HMN'NHP' IMNNP ' G8 AJN'
N ' IT'EJOQ I P!N' T J'H QH!PGG' G' ! N' P!NP NM !PO' NH'
NHMN' KP P I ! JG'M77PKN !' MG' T J' P P' !N8 NHP P%G' M'
Q PMN'MAMNP I P!N' 7'U !O!PGG' MLLPM G'MG' P99' !'NHP'QP!P M9'
OPLP!OM!NG'MG' !'NHP'OJUP'H I GP97'M9G 'M!O'T J'OMJQHNP +
? ' "M[GMT%GN'NH J'G '\
3 '2'APGPPKH'T J'LM O !' IP' IT'9 O' 7'2'AP' I G_
NMUP!'' 7 ' IT'OJNT'KM!! N' AP' G 9P!N' HP!'2' NH !U' T J'
H QH!PGG' !QPO+
? ' H J'AJN' P I P I AP %GN' IP' 7' I !P' !'K !KPLN !'
2' HM P' LP KP PO' M' I GN' 7M !N' !PQ9PKN' 7' 9MNP'8 H KH' 2'
HM P' MNHP 'A9M I PO' MG' I !P' !'EPM9 JG' KJ G NT'NHM!'
MG' M' P T'L PNP!KP'M!O'LJ L GP' 7'J!U !O!PGG'' 2' 99'9 U'
7J NHP ' !N %N+S JN HP P%G' IT'7 9+\' 2'HM P' ! N' GPP!'
H I'NH G'N 'OMTG+
3 ' !KP' IT'T J!Q'9MOT%G' Q !Q' !N ' O M!KP'G '
NHP'7 9'HMNH' IJKH'L !PO'M MT+
? ' ' I P' 7'NHMN8 2'HM P' ! NPO' N' P99+S : 'T J'
M!O' NP99' IT'OMJQHNP '2' J9O' GLPMU' NH' HP +S : 'T J'
KM99'H NHP ' IT'7 9+S

B ' NP M O+

1'T J'G 'T J'K IP'T J'H NHP 'G '' XH 'M I'2'G '\
7 2' T'9MOT%G'7MNHP +
? ' T'9MOT%G'7MNHP [IT'9 O%G'U!M P'T J' H PG !'
O Q[T J'G9M P[T J'KJ [
7 2'2' M I' ! !P' 7' NHPGP' IT'9 O'+2' APGPPKH' T J'
LM O !+
? '5 'T J'AM!OT'9 UG' NH' IP'T J' MGKM9'\
+7 ' 3'
7 2'2%99'! N'AP'GN JKUP!' IT'9 O+
' 'N LLPO'!P NHP 8 T J'AMGP'7 N AM99'L9MTP +
+ ,, 3'&,' -' -
? '2'NHM!U'NHPP'7P99 8 NH J'GP %GN' IP'M!O'2%99'9 P'
NHPP+
' IP'G 'M GP'M MT8 2%99'NPMKH'T J'O 77P P!KPG'8
M MT'M MT'27'T J' 99' IPMGJ P'T J'9JAAP %G' 9P!QNH'
MQM !'NM T''AJN'M MT''Q 'N 8 "M P'T J' GO I'\G +
+ &- -' ' NP M O'!&
? ' ' IT'7 P!O9T'U!M P'2'NHM!U'NHPP' NHP P%G'
PM !PGN' 7'NHT'GP KP+ + 1 3'7 ' ! 5

'O 9+

>!! ' /PN' IP'H P'H I'N 8S"P P%G' IT'K WK IA+ %
+ 1 3'7 ' -' ,
? ' " '! ' IT'L PNNT'U!M P' 'H 'O GN'NH J'\
>!! ' MH'T J' P P'APGN'NMUP' IT'K WK IA+

M!O' P GP'AJN'Q P'JG'NHP' P GP' !'NHP' I GN'2!PWMKN'M!O'KML K JG' IM!!P 'L P
GP!N !Q' P P T'MLLPM M!KP' 7'M' - 'NPWNSM'K LT'NMUP!' O !'MG'NHP'O M9 QJP'
MG' GL UP! SD' H KH'KMGP' N' J9O' AP' P T'O 77 KJ9N'7 'M' PL NP 'N 'OP7PKN'NHP'
APQ !! !QG'M!O'P!OG' 7'9 !PG'M!O'N ' IM U' HMN' X%G' !NP!OPO'N 'AP' IPN KM9'M!O'
HMN'! N+
'.XP'7 99 'NHP' LJ!KNJMN !' 7'NHP' Q !M9'AT' H KH' P' J!OP GNM!O+' 'N'
IMT'K IP'NHMN'NHT' IMGNP 'BK+

' XHT'7 9'
>ii' 5 GN'NH J' Ui 'NHP'O 77P piKP' 1T'A T'APN PPi'M
A NNP'7 9'MIO'M G ppN' iP\
? ' #'A NNP'7 9[
>ii' ^ HMN' 9 O' NHMN'K JiGP99O' NHPP'N 'Q P' M MT'NHT'
9MIO+
lP L9MKP'H 1'HP P'AT'lP'O 'NH J'7 'H 1'GNMIO' +
HP'G PPN'MIO'A NNP'7 9 99'L PGPiN9T'MLLPM 8
HP' iP'i'1 N9PT'HP P SNHP' NHP'7 JIO' JN'NHP P+
? '5 GN'NH J'KM99' lP'7 9'A T'\
>ii' #99'NHT' NHP'N N9PG'NH J'HMGN';Q Pi' M MT8 NHMN'
NH J' MGN'A i' NH+
' H G' G i N'M9N QPNHP'7 9'IT'9 O+
>ii' %7MNH'9 OG'MIO'Q PMN' Ipi' 99 i N 9PN'lP8 7
2'HMO'M' I i L 9T'+ JN'NHPT' J9O'HM P'LM N' i%N q'MIO'
9MO PG'N 'NHPT' 99 i N 9PN'lP HM P'M99'7 9'N 'ITGP978
NHPT%99'AP'GiMNKH iQ+S J1K9P'Q P'lP'MI'PQQ'MIO'2%99
Q P'NHPP'N 'K iG+
? ' XHMN'N 'K iG GHM99'NHPT'AP'\
>ii' XHT'MZNP'2'HM P'KJN'NHP'PQQ'%NHP' I OO9P'MIO'
PMN'JL'NHP'lPMN'NHP'N 'K iG 7'NHP'PQQ+' XHPi'NH J'
K9 PGN'NHT'K i' % NHP' I OO9P'MIO'QM PGN'M MT'A NH'
LM NG'NH J'A PGN'NH iP'MGG i'NHT'AMKU' %P'NHP'O N'
H J'HMOGN'9 NN9P' N'i'NHT'AM9O'K i' HPi'NH J'QM %GN
' &$$2* "'I 'NHP']JM N G+ HP'M9NP MN i'7 NHP'7 9 'N '6'XHT'lT
A T\R'I QHN'9PMO'JG N'?I7'NHMN'NHP'GLPPKH' MG'iNPiOPO'7 ' ;'MIO'NHMN'
MT'MI'NH J'KMiGN'i N'GI 9P'MG'NHP' iO'G NG'NH J%N'KMNKH
K9O'GH N9T' HP P'NMUP'lT'K WK lA' XHT'NH G'7P99 '
HMG'AMi GHPO'N '7HG'OMJQHNP G'MIO'OO'NHP'NH O'M
A9PGG iQ'MQM iGN'HG 998 7NH J'7 99 'HI'NH J'lJGN'
ippOG' PM'lT'K WK lA+S" 'i 'iJiK9P\ %X J9O'?
HMO'N 'K WK lAG'MIO'N 'OMJQHNP G[
? ' XHT'lT'A T\
>ii' 27'?'QM P'NHPI'M99'IT'9 iQD'2%O'UPPL'lT'K W_
K lAG'lTGP97' HP P%G'I ip8 APQ'MI NHP' 7NHT'OMJQHNP G+
? ' MUP'HPPO'G MH8'NHP' HL+
O 9+ J1NH%G'M O Q'lJGN'N 'UPiip98 HP'lJGN'AP' HLLPO'
JN' HPi'NHP'9MOT'A MKHF'IMT'GNMIO'AT'NHP'7 P'MIO'GN iU+
/PM+' #'LPGN 9PiN'QM99'N 'lP[
O 9+ MH'2%99'NPMKH'NHPP'M'GLPPKH+
/PM+'5 +
O 9+ M U'N'iJiK9P' S
"M P'I P'NHMI'NH J'GH PGN+
LPMU'9PGG'NHMI'NH J'UI PGN+
/PiO'9PGG'NHMI'NH J' $PGN D
&OP'I P'NHMI'NH J'Q PGN+
/PM i'I P'NHMI'NH J'N PMN+
PN'9PGG'NHMI'NH J'NH PGN8
/PM P'NHT'O iU'MIO'NHT' H P+
#iO'UPPL'i M O +
#iO'NH J'GHM9N'HM P'I P'
HMI'N 'NPiG'N'M'GK P+
piN+' HG G'i NH iQ'7 9+%%
O 9+ HPi'%G'9 UP'NHP'A PMNH' 7MI'JI7PP%O'9M TP 8 T J'
QM P'IP'i NH iQ'7 %' MI'T J'IMUP'i 'JGP'7 i NH iQ'
iJiK9P'\
/PM+' XHT'i ' A T8 i NH iQ' KMi' AP' iMOP' JN' 7
i NH iQ+
O 9+ - NHPP' NP99' H I 'G ' IJKH'NHP' piN' 7 HG'9MiO'
K IPG'N 8 HP' 99 i N'AP9 P P'M7 9+ = i'7

' ?

' XHT'7 9'
>ii' 5 GN'NH J' Ui 'NHP'O 77P piKP' 1T'A T'APN PPi'M
A NNP'7 9'MIO'M G ppN' iP\
? ' #'A NNP'7 9[
>ii' ^ HMN' 9 O' NHMN'K JiGP99O' NHPP'N 'Q P' M MT'NHT'
9MIO+
lP L9MKP'H 1'HP P'AT'lP'O 'NH J'7 'H 1'GNMIO' +
HP'G PPN'MIO'A NNP'7 9 99'L PGPiN9T'MLLPM 8
HP' iP'i'1 N9PT'HP P SNHP' NHP'7 JIO' JN'NHP P+
? '5 GN'NH J'KM99' lP'7 9'A T'\
>ii' #99'NHT' NHP'N N9PG'NH J'HMGN';Q Pi' M MT8 NHMN'
NH J' MGN'A i' NH+
' H G' G i N'M9N QPNHP'7 9'IT'9 O+
>ii' %7MNH'9 OG'MIO'Q PMN' Ipi' 99 i N 9PN'lP8 7
2'HMO'M' I i L 9T'+ JN'NHPT' J9O'HM P'LM N' i%N q'MIO'
9MO PG'N 'NHPT' 99 i N 9PN'lP HM P'M99'7 9'N 'ITGP978
NHPT%99'AP'GiMNKH iQ+S J1K9P'Q P'lP'MI'PQQ'MIO'2%99
Q P'NHPP'N 'K iG+
? ' XHMN'N 'K iG GHM99'NHPT'AP'\
>ii' XHT'MZNP'2'HM P'KJN'NHP'PQQ' %NHP' I OO9P'MIO'
PMN'JL'NHP'lPMN'NHP'N 'K iG 7'NHP'PQQ+' XHPi'NH J'
K9 PGN'NHT'K i' % NHP' I OO9P'MIO'QM PGN'M MT'A NH'
LM NG'NH J'A PGN'NH iP'MGG i'NHT'AMKU' %P'NHP'O N'
H J'HMOGN'9 NN9P' N'i'NHT'AM9O'K i' HPi'NH J'QM %GN
' &$$2* "'I 'NHP']JM N G+ HP'M9NP MN i'7 NHP'7 9 'N '6'XHT'lT
A T\R'I QHN'9PMO'JG N'?I7'NHMN'NHP'GLPPKH' MG'iNPiOPO'7 ' ;'MIO'NHMN'
MT'MI'NH J'KMiGN'i N'GI 9P'MG'NHP' iO'G NG'NH J%N'KMNKH
K9O'GH N9T' HP P'NMUP'lT'K WK lA' XHT'NH G'7P99 '
HMG'AMi GHPO'N '7HG'OMJQHNP G'MIO'OO'NHP'NH O'M
A9PGG iQ'MQM iGN'HG 998 7NH J'7 99 'HI'NH J'lJGN'
ippOG' PM'lT'K WK lA+S" 'i 'iJiK9P\ %X J9O'?
HMO'N 'K WK lAG'MIO'N 'OMJQHNP G[
? ' XHT'lT'A T\
>ii' 27'?'QM P'NHPI'M99'IT'9 iQD'2%O'UPPL'lT'K W_
K lAG'lTGP97' HP P%G'I ip8 APQ'MI NHP' 7NHT'OMJQHNP G+
? ' MUP'HPPO'G MH8'NHP' HL+
O 9+ J1NH%G'M O Q'lJGN'N 'UPiip98 HP'lJGN'AP' HLLPO'
JN' HPi'NHP'9MOT'A MKHF'IMT'GNMIO'AT'NHP'7 P'MIO'GN iU+
/PM+'#'LPGN 9PiN'QM99'N 'lP[
O 9+ MH'2%99'NPMKH'NHPP'M'GLPPKH+
/PM+'5 +
O 9+ M U'N'iJiK9P' S
"M P'I P'NHMI'NH J'GH PGN+
LPMU'9PGG'NHMI'NH J'UI PGN+
/PiO'9PGG'NHMI'NH J' $PGN D
&OP'I P'NHMI'NH J'Q PGN+
/PM i'I P'NHMI'NH J'N PMN+
PN'9PGG'NHMI'NH J'NH PGN8
/PM P'NHT'O iU'MIO'NHT' H P+
#iO'UPPL'i M O +
#iO'NH J'GHM9N'HM P'I P'
HMI'N 'NPiG'N'M'GK P+
piN+' HG G'i NH iQ'7 9+%%
O 9+ HPi'%G'9 UP'NHP'A PMNH' 7MI'JI7PP%O'9M TP 8 T J'
QM P'IP'i NH iQ'7 %' MI'T J'IMUP'i 'JGP'7 i NH iQ'
iJiK9P'\
/PM+' XHT'i ' A T8 i NH iQ' KMi' AP' iMOP' JN' 7
i NH iQ+
O 9+ - NHPP' NP99' H I 'G ' IJKH'NHP' piN' 7 HG'9MiO'
K IPG'N 8 HP' 99 i N'AP9 P P'M7 9+ = i'7

' ?

' XHT'7 9'
>ii' 5 GN'NH J' Ui 'NHP'O 77P piKP' 1T'A T'APN PPi'M
A NNP'7 9'MIO'M G ppN' iP\
? ' #'A NNP'7 9[
>ii' ^ HMN' 9 O' NHMN'K JiGP99O' NHPP'N 'Q P' M MT'NHT'
9MIO+
lP L9MKP'H 1'HP P'AT'lP'O 'NH J'7 'H 1'GNMIO' +
HP'G PPN'MIO'A NNP'7 9 99'L PGPiN9T'MLLPM 8
HP' iP'i'1 N9PT'HP P SNHP' NHP'7 JIO' JN'NHP P+
? '5 GN'NH J'KM99' lP'7 9'A T'\
>ii' #99'NHT' NHP'N N9PG'NH J'HMGN';Q Pi' M MT8 NHMN'
NH J' MGN'A i' NH+
' H G' G i N'M9N QPNHP'7 9'IT'9 O+
>ii' %7MNH'9 OG'MIO'Q PMN' Ipi' 99 i N 9PN'lP8 7
2'HMO'M' I i L 9T'+ JN'NHPT' J9O'HM P'LM N' i%N q'MIO'
9MO PG'N 'NHPT' 99 i N 9PN'lP HM P'M99'7 9'N 'ITGP978
NHPT%99'AP'GiMNKH iQ+S J1K9P'Q P'lP'MI'PQQ'MIO'2%99
Q P'NHPP'N 'K iG+
? ' XHMN'N 'K iG GHM99'NHPT'AP'\
>ii' XHT'MZNP'2'HM P'KJN'NHP'PQQ' %NHP' I OO9P'MIO'
PMN'JL'NHP'lPMN'NHP'N 'K iG 7'NHP'PQQ+' XHPi'NH J'
K9 PGN'NHT'K i' % NHP' I OO9P'MIO'QM PGN'M MT'A NH'
LM NG'NH J'A PGN'NH iP'MGG i'NHT'AMKU' %P'NHP'O N'
H J'HMOGN'9 NN9P' N'i'NHT'AM9O'K i' HPi'NH J'QM %GN
' &$$2* "'I 'NHP']JM N G+ HP'M9NP MN i'7 NHP'7 9 'N '6'XHT'lT
A T\R'I QHN'9PMO'JG N'?I7'NHMN'NHP'GLPPKH' MG'iNPiOPO'7 ' ;'MIO'NHMN'
MT'MI'NH J'KMiGN'i N'GI 9P'MG'NHP' iO'G NG'NH J%N'KMNKH
K9O'GH N9T' HP P'NMUP'lT'K WK lA' XHT'NH G'7P99 '
HMG'AMi GHPO'N '7HG'OMJQHNP G'MIO'OO'NHP'NH O'M
A9PGG iQ'MQM iGN'HG 998 7NH J'7 99 'HI'NH J'lJGN'
ippOG' PM'lT'K WK lA+S" 'i 'iJiK9P\ %X J9O'?
HMO'N 'K WK lAG'MIO'N 'OMJQHNP G[
? ' XHT'lT'A T\
>ii' 27'?'QM P'NHPI'M99'IT'9 iQD'2%O'UPPL'lT'K W_
K lAG'lTGP97' HP P%G'I ip8 APQ'MI NHP' 7NHT'OMJQHNP G+
? ' MUP'HPPO'G MH8'NHP' HL+
O 9+ J1NH%G'M O Q'lJGN'N 'UPiip98 HP'lJGN'AP' HLLPO'
JN' HPi'NHP'9MOT'A MKHF'IMT'GNMIO'AT'NHP'7 P'MIO'GN iU+
/PM+'#'LPGN 9PiN'QM99'N 'lP[
O 9+ MH'2%99'NPMKH'NHPP'M'GLPPKH+
/PM+'5 +
O 9+ M U'N'iJiK9P' S
"M P'I P'NHMI'NH J'GH PGN+
LPMU'9PGG'NHMI'NH J'UI PGN+
/PiO'9PGG'NHMI'NH J' $PGN D
&OP'I P'NHMI'NH J'Q PGN+
/PM i'I P'NHMI'NH J'N PMN+
PN'9PGG'NHMI'NH J'NH PGN8
/PM P'NHT'O iU'MIO'NHT' H P+
#iO'UPPL'i M O +
#iO'NH J'GHM9N'HM P'I P'
HMI'N 'NPiG'N'M'GK P+
piN+' HG G'i NH iQ'7 9+%%
O 9+ HPi'%G'9 UP'NHP'A PMNH' 7MI'JI7PP%O'9M TP 8 T J'
QM P'IP'i NH iQ'7 %' MI'T J'IMUP'i 'JGP'7 i NH iQ'
iJiK9P'\
/PM+' XHT'i ' A T8 i NH iQ' KMi' AP' iMOP' JN' 7
i NH iQ+
O 9+ - NHPP' NP99' H I 'G ' IJKH'NHP' piN' 7 HG'9MiO'
K IPG'N 8 HP' 99 i N'AP9 P P'M7 9+ = i'7

" P I MT P!QJM O H G O NMQP NH NHP L P G
#!O H 9O J 9 PG ! I P KT+S1G M9O 2 GMT[S
(X P99 T J I MT 7PM N 7M +
, !- M7P NHM! N JGN N 7M +$D
/ PN I P GN 99 NMUP M MT NHP HM I G 2 7PM +
N 7PM GN 99 N AP NMUP! 2 U! H G HPM N
X HMN HP HMNH JNNP %O 2 HM P N I T G GNP 8
27 GHP GJGNM ! H I M!O H G HJ!O PO U! QHNG+
X HP! 2 HM P GH %O NHP J!7 N!PGG D" ! 1G M9O \

NP M O+

X HMN HM P T J N NHMN 9PNNP N I T G GNP \
7a 7N 5$ I MOM I +
! MUP T J G I P K I LM!T M!O M MT N H GP
2!7 I HP 7J99 7 I T LM N KJ9M 7PM 8
#!O NHP PN MOO GJKH PMG !G 7T J !+
#G I MT K I LMKN N I P+ : PN T J Q !P 8
#!O HMGNP! T J PNJ !+ 9: 4 NP +" ! I T 9 O+
H G I 9UT QP!N9P!PGG M!O K J GP 7T J G+
H JQH 2 K !OP I ! ! N TPN J!OP LM O !+
4 J M P I JKH I P MNNMGU%O 7 M!N 7 GO I +
HM! L M G%O 7 HM I 7J9 I 9O!PGG+
(" 7M) J PTPG I MT L P KP 2 KM!! N NP998
N !Q N APNNP 7N P I M HMN%G P99+
! MT NHP! S
(X P99 P998 NHP P P!N+ = 4 &

3 3 +S !& (.! -

7 "O 9+

? : T J AP7 P N : 9 GNP NH NHPGP 9PNNP G MK_
]JM !N I T OMJQHNP ! 7J NHP NH M!TNH !Q T J U!
NHM! K I PG 7 I HP OP I M!O JN 7 NHP 9PNNP 27 T J
O 9 QP!KP AP ! N GLPPOT 2 GHM99 AP NHP P M7 P T J+
2 99 ! N G9PPL I T 9 O N 99 2 HM P OP9 P PO T J
9PNNP + = 4
>!! 27 M I M!%G A M !G P P ! H G HPP9G P P%N ! N !
OM!QP 7 U APG \
? #T A T+
>!! HP! 2 L NHPP AP I P T8 NHT N GHM99 ! N Q
G9 L GH O8
? " M HM HM [
>!! HM9N GPP NHT NHP OMJQHNP 99 JGP NHPP U !O9T
7 NH JQH GHP%G MG 9 UP NH G MG M K MA%G 9 UP M! MLL9P TPN 2
KM! NP99 HMN 2 KM! NP99+
? X HMN KM! GN NP99 A T \
>!! HP 99 NMGNP MG 9 UP NH G MG M K MA O PG N M K MA+
H J KM! GN NP99 HT !P%G ! GP GNM!OG % NHP I OO9P 7
!P%G 7MKP \
? +
>!! X HT N UPPL !P%G PTPG 7 P NHP G OP !P%G ! GP8
NHMN HMN M I M! KM!! N G I P99 JN HP I MT GLT !N +
? 2 O O HP !Q S
>!! M!GN NP99 H M! TGNP I MUPG H G GHP99 \
? +
>!! 2 !P NHP 8 AJN 2 KM! NP99 HT M G!M 9 HMG M
H JGP+
? X HT \
>!! X HT N LJN H G HPMO ! 8 ! N N Q P N M MT N H G
,OMJQHNP G M!O 9PM P H G H !G NH JN M KMGP+
? 2 99 7 QPN I T !MNJ P+S U !O M 7MNHP [S P
I T H GPG PMOT \
>!! HT MGGPG M P Q !P MA JN %P I HP PMG ! HT
NHP GP P! GNM G M P ! I P NHM! GP P! G M L PNNT PMG !+
? PKMJGP NHPT M P ! N P QHN \
>!! 4PG !OPPO H J J9OGN I MUP M Q O 7 9+
? NMUP N MQM !LP 7 KP[S !GNP !Q MN NJOP[

$ NPP P!G PEPKNG NHPGP OG M7NP H G NMGNP9PGG 7MGH ! 7P I P!OM_
N !+

>!! 27 NH J P N I T 7 9 !J!K9P 2%O HM P NHPP APMNP!
7 $AP !Q 9O AP7 P NHT N I P+
? " %G NHMN \
>!! H J GH J9OGN ! N HM P APP! 9O N 99 NH J HMOGN
APP! GP+
? 9PN I P ! N AP I MO8 ! N I MO G PPN HPM P! [
PPL I P ! NP I LP 8 2 J9O ! N AP I MO [

: P!N9P I M!+

" ! [M P NHP H GPG PMOT \
&PMOT I T 9 O+
? P A T+
>!! HP NHMN%G M I M O ! M!O 9MJQHG MN I T OPLM NJ P+
HM99 ! N AP M I M O 9 !Q J!9PGG NH !QG AP KJN GH NP +
= 4 &

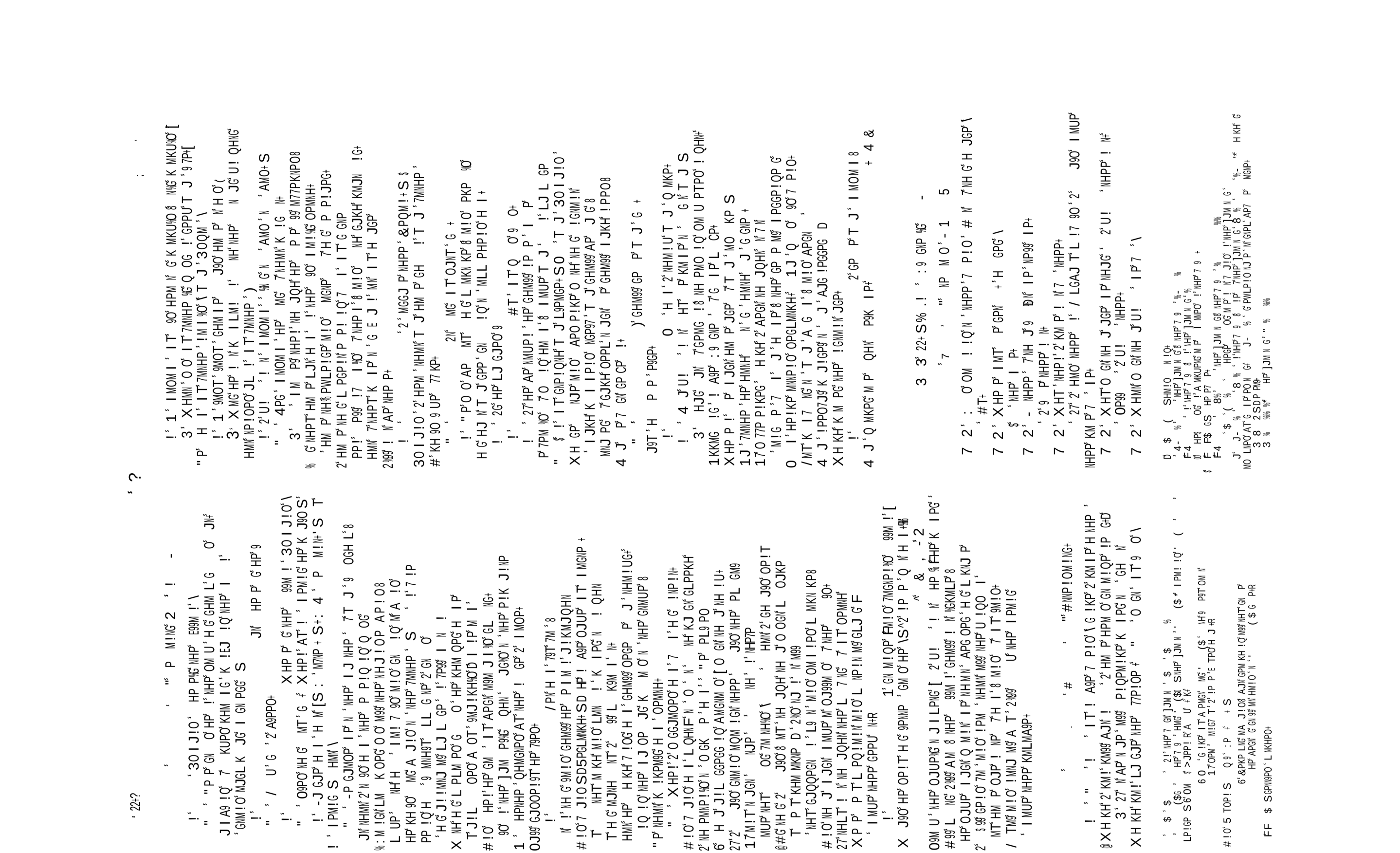
3 3 2+ B !& 2 - !.
3M 9 7 : 9 GNP +

(" (3

" M P NHPP J M!+
;; #!O T J G + 2 HM P APP! NH T J 7MNHP 8 M!O
Q P!H I ! N KP NHMN NHP OJUP 7 ! M99 M!O &PQM!H G
OJKHPGG 99 AP HP P NH H I NH G ! QHN+
" " K I PG NHMN \
& 4 J I MT O NHP! ! N I P+ OM P T J P99 G +
= 4
" HP OJUP AP HP P N ! QHN HP APNNP APGN[
H G PM PG NGP97 LP 7 KP !N I T AJG !PGG [;
T 7MNHP HMNH GPN QJM O N NMUP I T A NHP 8
#!O 2 HM P !P NH !Q 7M]JPMCT D]JPGN ! U
X H KH 2 I JGN MKN S P7!PGG M!O 7 NJ!P U[S
NHP M O 8SOPGKP!O S NHP 2 GMT8

T 7MNHP MNKHPG S1 G 79T NH G L9MKP 8
2!NP99 QP!KP G Q P! HP P T J M P H O8
4 J HM P ! NHP Q O MO M!NMQP 7NHP ! QHN S
"M P T J ! N GL UP! %QM !GN NHP OJUP 7 ! M99 \
"P%G K I !Q H NHP 8 ! % NHP ! QHN % NHP HMGNP+
#!O &PQM! NH H I " M P T J ! NH !Q GM O
L ! H G LM NT %QM !GN NHP OJUP 7#9AM!T \
#O GP T J GP97+
"3 2 M I GJ P !%N ! N M O+
" 2 HPM I T 7MNHP K I !Q S-M O ! I P S
2! KJ!! !Q 2 I JGN O M I T G O JL ! T J S
5 M PP I N OP7P!O T J GP978]J N T J P99+
4 P9O K I P AP7 P I T 7MNHP 8S / QHN H M HP P [S
O9T A NHP 8SD KHPG [N KHPG[S 7M P P99[S
= 4
I P A9 O O M ! ! I P J9O APQPN L ! !
=8!& "- -
17 I T I P 7 P KP P!OPM J 2 HM P GPP! O J!UM OG
5 I P NHM! NH G ! GL N+SOMNHP [7MNHP [
N L GN L[! HP9L \

: D2 H G G# PWL9M !PO MG OP9 KMNP J!KP NM ! ()' %$ LP HMLG Q PG
NHP I PM! !Q I P K9PM 9T+
)$7



; #U!M P8 MGKM98 M!PMNP 7A UP! IPMNG8 M AMGP L JO GHM99 APQQM 9T NH PP GJ NPO HJ!O PO L J!O'7 9NHT GNPO GN KU !Q U!M P 9 9T 9 P PO MKN !_ NMU !Q H PG ! Q9MGG QMC !Q GJLP GP KPMA9P 7 ! KM9 QJP8 !P N J!U !HP N !Q G9M P8 !P NHMN J9OGN AP M AM O ! MT 7 Q O GP KP M!O M N ! NH !Q AJN NHP K I L G N ! 7 M U!M P APQQM K M O LM!OP M!O NHP G ! M!O HP 7 M I !Q P9 A NKH !P H I 2 99 APMN !N K9M I JG H ! !Q 7 NH1J OP!T%GN NHP 9PMGN GT99MA9P 7NHT MOO N !+[

7 I1 8 5$ HMN M I !GN JG 7P99 M N NH J NHJG N M 9 ! !P NHMN G !P NHP U! ! 7NHPP ! U! G NHPP[X HMN M A MCP! 7MKPO M 9PN M N NH J N OP!T NH J U! %GN I P[2G N N OMTG G !KP 2 N LL%O JL NHT HPP9G M!O APMN NHPP AP7 P NHP U !Q\ 5 M T J QJP8 7 NH JQH N AP ! QHN TPN NHP I !GH !PG 8 2%99 I MUP M G L % NHP I !GH !P 7 T J T J H PG ! KJ99 !9T AM AP I !QP + 5 M + + 2 3 -2! " 7 2 # MT8 2 HM P ! NH !Q N O NH NHPP+ 5 M T J MGKM9 T J K I P NH 9PNNP G MQM !GN NHP U !Q M!O NMUP M! NT NHP LJLLPN%G LM N MQM !GN NAP TM9NT 7HP 7MNHP 5 M T J QJP 2%99 G KM A !MO T J GHM!UG SO M T J MGKM9 K I P T J MTG+ 7 2 "P9L H M[I J NHP [HP9L [N UP$T J G9M P8 GNM!O QJP8 GNM!O T J !PMN G9M P8 GN UP+ +% 3 7 2 "P9L H M[I J NHP [I J NHP [

(. # P M!NG+

" " ! $X\ HMN%G NHP I MNNP \ - M N+ X NH T J Q O I M!A T 7T J L9PMGP 8 K I P+ 2%99 79PGH T J8 K I P ! T J!Q I MGNP + ! X PML !G[M I G[HMN%G NHP I MNNP HP P \ ! PPL LPMKP JL ! T J 9 PG 8 "P O PG NHMN GN UPG MQM ! X HMN G NHP I MNNP \ 3 HP I PGGP!QP G 7 I J G GNP M!O NHP U !Q+ ! X HMN G T J O 77P P!KP \ GLPMU+ 7 2 2 M I GKM KP ! A PMNH I T 9 O+ I M P9 T J HM P G APGN %O T J M9 J + 4 J K M O9T MGKM9 ! MNJ P O GK9M I G ! NHPP8 M NM 9 I MOP NHPP+ ! H J M N M GN M!QP 7P99 8 M NM 9 I MUP M I M!\ #NM 9 G 8 M GN !P KJNNP M LM !NP K J9O ! N HM P I MOP H I G 99 NH JQH NHPT HMO APP! AJN N H J G D MN NHP N MOP+ ! LPMU TPN H Q P T J]JM P9\ 7 2 H G M!K P!N J77 M! G H GP 9 7P 2 HM P GLM %O# N GJ N 7H G Q PT APM O D H J H PG ! CPO[NH J J!!PKPGGM T 9PNNP [S T 9 O 7 T J 99 Q P I P 9PM P 2 99 N PMO NH G J! A 9NPO 99M ! !N I NM M!O OMJA NHP M99 7 M EMUPG NH H I+S LM P I T Q PT APM O T J MQNM 9 \ ! -PMKP G MH[4 J APMGN9T U!M P U! T J ! P P P!KP \ 4PG G 8$AJN M!QP HMNH M L 9PQP+ ! X HT M N NH J M!Q T \ HMN GJKH M G9M P MG NH G GH J9O PM M G O # H PM G ! H !PGNT JKH G I 9 !Q QJPG MG NHPGP+ / UP MNG 7N A NP NHP H 9T K OG MN M ! X H KH M P N ! N !GP FN%J!9 GP G I NH P P T LMGG ! HMN ! NHP ! MNJ PG 7NHP 9 OG PAP98

P M!NG+

HP OPGK LN ! 7 M! !O OJM9 ! M 9PQM9 O KJ I P!N G KM99PO H G X P MQ PP NH PKU NHMN NHP MNNP I LNG 7 NHP K I I P!NMN G N PWL9M ! NHP %H KH P!N APGN G JL ! NHP NP M O M P P T J!GMN G7MKN T I P M P A JG P! JQH8 NHP G P P L AMA9T !NP99 Q A9P N HMUGLP P%G K !NP I L M PG 8 AJN GP P M9 ! M99 9 UP9 H O AP9 !Q N NH GP 7 QJ PG 7 GLPPKH H KH P ! KM99 G9M!Q 2N I JGN AP PK 99PKNPO NHMN P!N HMG MGGJ I PO NHP KHM MKNP 7M GP !Q I M!+ 9 % NHP]JM N G 8 NHP 7 9 2 % % SK9 GP9T N PO+ NHP]JM N G 8 NHP 7 9 G N OP!T+ F 9 '(2) % HP HM9KT ! G NHP U !Q7 GHP 8 M!O NHP P MG M L LJ9M

!Q G N 7 P G! N NHP K 9OP I OG8 &P!PQP $ M77 I M!O NJ !NHP HM9KT !APMUG F X NH P P T QM9P M!O M T 7NHP I MGNP G+ ! !Q !MJQHN 9 UP O QG AJN 7 99 !Q+S #L9MQJP JL ! T J PL 9PLN K GMQP[I 9P T J I T GLPPKHPG MG 2 P P M 7 G \ : GP 7 2 HMO T J JL ! M J I L9M !+ 2%O O P TP KMKU9 !Q H I P N M I P9 N+F ! X HMN M N NH J I MO 9O 7P99 \ ! " 7P99 T J JN \ MT NHMN+ K !N M PG H 9O I P M!N LMNHT+ HM! 2 M!O GJKH M U!M P+ ! X HT O GN NH J KM99 H I U!M P \ X HMN G H G 7MJ9N \F " G K J!NP!M!KP 9 UPG I P ! N+ I P LP KHM!KP O PG I !P H G HP G %N G I T KKJLMN ! N AP L9M !8 2 HM P GPP! APNNP 7MKPG ! I T N I P+ HM! GNM!OG ! M! T GH J9OP NHMN 2 GPP P7 P I P MN NH G !GNM!N+ H G G G I P 7P99 + XH HM !Q APP! L M G%O 7 A9J!N!PGG O NH M77PKN #GMJKT JQH!PGG8 M!O K !GN M !G NHP QM A >J NP 7 I H G !MNJ P " P KM!! N 79MNNP P HP NHMN APQJ 9PO T J ! M L9M ! MKKP!N MG M L9M ! U!M P H KH 7 I T LM N 2 99 ! N AP NH JQH 2 GH J9O ! T J O GL9PMGJ P N P!N PMN I P N N+ ! X HMN MG NHP 77P!KP T J QM P H I \ 7 2 2 !P P QM P M!T+F 2N L9PMG%O NHP U !Q H G I MGNP P T $!GN UP MN !$ JL ! H G - ! - & ! # X HP! HP K I LMKN F M!O % 3 -O GL9PMGJ P LL%O I P APH !O (3 "!2 $ -& "$ G" #!O LJN JL ! H I GJKH M " ! . HMN NHT%O H I Q N L M GPG 7NHP U !Q$ 0 H I MNNP I LN !Q H MG GP97 GJAOJPO 8 #!O ! NHP 79PGH I P!N 7NH G O PMO PWL9 N+ 5 P ! I P HP P MQM !+ !P 7NHPGP QJPG M!O K M OG+ JN #EMW G NHP 7 9+ OPNKH 7 NH NHP GN KUG[4 J GNJAA ! M!K P!N U!M P T J P P P!N A MQQM N+ X P%99 NPMKH T JS P!N 2 M I N 9O N 9PM ! M99 ! N T J GN KUG 7 I P 2 GP $P NHP U !Q 8 1! H GP P I L9 T I P!N 2 MG GP!N N T J 4 J GHM99 O G I M99 PGLPKNG GH N A 9O I M9 KP #QM !GN NHP Q MKP M!O LP G ! 7 I T I MGNP + N KU !Q H G I PGGP!QP +

L ! !NHMN NHP A O 7 HJ!Q JL J9O !O KMNP AT NHP NJ ! !Q 7 NG APMU NHP L !N 7 I H KH NHP !O A9P ! M 9 P%G 6?P 7 M9NM R S

6 JN H ! GNM!OG NHP !O+\ 2!N HMN K I P LPP G IT $ '(2 0%$ '' 1B F &$ %$ %' '1 HP]JM N G 8$ 0%$ % (1 % 5 HP]JM N G HP KHM!QP MG ! N I MOP NH JN PMG !+ #9NH JQH P!N I PM!N N Q JN 7 H G O M9PKN NHP O G J!OPO ! KM99T M!O MG KM9KJ9MNPO N 77P!O I P NHM!' MG !PPO7J9+ F - (HP]JM N G (A (- (G HP P JGPO ! NHP GP!GP 7 (1/ 27 2

6 #LL MKH'NH J'APMK i'N 'NH G'J1OP'Q9 AP R S
Z 6'2i'T J' J1ii1G7 1'H 1'N 'IP
X HPi' "M 19N'GMTG'6'2'MI'N 'IJKF %'NHP'GJ1R'HP' P7P G'N 'NHP'GM1P'L P A'
H KH' KKJ G i'(GP P M9A UG 7 HMUGLP%G N1P± @ PPi NP' i"M1 9PN'#KN'2±'
K±'22+' d + MT'O'i N'G '2'HM P' MNKH%O'MIO'N M P99%O'
HM O8
1P'N 1P'2'GHM99'G9PPL' JN'NHP'PGN'2%99' H GN9P+
#'Q O'1Mi%G'7 NJ1P'1MT'Q ' JN'MN'HPP9G' [J'T J'Q O'1
: P'T J'Q O'1 [i' HP'OJUP%G'N 'A9M1P' i'NH G'8 %W 99'AP' 99'NMUPi+
+ 4
' : O'UIQ'NHMN'1JGN'MLL P'NHP'K 1 i'GM 8
3 3'222+S ', 'i;' '
',
"3' 2'HPM O' I TGP97L K9M 1%O'8
#io'AT'NHP'HMLLT'H 99 ' 7M'N PP+
3GKML%O'NHP'HJIN+' 'L N' G'7 PP8 i 'L9MKP+
HMN'QJM O'MiO' I GN'JiJGJM9' Q 9MiKP+
5 PGi N'MNNPiO'IT'NMU iQ+' XH 9PG2'IMT'%GKMLP+
$' HP'9 ipG i'A MKUPNG M P' 1 NNPO' i'NHP'7 9 + 2N'G K9PM'NHMN'NHP' 1 GG i'
MG i N'MKK OPiNM9 'KML K JG'7 ' i'NHMN'PO N i'N P GJAGP]JPiN'LMGGMQP'G
M9NP PO'N S
6' HP'U iQ'H G 1 MNPO' i'NHP'7 9 +
F H G9 iP G M9G ' 1 NNPO' i'NHP'7 9 +
' XP' iGP N'NHP'GMMQP'O PKN i'MG +'5TKP'GJQQPGNG+
' HP'K 1 i'%(8 M99JOPO'N ' G 7 JiO' i' "PT O%G'6'5 M9 QJPG'MiO'- _
P AG'RS
Z 6'2i'T J' J1ii1G7 1'H 1'N 'IP
X HPi' "M 19N'GMTG'6'2'MI'N 'IJKF %'NHP'GJ1R'HP' P7P G'N 'NHP'GM1P'L P A'
H KH' KKJ G i'(GP P M9A UG 7 HMUGLP%G N 1P± @ PPi NP' i"M1 9PN'#KN'2±'
K±'22+' d + MT'O'i N'G '2'HM P' MNKH%O'MIO'N M P99%O'
HM O8
1P'N 1P'2'GHM99'G9PPL' JN'NHP' PGN'2%99' H GN9P+
#'Q O'1Mi%G'7 NJ1P'1MT'Q ' JN'MN'HPP9G' [J'T J'Q O'1
: P'T J'Q O'1 [i' HP'OJUP%G'N 'A9M1P' i'NH G'8 %W 99'AP' 99'NMUPi+
+ 4
' : O'UIQ'NHMN'1JGN'MLL P'NHP'K 1 i'GM 8
3 3'222+S ', 'i;' '
',
"3' 2'HPM O' I TGP97L K9M 1%O'8
#io'AT'NHP'HMLLT'H 99 ' 7M'N PP+
3GKML%O'NHP'HJIN+' 'L N' G'7 PP8 i 'L9MKP+
HMN'QJM O'MiO' I GN'JiJGJM9' Q 9MiKP+
5 PGi N'MNNPiO'IT'NMU iQ+' XH 9PG2'IMT'%GKMLP+
$' HP'9 ipG i'A MKUPNG M P' 1 NNPO' i'NHP'7 9 + 2N'G K9PM'NHMN'NHP' 1 GG i'
MG i N'MKK OPiNM9 'KML K JG'7 ' i'NHMN'PO N i'N P GJAGP]JPiN'LMGGMQP'G
M9NP PO'N S
'GPN'NHPP'HP P'\
' 2N' G A NH'HP'MiO'GHP+
4 J'G i'MiO'OMJQHNP +
? ' +
' 4PG+
? ' ' ?' GMT+
' ?' GMT'TPM+
+? ' ' i 8 NHPT' J9O'i N+
' 4PG'NHPT'HM P+DF'
? ' T'?JL NP ?'G PM 'i +
' T'?JI '2'G PM 'MT+
? ' HPT'OJ GN'i N'O %W 8
HPT'K J9O'i N' J9O'i N'O %W 8 %W G GP'NHMI'IJ NHP +'
'O'JL i' PGLPK%'GJKH' 9PiN' JN MQP
&PG 9 P'IP' NH'M99'I OPGN'HMGNP' HKH' MT'
H J'I QHN%GN'OPGP P' 'NHPT' IL GP'NH G'JGMQP+
I iQ'7 I'JG+
' T'9 O' HPi'MN'NHP 'H IP
2'OO'K IIPiO'T J'H QHIPGG%'9PNNP G'N 'NHPI
3 P2' MG GPi'7 I'NHP'L9MKP'NHMN'GH %O'
$ T'OJNT'UIPP9 iQ'KMI P'N'HP PPU iQ'L GN+
NP %O' i'H G'HMGNP'HM97'A PMNH9PGG'LMiN iQ'7 NH'
O I';' ip 9H G' I GN PGG'GM9JJNMN LiG8
5P9 P %O'9PNNP G'GL NP' 7 iNP I GG i
L PNUT' P99'MQ PPO'NHMN'NHP'APMK i'G'HP'GJi'MiO'NHMN' piN' GHPG'7 ' NG' G iQ'
NHMN'HP' IMT' PMO'NHP'9PNNP ±' JN'NHP'PM 9T'PO N G K iG OP ' NHMN' JL i' piN%G
M O PKN i<- ' $ ', ' IP' 7 HP' PIM i iQ L N iG' 7 H G GLPPKH'
N9 PT'K iG OP'MG' LM NG' 7 NHP' 9PNNP 'MiO'D P;'M O PKN i'MKK O i9ST±' XP' MQ PP
NH' M9 ip'NHN'M9NH JQH' piN'HMG M'9PNN'7 1' OP9 M'MiO'Ui G NHMN'GHP
HMG'APPi' i7 1PO' 7 H G' 6' AGKJ PO' K J GP R'HP' G JiMA9P'N ' PMO' N' i'NHP'O I'
OM i iQ±' PKU' GMTG'6' HP'L PN' OPG PG'HP P'N ' pl iO' JG MQM i' 7 OP9 M'
MiO'N 'Q P'MO GNMiN'iN 1 MN 'NHMN' H 99T'ip 'p PiNG M P'MA JN'N 'AP' iN OJKPO+R
F ' <= 2* 79 NN9P' NH± @ PP'i NP' i'&.KHM O'22+'#K'22±' K±'2+'
3 SKJ GPG+
F ' H G' G M L9MT'JL i' NHP'O JA9P' 1PMi iQ' 7'NHP' O' 'i' ip 7 NG
GPiGPG N' MG'M'9 GP9T pi'iM ' 99Pi'JGPO'7 'QM NP G' HP'
1Mi'J7MKNJ P' G i N' H 99T' AG 9PNP'NH JQH'AJN'9 NN9P'JGPO'i +
' HP'9 ipG'i'A MKUPNG'M P' 1 NNPO' i'N9 P'7 9 +

X H KH L PGP ! N9T ' NHPT PMO ' ! ' NH GP K ! NP ! NG ,
HPT GJ I I ! %O JL ' NHP ' I P ! T ' GN M QH N U H GP8
I I M ! OPO I P N ' 7 99 ' M ! O MNNP ! O
HP 9P GJ P 7 NHP ' M ! G P 8 QM P I P K 9O 9 UG
! O I PPN ! Q HP P NHP NHP ' I PGGP ! QP
X H GP P9K I P ' 2 LP KP %O ' HMO L G ! %O I ! P
@ P ! Q NHP P T 7P99 ' H KH 7 9MNP
5 GL9MT%O G ' GMJK 9T MQM 9GN T J ' H QH ! PGG
" M ! Q I P I M ! ' NHM ! ' N MA JN I P ' O P 8D
" P M G%O NHP H JGP NH 9 JO M ! O K M O K PG
4 J ' G ! ' M ! O OMJQHNP ' 7 J ! O NH G +N PGLMGG NH
HP GHM I P H KH HP P N GJ77P G+
>!! ' X ! NP %G ! N Q ! P TPN ' 7 NHP 9O QPPGP 79T NHMN
MT+
OMNHP G NHMN PM ' MQG O ' I MUP NHP ' KH 9O P ! ' A9 ! O8
JN 7MNHP G NHMN APM ' AMQG GHM99 GPP NHP ' KH 9O P ! ' U ! O+
0 NJ ! P ' NHMN M M ! N H P ' ! P%P ' NJ ! G NHP UPT N ' NHP
L +S
JN ' 7 ' M99 NH G ' NH J GHM9N HM P MG I M ! T O 9 J G D7 ' NHT
OMJQHNP G ' MG NH J KM ! GN NP99 ! ' M TPM +
? ' 1 ' H ' NH G I NHP ' G P99G JL ' N M O I T HPM N[
5- ', -- ! ' WSO ! ' NH J K9 I A ! Q G
HT P9P I P ! N%G AP9 [SDXHP P G NH G OMJQHNP ' \
' X NH NHP PM 9 ' G ' HP P NH ! +
? ' 0 99 ' I P ! N8
NMT HP P+ = 4
' MOP T J ! ' ' I P 77P ! KP AJN HMN T J GLPMU 7\
' !P+
" ' KHM ! KP NHP U ! Q K I PG NH G ' G I M99 M ! J I AP ' \D
>!! ' # ! ' NH J HMOGN APP ! ' GPN %NHP GN KUG 7 ' NHMN] JPG_
N ! ' NH J HMOGN P99 OPGP PO N+
' XHT ' 7 g \
>!! ' X P%99 GPN NHPP N ' GKH g N ' M ! ' M ! N ' N ' NPMKH NHPP
NHP P%G ! ' 9MA J ! Q ! ' NHP ! NP + #99 NHMN 7 99 ' NHP '
! GPG M P 9PO AT NHP ' PTPG ' AJN A9 ! O I P ! 8 M ! O NHP P%G ! N
M ! GP M I ! Q N P ! NT AJN KM ! G I P99 H I ' NHMN%G GN ! U ! Q+
/ PN Q ' NHT H 9O ' HP ! ' M Q PMN HPP9 J ! G O ! ' M H 99 ' 9PGN
N A PMU NHT ! PKU NH 7 99 ! Q8 AJN NHP Q PMN ! P NHMN
Q PG JL M O F 9PN H I ' O M ' NHPP M7NP + X HP ! ' M GP I M ! '
Q PG NHPP APNNP ' K J ! GP9 ' Q P I P I ! P MQM ! ' 2 J9O
HM P ! ! P AJN U ! M PG 7 99 ' N ' G ! KP M 7 g Q PG N+
HMN ' G ' H KH GP PG M ! O GPPUG 7 ' QM ! ' D
! O 7 99 G AJN 7 ' 7 I
X 99 LMKU ' HP ! ' N APQ ! G N ' M !
! O 9PM P NHPP ! ' NHP GN I +
JN 2 ' 99 NM T8 NHP 7 g 99 GNMT+
! O 9PN NHP GP I M ! ' 79T
HP U ! M P NJ ! G 7 g NHMN J ! G M MT8
HP 7 g ! ' U ! M P ' LP OT+F
; ' X HP P 9PM ! %O T J NH G ' 7 g \
>!! ' N %NHP GN KUG ' 7 9+

B ' ' 2 ') 1

? ' 5P ! T N ' GLPMU NH I P \ HPT M P G KU \ NHPT M P
PM T \
HPT HM P N M P %O M99 NHP ! QHN \ P P 7PNKHPG 8
HP I MQPG 7 P 9N M ! O 79T ! Q 77[
OPNKH I P M APNNP ' M ! G P +
! ' T OPM ' 9 O+
4 J U ! ' NHP 7 P T] JM9 NT 7 NHP OJUP 8
" ' J ! 7P I PMA9P M ! O 7 W%O HP G
2 ! ' H G ! ' K J GP+
? ' P ! QPM ! KP[L9MQJP[OPMNH[K ! 7JG ![S

' 2SD PN ! JP ' MNNP ! OM ! NG8 HP ! KP NHP MOEPKN P ' ' 2 ! ' NHP 9O N M ! G9MD
N ! ' 7 NHP A9P P 7 ! O ' 6 ' # ! O ' # A MHM I ' GMOO9PO H G MGG ' M ! O N U N ' 7 H G
2 2 NH H I ' M ! O ' 2GMMK H G G ! +R 2 ! ' J ' L PGP ! N N M ! G9MN ! ' P 0$ 2 '
' ! ' NHP L9MKP 7 2 2
' 8 ' HP LP G ! M9 L ! J ! ' ' G J ! OP GN O AP7 P 8
6 ' %' HP P G M] J AA9P HP P APN PP ! ' ' %M ! O ' ' %
' " ' HP] JM N G '
' 6-8 ' HP] JM N G ' -' $ ' $ ''

O P T \ HMN] JM9 NT \ HT ' : 9 GNP ' : 9 GNP
2%O GLPMU NH NHP OJUP 7 ! M99 M ! O H G 7P+
: K+$ X P99 ' I T Q O 9 O ' 2 HM P ! 7 I %O NHP I ' G +
? ' 2 ! 7 I %O NHP I [5 GN NH J J ! OP GNM ! O I P ' I M ! ' \
! ' # T ' I T Q O 9 O+
? ' HP U ! Q J9O GLPMU NH ! M998 NHP OPM '
7MNHP
X J9O NH H G OMJQHNP ' GLPMU ' K I I M ! OG ' NP ! OG ' GP _
KP
P NHPT ! 7 I %O 7 NH G \ T A PMNH M ! O A9 O [S
O P T [NHP 7 P T OJUP [SD P99 NHP H N OJUP ' NHMN S
' AJN ! N TPN S I MT AP ' HP G ! N P998
2 ! 7 I NT O NH GN 99 ! PQ9PKN M99 77 KP+
X HP PN ' J ' HPM9NH G A J ! O 8 P M P ! N J GP9 PG+
X HP ! ' ! MNJ P ' AP ! Q LL PGG%O K I I M ! OG NHP I ! O
' GJ77P ' NH NHP A OT ' 2%99 7 APM ' 8
! O M I ' 7M99P ! ' JN NH I T I P+HPMO P ' 99+
' NMUP NHP ! O GL G%O M ! O G KU9T 7 N
O ' NHP G J ! O I M ! + S5PMNH ! ' I T GNMNP [HP P7 P
+?!! ' 3 ! ' 3 +
H J9O HP G N HP P \ H G MKN LP GJMOPG I P+
HMN NH G P I N ! ' 7 NHP OJUP M ! O HP '
2G L MKN KP ! 9T + : P I P I T GP M ! N 7 NH
: ' NP99 NHP OJUP M ! O H G 7P ' 2%O GLPMU NH NHP I +
' L PGP ! N9T ' A O NHP I ' K I P 7 NH M ! O HPM ' I P+
1 ' MN NHP ' KHM I AP ' O ' 2%99 APMN NHP O J I +
99 N K T G9PPL N ' OPMNH+F
! ' 2%O HM P M99 P99 APN WN T J + = 5
? ' 1 ' I P ' I T HPM N ' I T G ! Q HPM N[SAJN ' O ! +
>!! ' T N ' N ' ! J ! K9P ' MG NHP K KU ! Pa$ ' O O ' N ' NHP PP9G F
HP ! ' GHP LJN NHP I ' %NHP ' LMGNP M9 P8 GHP ' U ! MLL%O %P I ' %
NHP K WK I AG NH M GN KU ' M ! O K PO ' 65 ! ' M ! N ! G '
O ! R % MG HP ' A NHP ' NHMNE ! ' LJ P U ! O ! PGG ' N ' H G
H GP ' AJNNP %O H G HMT+

' . ' # ' ' " P M ! NG+
', ? ' : O I ' N ' T J A NH+
! ' " M 9 N ' T J ' Q MKP
;7 ' - ' - ' ' (5 '
3 ' 2 ' M I ' Q9MO ' N ' GPP T J ' H QH ! PGG+
? ' &PQM ! ' 2 ' NH ! U T J M P8 2 ' U ! ' HMN PMG !
2 ' HM P N ' NH ! U G 8 7 NH J GH J9OGN ! N AP Q9MO
2 ' J9O O KP I P 7 I ' NHT I NHP %G N I A
PLJ9KH% ! Q M ! ' MOJ9N PGG+ S 1 ' M P T J 7 PP \ + ! ' 7 '
I P NHP ' N I P 7 ' NHMN+ S P9 PO &PQM !
HT G GNP %G ! MJQHN ' 1 ' &PQM ! ' GHP HMNH N PO
HM L N NH%O J ! U ! O ! PGG ' 9 UP M J9NJ P ' HP P S
+ ! -' ! ' -'
2 ' KM ! ' GKM KP GLPMU N ' NHPP8 NH J%9N ! N AP9 P P+
X NH H ' OPL M %O M] JM9 NT S ' &PQM ! ' [
3 ' 2 ' L MT T J ' G ' NMUP LMN P ! KP8 2 ' HM P H LP
4 J 9PGG U ! ' H ' N ' M9JP HP ' OPGP N
HM ! ' GHP N ' GKM ! N HP ' OJNT+F
? ' MT ' H ' G NHMN \
3 ' 2 ' KM ! ! N NH ! U I T G GNP ' ! ' NHP 9PMGN
X J9O 7M g HP $ A9 QMN ! ' ' 27 ' G ' LP KHM ! KP+
HP HM P PGN M ! %O NHP NG 7 T J ' 7 99 P G
% G ! ' GJKH Q J ! O ' M ! O N ' GJKH H 9PG I P P ! O+
# G K9PM G HP ' 7 I ' M99 A9M I P+
? ' T KJ GPG ! ' HP [
3 ' 1 ' G ' T J M P 9O 8
MNJ P ! ' T J GNM ! OG ! ' NHP P T P QP
17 HP ' K ! 7 ! P ' T J GH J9O AP J9%O ' M ! O 9PO

' MLP ' J9O PMO S
6 HP "NJ ! G) ' NHMN J ! G M MT
HP " ! ') * LP OT+R
% %* %* % (' HP] JM N G ' (%$ ' % (
F '' ' (2 %' -' ' $ ' X P L ! N NH G LMGGMQP MG ! ' NHP Q ! M9 K L PG
2N G Q P ! ' I OP ! ' PO N ! G ' / ' 2 N K TS4 ' -' ' $R S MG 7 N P O J I ' GM O
9PPL N ' OPMNH PKU GJQQPGNPO NHP N JP PWL9M ! MN ! S N 99 NHP ! GP 7 NHP O J I '
HMG APP ! ' NHP OPMNH 7 G9PPL S HMG ' OPGN TPO G9PPL S HMG ' 7 KPO NHP I ' N ' M MUP ! +
F HP K ! GN JKN ! ' HP P G ! 9 PO ' AJN NHP I PM ! ! Q G P OP ! N + 4 J 9PGG
U ! ' H ' N ' M9JP HP ' OPGP N NHM ! ' GHP U ! G N ' GKM ! N HP ' OJNT+
+\

T'G IP'O GK PN i'NHMN'O GKP iG'T J'GMNP'
PNNP'NHMI'T J'T J GP97' HP P7 P'2'L MT'T J+
HMN'N ' J'G GNP'T J'O 'I MUP' PNJ i
MT'T J'HM P' iQ%'OP+
? ' #GU'HP'7 Q PIPGG'\
5 'T J'AJN'I M U'H 'NH G'APK IPG'NHP'H JGP'\'
6'5PM'OMJQHNP '2'K i7PGG'NHN'2'MI' 9O8
#QP' G J1IPKPGGM T' i'I'T'UIPPG'2'APQ' 9 3A
HMN'T J%9Y JKHGM7P I'P' M I PIN'APO'MiO'7 O+R
3': O'G 'i'I P'8 NHPGP'M P'J1G QHN9T'N KUG'
&PNJ i'T J'N 'I'T G GNP +
? ' P P &PQMI8
HP'HMNH'MAMNPO' I P' 7HM97 I'T N M i8
/ U%O'A9MKU'JL i'I P8 GN U'I P' NH'HP'N iQJP+
GN'GP LPIN 9 UP'JL i'NHP' P T'HPM N S
#99'NHP'GN %O' PIQPMiKPG' 7HPM PI'7M99
1i'HP'iQ MNP7J9'N L[N UP'HP'T J1Q'A IPG+
4 J'NMU iQ'M G' NH'9MI PIPGG'[
i ' O P'G '7 P[
4 J'7I A9P'9 QHNi IQG'OM N'T J'A9 iO iQ'79M I PG
2iN 'HP'GK i7J9'PTPG[2i7PK\'HP'APMJNT+
4 J'7Pi GJK U%O'7 QG'O M i'AT'NHP'L P7J9'GJI+
'7M99'MiO'A9 GNP +D
3' 1'NHP'A9PGN'Q OG[
' 99'T J' GH' i'I P' HPi'NH P' MGH'I O%G i+
? ' &PQMI';NH J'GHM9N'ip p'HM P'I T'KJ GP8
HT'NPiOP HP7NPOD'iMNJ P'GHM99'i N'Q P'
HPP' %P'N 'HM GHIPGG'8 HP'pTPG'M P'7 P KP'AJN'NH ip'
5 'K I7 N'MIO'i N'AJ i'8 % G i N' i'NHPP'
'Q JOQP'I T'L9PMGJ PG'N 'KJN' 77 I T'N M i+
'AMiOT'HMGNT' OG'N 'GKMiN' I T'G CPG F
#iO' i'K iK9JG i'N ' LL GP'NHP'A 9N'
#QM iGN'I T'K I iQ' i'8 NH J'APNNP'UI %GN'
HP' 77KPG' 7iMNJ p'A iO' 7KH 9OH O+

'7G IP'O GK PN i'NHMN'O GKP iG'T J'GMNP'
PNNP'NHMI'T J'T J GP97' HP P7 P'2'L MT'T J+
HMN'N ' J'G GNP'T J'O 'I MUP' PNJ i
MT'T J'HM P' iQ%'OP+
? ' #GU'HP'7 Q PIPGG'\
5 'T J'AJN' I M U'H 'NH G'APK IPG'NHP'H JGP'\'
6'5PM'OMJQHNP '2'K i7PGG'NHMN'2'MI' 9O8
#QP' G J1IPKPGGM T' i'I'T'UIPPG'2'APQ' 9 3A
HMN'T J%9Y JKHGM7P I'P' M I PIN'APO'MiO'7 O+R
3': O'G 'i'I P'8 NHPGP'M P'J1G QHN9T'N KUG'
&PNJ i'T J'N 'I'T G GNP +
? ' P P &PQMI8
HP'HMNH'MAMNPO' I P' 7HM97 I'T N M i8
/ U%O'A9MKU'JL i'I P8 GN U'I P' NH'HP'N iQJP+
GN'GP LPIN 9 UP'JL i'NHP' P T'HPM N S
#99'NHP'GN %O' PIQPMiKPG' 7HPM PI'7M99
1i'HP'iQ MNP7J9'N L[N UP'HP'T J1Q'A IPG+
4 J'NMU iQ'M G' NH'9MI PIPGG'[
i ' O P'G '7 P[
4 J'7I A9P'9 QHNi IQG'OM N'T J'A9 iO iQ'79M I PG
2iN 'HP'GK i7J9'PTPG[2i7PK\'HP'APMJNT+
4 J'7Pi GJK U%O'7 QG'O M i'AT'NHP'L P7J9'GJI+
'7M99'MiO'A9 GNP +D
3' 1'NHP'A9PGN'Q OG[
' 99'T J' GH' i'I P' HPi'NH P' MGH'I O%G i+
? ' &PQMI';NH J'GHM9N'ip p'HM P'I T'KJ GP8
HT'NPiOP HP7NPOD'iMNJ P'GHM99'i N'Q P'
HPP' %P'N 'HM GHIPGG'8 HP'pTPG'M P'7 P KP'AJN'NH ip'
5 'K I7 N'MIO'i N'AJ i'8 % G i N' i'NHPP'
'Q JOQP'I T'L9PMGJ PG'N 'KJN' 77 I T'N M i+
'AMiOT'HMGNT' OG'N 'GKMiN' I T'G CPG F
#iO' i'K iK9JG i'N ' LL GP'NHP'A 9N'
#QM iGN'I T'K I iQ' i'8 NH J'APNNP'UI %GN'
HP' 77KPG' 7iMNJ P'A iO' 7KH 9OH O+

?. ' NP M O+
3' 2'UI %N'I T G GNP %G' NH G'MLL PG'HP'9PNNP'
HMN'GHP' J9O'G i'AP'HP P+S2G'T J'9MOT'K I P'\
? ' H G G'M'G9M P' H GP'PMGT A %O'L OP'
5 P99G' i'NHP'7 KU9P'Q MKP' 7HP'HP'7 99 G S
1JN' M 9PN'7 I'I T'G QHN[
i ' X HMN'I PMiG T J'Q MKP'\
? ' X H'GN KU%O' I T' GP MiN\' &PQMI'2' HM P'Q O'
H LP
H J'O OGN'i N'UI ' i%+SDXH'K IPG'HP P'\ 1'HPM piG+

'; 1 3&2/+

27'T J'O'9 P' 9O'IPi' 7'T J'G PPN'G MT' +
#99 ' APO'PIKP' 7'T J'T J GP9 PG'M P' 9O
MUP' N'T J'KMJGP8 GPiO'O i'MiO'NMUP' I'T'LM N[S
N'i N'MGHM I%O'N'9 U'JL i'NH G APM O'\S
+ i'
1'&PQMI' 9N'NH J'NMUP'HP'AT'NHP'HMiO'\
i ' X HT'i N'AT'NHP'HMiO'G '\ " 'HM P'2' 77PiOPO'\

' $'$ % ' HP AM9O'KHMiQPO'NH G'7 IP'PWL PGG LI'N ' $ ' % ' ML P99 H '
i'GL NP' 7H G' AGKJ N PG' 7MPi'O GL9MTG M'7JiO' 7'Q O'GPiGP' H KH'HMG'APPi'N '
I JKH' IPO9PKMPO'GMTG'6 H G G IP' 7'NHP' 9 IPG'NHN' I M U' HMUGLP P + + + + ' $ '
$ % ' G Mi' PWL PGG i" NHT'H G'QPi JG8 7MNHP G M P'i N'NHP'HPMOG' i9T' 7'M
H JGP' 'M'7MI 9T'AJN' NG' PL PGPiMMN PG8 NHPT'M P' $ '$ % '* HMN' M77PKNG'NHPI'
M77PKNG'NHP' PGN' 7'NG'A OT+R' + 99 P %G' K PKUPO'K LT' PMOG' $ ' $ iGNPMO'
7' $ '$ % *
' HP'GMMQP'O PKN i'$ ' '* G i'MKK OMiK' NH'NHP'GMMQPL MKN KP+' JN
P'HM P'7 'I P 9T' I NNPO' N'O JAN iO' HPNHP'/PM' G MOO PGG iO' NHPGP' OG N '
&PQMI+' 27'HP' P P' i9T' PHPM G iQ' HMN' HP' J9O' GMT'N ' : ip g 7'HP' GH J9O'
MGU'HP'7 Q PIPGG' NHP' ' ' I QHN' G 99 AP' NHP' MLL L MNP' MKN i+' +
5TKP'K iG OP G NHP' OG' 7 &PQMi%E ipWN' GLPPKH'6'NHPGP' M P'JiG QHN9T'N KUG R
N ' P7P'N ';/PM %G'MNNP I LN'N '6 GJ N'NHP'MKN i'N 'NP' O+R
%' dddddd

?

!1' *** :

? MOP T J I T QJM O M!G I T OPL G NM PG8
JN UPL M PGP MN !' N AP 7 99 %O
X NH GJKH M !J I AP X HMN JGN 2' K IP N T J
X NH7 P M!O N P!NT &PQM!' GM O T J G \
3 #!O GLPMU%M MQM !' I T 9 O8 !' I P NH I P
? H GP KUPO K PMNJ PG TPN O 9 U P99 7M J %O [
XHP!' NHP G M P I P KUPO ! N AP !Q NHP GN
NM!OG !' G IP M!U 7L M GP S2%99 Q NH NHPP8
= !'

HT 7N T TPN O NH O JA9P 7 P M!O N P!NT+
#!O NH J M N KP HP 9 P+
" PM I P I T 9 O8
!&'
XHMN !PPO T J 7 P M!O N P!NT NP! 7 P+
7 99 !' M H JGP HP P N KP J I M!T
" M P M K I I M!O N NP!O T J \
3'
X HMN !PPO J P \
? 1 PMG !' ! N HP !PPO J AMGPGN APQQM G
P !' NHP L PGN NH !Q GJLP 79J JG
#99 ! N !MNJ P I P NHM!' !MNJ P !PPOG
M i%G 9 7P G KHPML MG APMGN%G NH J M N M 9MOT8
27 !9T N Q M I P P Q QP JG+
XHT !MNJ P !PPOG ! N HMN NH J Q QP JG PM %GN+
XH KH GKM KP9T UPPLG NHPP M I+S JN 7 N JP !PPO S
4 J HPM P!G Q P I P NHMN LMN P!KP LMN P!KP 2' !PPO [
4 J GPP I P HP P T J Q OG M L 9O I M!+
#G 7J99 7Q P7MG MQP8 PNKHPO !' A NH+
27 N AP T J NHMN GN NHPGP OMJQHNP G% HPM NG
#QM !GN NHP 7MNHP 7 9 I P' !' K JKH
APM N NM I P9T8 N JKH I P NH ! A9P M!QP [
#!O 9PN ! N IP!%G KHPPUG[SD T J I!MNJ M9 HMQG
NM !' IT I M!%G KHPPUG[SD T J I!MNJ M9 HMQG
2 99 HM P GJKH P P!QPG !' T J A NH ,
HMN M99 NHP 9O GHM99 S2 99 O GJKH NH !QG S
XHMN NHPT M P TPN 2' U! ! N8 AJN NHPT GHM99 AP
HP NP G 7NHP PM NH 4 J NH !U 2%99 PPL 8
2%99 ! N PPL S;
2 HM P 7J99 KMJGP 7 PPL !Q8 AJN NH G HPM N
HM99 A PMU !N MHJ!O PO NH JGM!O 79M GD
1 P P 2%99 PPL S1 7 9 2 GHM99 Q I MO[
= 4 & 7
! / PN JG NHO M %N 99 AP M GN I
=7 ! "O 9
3 H G H JGP G 9 NN9P 8 NHP 9O I M!' M!O H G LP L9P
M!! N AP P99 APGN %O+
! % G H G ! A9M I P8 HMNH LJN H I GP97 7 I
PGN+
#!O I JGN !PPOG NMGNP H G 7 99T+
3 O H G LM N KJ9M 2%99 PKP P H I QMO9T+
JN ! N JP 7 99 P +
! MI 2 LJ L G%O+
XHP P G I T 9 O 7 : 9 GNP \

B

! O 99 %O NHP 9O I M!7 NH SOP G PNJ !%O+
! HP U !Q G ! H QH MQP
! X H NHP G HP Q !Q \
! " P KM99G N H GP8 AJN 99 2 U! ! N H NHP
! % G APGN N Q P H I MT 8 HP 9PMOG H I GP97+
! T 9 O P!N PMN H I AT ! I PM!G N GNMT+
! #9MKU NHP ! QHN K I PG ! M!O NHP H QHF !OG
5 G P9T J779P8 7 I M!T I 9PG MA JN
HP P%G GKM KP M AJGH+
3' 1 G N 97J9 I P!
HP !EJ PG NHMN NHPT NHP I GP9 PG L KJ P
JGN AP NHP GKH 9 I MGNP G HJN JL T J O G8
" P G MNNP !OPO NH M OPGLP MNP N M !8

F HP 9 !PG !' A MKUPNG M P I NNPO !' NHP 7 9
F HP JM N G ' G U! 9POQP
%4 %SO G9 UPG+
() %S N QJPG+
HP 9 !PG !' A MKUPNG M P ! N !' NHP 7 9 +

JS

iO' GHP 99 NP99 T J H 'NHMN 7P99 ' G
HMN TPN J O 'i N Ui ‡ O P i'NH G GN I'[
2' 99 Q 'GPPU NHP U Q+
HP M779 KN i'i 'NHP 7PM +
? ' /PN NHP Q PMN Q OG+
HMN UPPL'NH G O PMO7J9 L JOOP 'F %P ' J 'HPMOG+
O iO' JN NHP 'pipl pGi ‡ plA9P'NH J' PNKH+
HMN HMGN NH D NHPP' JiO J9QPO'K lPG+
i H LL%O' 7EJGN KP' " OP'NHPP'NH J'A9 OT'HMiO'8
H J'LP EJ %O'MiO'NH J'G lJ9M'F 7 NJP'
HMN M N' iKPGNJ JG' M N 77'N 'L PKPG'GHMUP+
HMN'JiOP'K P N'MiO'K i piNG'pplQ'
"MGN'L MKN G%O' i'lM i%G 9 7P[S 9 GP'LPiN JL'QJ 9NG+
& P'T J'K iKPM9 iQ'K iN ipiNG'MiO'K T '
HPGP O PMO7J9 GJ l l ip G Q MKP+S2'M1'M' lMi'
7P'G ii%O'MQM iGN'NHMi'G ii iQ+
' #9MKU'AM p HPMOPO[
: MK JG' lT9 O'HM O'AT'HP P'G M'H P98,
lP'7 piOGH L' 9J N'9PiO'T J'%QM iGN'NHP'NP l LPGN8
&PL GP'T J'NHP p' H 9P'2'N 'NH G'HM O'H JGP
@ P'HM OP'NHMi'NHP'GN ipG' HP p 7%M G M G%O'
XH KH'p pi'AJN'i 'OPlMiO iQ'M7NP'T J+
5Pi PO'lP'N 'K lP' i ' PNJ i'MiO'7 KP'
HP 'GKMiNPO'K J NPGT+
? ' T NG'APQ i'N 8NJ i+S;
lP' i'lTA T' " 'O GN'lTA T\ # N'K 9O'\
2'M1'K 9O' lTGP97+SXHPTP' G'NH G'GN M ' lT'7P99 '\
HP'M N' 7' J'ipKPGG N pG' G GN MiQP+
#iO'KMi' lMUP' 9P'NH iQG'L pK JG‡ ip'T J'H P98
- '7 9MiO'UiM p'2'HM P' ip'LM N' i'lT'HPM N'
HMN%G G T TPN'7 'NHPP+

JN'TPN'2'KM99'T J'GP 9P'l i GNP G+
HMN' 99' NH'N 'LPiK JG'OMJQHNP GE i'D
4 J'H QH'piQPiOP %O'AMNN9PG'%QM iG'M'HPMO'
' 9O'MiO' H NP'MG'NH G‡ 1[1'[%'G'7 J9[
>ii ' "P'NHMN'HMG'M'H JGP'N 'LJN'H G'HPMO' i'HMG'M'Q O'
HPMO L PKP+

HP'K O L PKP'NHMN' 99'H JGP'
P7 P'NHP'HPMO'HMG'MiT+
HP'HPMO'MiO'HP'GHM99'9 JGP8S
'APQQM G lM T'lMiT+

HP' lMi'NHMN' lMUPG H G N P'
X HMN'HP'H G HPM N'GH J9O' lMUP+
HM99' 7M'K i'K T' P+
#iO'NJ i'H G G9PPL'N ' MUP+

SO 'NHP P' MG ip p'TPN'7M ' lMi'AJN'GHP' lMOP' l JNHG'
i'M'Q9MGG+

'7

? ' 9 ' iOG%D MiO' K MKU' T J ' KHPPUG[MQP'2
A9 [
4 J'KMNM MKNG'MiO'HJ KMi PG'GL JN
99'T J'HM P'O PiKH%O' J'GNPPL9PG'O iO'NHP'K KUG'
4 J'GJ9LHJ JG'MiO'NH JQHN PWPKJN iQ'7 PG+
MJN'K J P G 7 MU K9PM iQ'NHJiOP A 9NG+
iQP'lT' H NP'HPMO' ' #iO'NH J'M99 GHMU iQ'NHJiOP ‡
N UP'79M'NHP'NH KU' NJiO NT' %NHP' 9O'
MKU'iMNJ P%G' l J9OG'M99'QP lPiC'DGL 99'MN' iKP+
HMN' lMUP' iQ MNP7J9' lMi'
>ii ' 1'iJiK9P'K J N'H 9T MNP ' i'M'O T'H JGP' G'APNNP'
NHMi' NH G' M i' MNP ' JN' %O ‡ : O'iJiK9P' i8 MGU'
NHT'OMJQHNP G% A9PGG iQ8 HP P%G'M' i QHN'L N PG'ip NHP ' GP'
lPi'i '7 9G+
HP'M N' 7' J'ipKPGG N PG' G GN MiQP+
#iO'KMi' lMUP' 9P'NH iQG'L pK JG‡ ip'T J'H P98
O 'NHP' M i'N' M ipNH'p p T'OMT+R
D HP']JM N GS
6' HMN'HM P' NF'N 'LP i K JG'OMJQHNP G'E i%O+R
' 5 '' 8 S GKM P+
O' H G G M9 MTG l OP i GPO' iN '- $;' NHP' GM lP' O'O JAN9PGG'
AJN'G lP HMN' J9QM GPO'AT'NHP'KHMiQP+
376

3 3' 22+S i '. 'i.' ' 7i ' i & -
' AAM

? ' 9 ' iOG%D MiO' K MKU' T J ' KHPPUG[MQP'2
A9 [
4 J'KMNM MKNG'MiO'HJ KMi PG'GL JN
99'T J'HM P'O PiKH%O' J'GNPPL9PG'O iO'NHP'K KUG'
4 J'GJ9LHJ JG'MiO'NH JQHN PWPKJN iQ'7 PG+
MJN'K J P G 7 MU K9PM iQ'NHJiOP A 9NG+
iQP'lT' H NP'HPMO' ' #iO'NH J'M99 GHMU iQ'NHJiOP ‡
N UP'79M'NHP'NH KU' NJiO NT' %NHP' 9O'
MKU'iMNJ P%G' l J9OG'M99'QP lPiC'DGL 99'MN' iKP+
HMN' lMUP' iQ MNP7J9' lMi'
>ii ' 1'iJiK9P'K J N'H 9T MNP ' i'M'O T'H JGP' G'APNNP'
NHMi' NH G' M i' MNP ' JN' %O ‡ : O'iJiK9P' i8 MGU'
NHT'OMJQHNP G% A9PGG iQ8 HP P%G'M' i QHN'L N PG'ip NHP ' GP'
lPi'i '7 9G+
HP'M N' 7' J'ipKPGG N PG' G GN MiQP+
#iO'KMi' lMUP' 9P'NH iQG'L pK JG‡ ip'T J'H P98
O 'NHP' M i'N' M ipNH'p p T'OMT+R
D HP']JM N GS
6' HMN'HM P' NF'N 'LP i K JG'OMJQHNP G'E i%O+R
' 5 '' 8 S GKM P+
O' H G G M9 MTG l OP i GPO' iN '- $;' NHP' GM lP' O'O JAN9PGG'
AJN'G lP HMN' J9QM GPO'AT'NHP'KHMiQP+
376

JKH'GHPPNG' 7'7 P'GJKH'AJ GNG' 7'H O'NHJiOP +
JKH'Q MiG' 7' M iQ' iO'MiO' M i'2'ip P'
+&PlPlAP'N 'HM P'HPM O' lMi%G'iMJ P'KMii N'KM T'
HP'M779 KN i'i 'NHP'7PM +
? ' /PN NHP'Q PMN'Q OG+
HMN'UPPL'NH G O PMO7J9'LJOOP'F %P' J'HPMOG+
O iO' JN'NHP 'pipl pGi ‡ plA9P'NH J' PNKH+
HMN'HMGN' NH D'NHPP'JiO J9QPO'K lPG+
i H LL%O' 7EJGN KP' " OP'NHPP'NH J'A9 OT'HMiO'8
H J'LP EJ %O'MiO'NH J'G lJ9M'FE 7 NJP'
HMN'M N' iKPGNJ JG' M N 77'N 'L PKPG'GHMUP+
HMN'JiOP'K P N'MiO'K i piNG'pplQ'
"MGN'L MKN G%O' i'lM i%G 9 7P[S 9 GP'LPiN JL'QJ 9NG+
& P'T J'K iKPM9 iQ'K iN ipiNG'MiO'K T '
HPGP O PMO7J9 GJ l l ip G Q MKP+S2'M1'M' lMi'
7P'G ii%O'MQM iGN'NHMi'G ii iQ+
' #9MKU'AM p HPMOPO[
: MK JG' lT9 O'HM O'AT'HP P'G M'H P98,
lP'7 piOGH L' 9J N'9PiO'T J'%QM iGN'NHP'NP l LPGN8
&PL GP'T J'NHP P' H 9P'2'N 'NH G'HM O'H JGP
@ P'HM OP'NHMi'NHP'GN ipG' HP P 7%M G M G%O'
XH KH'P Pi'AJN'i 'OPlMiO iQ'M7NP'T J+
5Pi PO'lP'N 'K lP' i ' PNJ i'MiO'7 KP'
HP 'GKMiNPO'K J NPGT+
? ' T NG'APQ i'N 8NJ i+S;
lP' i'lTA T' " 'O GN'lTA T\ # N'K 9O'\
2'M1'K 9O' lTGP97+SXHPTP' G'NH G'GN M ' lT'7P99 '\
HP'M N' 7' J'ipKPGG N PG' G GN MiQP+
#iO'KMi' lMUP' 9P'NH iQG'L pK JG‡ ip'T J'H P98
- '7 9MiO'UiM P'2'HM P' ip'LM N' i'lT'HPM N'
HMN%G G T TPN'7 'NHPP+

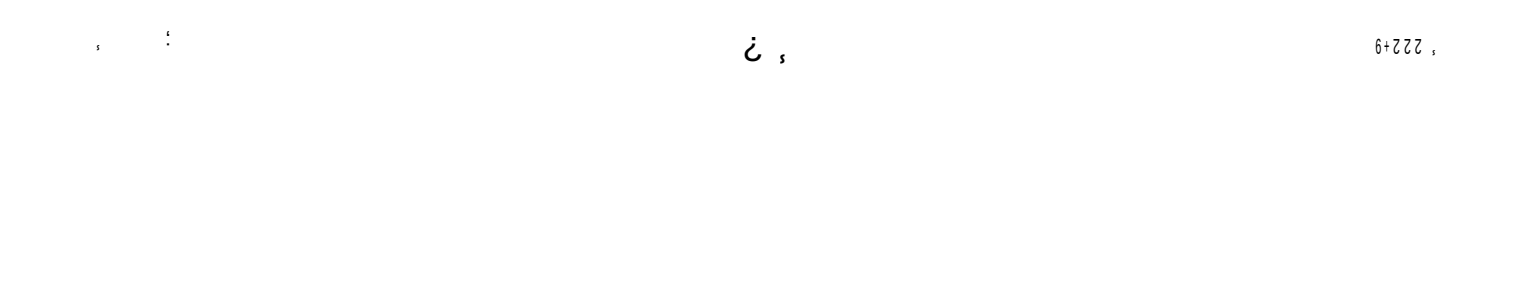
F' '' ?4 0?' "P'NHMN'9 MG'MiO'M'9 NN9P'N iT' N S
X NH'HP QH'H 'NHP' iO'MiO'NHP' M i S
, JN'I MUP'K iNPiN' NH'H G'7 NJiPG'7 N+
H JQH'NHP' M i' N' M ipNH'p p T'OMT+%'$

' ?

" ' GN' GM MQP' MIO' J1IMNJ M9[
i' : ' N G M T' T J' i NH IQ' HP P' G O G i'
APN PPI' NHP' OJUPG8 MIO' M' GP' IMNNP' NHMI' NHMN' 2'
HM P' PKP PO' M' 9PNNP' NH G i QHN8 S%W G' OMIQP JG' N 'AP'
GL UPI8S2' HM P' 9 KUPO' NHP' 9PNNP' i' IT' K9 GPN' NHPGP'
iEJ PG' NHP' U IQ' i 'APM G' 99' AP' P PIQPO' H I P8 NHP P'
G LM N' 7'M' L P'M9 PMOT' 7 NPO' P' I JGN' IK9 IP' N 'NHP'
U IQ'4' 2' 99' 9 UDH I 'MIO' L 9T' P9 P P' H I'8 Q ' T J'
MIO' I M I NM I'7M9U' NH' NHP' OJUP'NHMN' IT'KHM NT'AP' i N' 7
H I 'LP KP PO' 27'HP' MGU' 7 ' IP' 2' M I' 99' MIO' Q IP' N '
APO4' 27'2' O P' 7 ' N'MG' i '9PGG' G NH PMNPIPO' IP'NHP' U IQ'
IT' 9O' I MGNP 'I JGN' AP' P9 P PO4' HP P' G GN MIQP' NH IQG
N M O'3O I JIO'8 L MT' T J'AP'KM P7J9' = 4
"$' H G K J NPGT'7 A O'NHPP'GHM99'NHP' OJUP'
H G NPI LPGN' 99' i N'Q P' I P' 9PM P'N 'L IOP'
1I'NH IQG' J9O'HJ N' I P' I p+S JN'2%9Y' Q ' i'8
2i'A T8 Q '7 GN F=' i' ii9 Y' 4 J'H JGP9PGG'L p NT S'
MT'QPN'NHPP' i4' 2%9G' L MT'MIO'NHPi'2%9Y' G9PPL+
^O 'g 3i -'
- 'IMUPO' PNKHPG' HP PG P%P'T J'M P+
HMN'A OP'NHP'LP9N IQ' 7NH G'L N 9PGG'GN I+
" 'GHM99'T J'H JGP9PGG'HPMOG'MIO'JI7PO' G OPG+
4 J'9 L%O'MIO' IO %O' MQQPOIPGG'OP7PIO'T J'
O I'GPMG IG'GJKH'MG'NHPGP'\ 1'2'HM P'NM%PI'
'9 NN9P'KM P' 7NH G[MUP'LHTG K'L IL'8
3WL GP'NHTGP97N '7PPY HMN' PNKHPG'7PP98
HMN'NH J'I MT%GN'GHMUP'NHP'GJLP 79JW'N 'NHPI
#IO'GH 'NHP'HPM PIG I P'EJGN+

')' HP']JM N G'%)
' ' 7NHP']JM N G' PMO'
' 0'G'NHP' PMO IG' 7NHP']JM N G8 NHP'7 9 'HMG' --G
' HP']JM N G Q P' NH G GLPPKH' NHJG S6'# MT'NHP' 7 J9' 7PIO' 7 99 G IP'
NH 'JQH' NHP' GHM L'HM NH i'A9 G NHP'K 9O' IO'Q 'N 'NHT'K 9O' APO' MIO' M I'
NHPP+R

' HP']JM N G' PMOS
6'9 %'NH J'Q pi'M 'N 'NHT' 8 ' OMJQHNP G\'R
F',) SIM9 QIMI\' I79JPIKP+
.& QA'A % (' $ ' ('J% *' 8 A % '2
' '% i ' H G G i M\' I pi M9'AJN'M'% ' i'NHP' GPIGP' i' HKH'N
G JGPO' i' HP' ' :piN9PIpi' 7' p IM S
6' '9 'M I GN PGG7 'G'H QH'M'NP MIN+RS' +
)$&



OD [

? ;

A9 G NHP K 9O ! O8 MTG GJJ I I J! ! ! ! T O 9LH ! I T
A T A T PGPT8 Đ 9PN H I N N AT =7 ! - ! & -
? H J P N APNNP ! M Q M P NHM ! N M ! G P NH$
NHT J ! K P PO A OT NH G PWN P I NT 7 NHP GU PG+ S 2G I M ! ! I P NHM ! NH G \ ! G OP H I P99 H J PGN NHP
I ! G 9U NHP APMGN ! H OP NHP GHPPL ! 9 NHP KMN
! LP 7J HP S " M [HP P%G NH PP 7 JG M P G LH GN KMNPO[S H J M N NHP NH ! Q NGP97 J ! MKK I I OMNPO I M ! G ! I P AJN GJKH M L AM P 7 UPO M ! I Mg MG NH J M N+ S 177 77 T J 9P ! O ! QG S I P8 J ! AJNN ! HP P+ S
= 3 ! .. - ! -
>!! - NHPP ! J ! K9P AP K ! NP ! NPO8 %N G M ! MJQHNT ! QHN
N G I !+ S M 9 NN9P 7 P ! M 9O 7 P9O P P 9 UP M !
9O 9PKHP %G HPM N S M G I M99g GLM U M99g NHP PGN 7 H G A OT
K 9O+ S / U HP P K I PG M M9U ! Q 7 P+
"3 H G G NHP 7 J9 7 P ! O O9 AAP N Q AAPN HP APQ ! G MN
KJ 7P M ! O M9UG N 99g NHP 7 GN K KU8 HP Q PG NHP PA M ! O
NHP L ! D G] J ! NG NHP PTP M ! O I MUPG NHP HM P 9 L8 I 9OP G
NHP H NP HPMN M ! O HJ NG NHP L K PMNJ P 7 PM NH+
NH 9O 7 NPO NH KP NHP 9O 8 F
" P I PN NHP ! QHN I M P M ! O HP ! ! P 7 9O
O HP M9 QHN+
! O HP N NH L9 QHN+
! O M ! N NHPP #\ [NKH M ! N NHPP [q
" 7M PG T J Q MKP \

) 1 O Z !

? X HMN%G HP \
X H %G NHP P \ X HMN G%N T J GPPU \
! X HMN M P T J NHP P \ 4 J ! M I PG \
"3 - I 8 NHMN PMNG NHP G I I ! Q 7 Q NHP N MO
NHP NMOL 9P NHP M99 ! P N M ! O NHP MNP 8 Đ NHMN ! NHP
7J T 7 H G HPM N HP ! NHP 7 Jg 7 P ! O MQPG PMNG K OJ ! Q
7 GM99PNG8 G M99 G NHP 9O MN M ! O NHP O NKH O Q8
O ! UG NHP Q PP ! I M ! N9P 7 NHP GNM ! O ! Q L 98 H G
H LLPO 7 I NTNH ! Q N NTNH ! Q M ! O GN KUPO LJ ! GHPO
M ! O I L G ! PO8 Đ H HMNH HMO NH PP GJ NG N H G AMKU
G W GH NG N H G A OT H GP N OP M ! O MNG M ! O GJKH G I M99g OPP +
" M P APP ! I %G 7 O 7 GP P ! 9 ! Q TPM + D
P M P I T 7 99 P S - PMKP I 9U ! 8 LPMKP NH J
7 P ! O [
! X HMN HMNH T J Q MKP ! APNNP K I LM ! T \
"3 HP L ! KP 7 OM U ! PGG G M QP ! N9P I M ! 8
O HP%G KM99%O M ! O MHJ+F
! 1J 79PGH M ! O A9 O I T 9 O G Q ! G 9P+
HMN N O NH HMNP HMN QPNG N+
"3 - I %G M K 9O+
! : ! NH I P8 I T OJNT KM ! ! N GJ77P
APT ! M99 T J OMJQHNP G% HM O K I I M ! OG 8
H JQH NHP ! EJ ! KN ! AP N AM I T O G
! O 9PN NH G NT M ! ! JG ! QHN NMUP H 9O JL ! T J 8
4PN HM P 2 P ! NJ %O N K I P GPPU T J JN+
! O A ! Q T J HP P A NH 7 P M ! O 7 O G PMOT+
? O GN 9PN I P NM9U NH NH G LH 9 G LHP S
X HMN G NHP KMJGP 7 NHJ ! OP \ ;
: ! N NHP H JGP+
? 2%99 NM9U M O NH NH G GM I P 9PM ! PO HPAM ! S
X HMN G T J GNJOT \

" 3 " N L P P ! N NHP 7 P ! O M ! O N U 99 P I !+
? / PN I P MGU T J ! P O ! L MNP+
2 I L NJ ! P H I ! KP I P N Q I T 9 O8
" G NG APQ ! N J ! GPNN9P+
! M ! GN NH J A9M I P H I \
" G OMJQHNP G GPPU H G OPMNH S # H [NHMN Q O P ! N [
" P GM O N J9O AP NHJG S - AM ! GH%O I M ! S
H J GMT% N NHP U ! Q G I MO 8 2%99 NP99 NHPP 7 P ! O
2 M I M9 I GN I MO I TGP97 2 HMO M G !
J$N9M %O 7 I I T A9 O HP G JQHN I T 9 7P+
JN 9MNP9T P T 9MNP8 2 9 %O H I 7 P ! O S
7MNHP H G G ! OPM P N JP N NP99 NHPP
=7 ! ! & -
HP Q P7 HMNH K MC%O I T NG+ X HMN M ! QHN%G NH G [
2 O APGPPKH T J Q MKP S
? 1 K T T J I P KT G +
A9P LH 9 G LHP T J K I LM ! T+
"3 I %G M K 9O+
! 2 ! 7P99 NHP P ! N NHP H1 P9 UPPL NHPP M I +
? $ I P 9P N%G ! M99+
H G MT I T 9 O+
? X NH H I 8
2 99 UPPL GN 99 NH I T LH 9 G LHP +
: O I T 9 O G NHP H I 8 9PN H I NMUP NHP
7P99 +
! MUP H I T J !+
MH K I P ! 8 Q M9 ! Q NH JG+
? I P Q O # NHP ! M !+
! OG ! OG
" JGH+
"3 H 9OP & M ! O N NHP OM U N P KM I P 8
" G O MG GN 99 SO P 7 H M ! O 7J I
2 G I P99 NHP A9 O 7 M N GH I M ! +R

3 3 +S ! ! : 9 GNP %G -

! 2 99 HM P I T P P ! QP P P 2 OPLM N H G H JGP+
" " I T 9 O 2 I MT AP KP ! GJ PO NHMN ! MNJ P NHJG
Q PG MT N 9 TM9NT G I PNH ! Q 7PM G I P N NH ! U 7+
! 2 ! LP KP P N MG ! N M9N QPNHP T J A NHP %G
P g O GL G N ! I MOP H I GPPU H G OPMNH 8 AJN M L U ! Q
I P N GPN M U AT M PL PMA9P AMO ! PGG ! H I GP97+
" " I M9 K JG G I T 7 NJ ! P NHMN 2 I JGN PLP ! N
N AP EJGN [H G G NHP 9PNNP H KH HP GL UP 7 H KH
MLL PG H I M ! ! NP99 QP ! N LM NT N NHP MO M ! NMQPG 7
ONM ! KP 1 HPM P ! G [NHMN NH G N PMG ! P P ! N ! 2
NHP OPNPKN (
! : NH I P N NHP OJKHPGG+
" 27 NHP I MNNP 7 NH G LMLP AP KP NM ! T J HM P
I QHNT AJG ! PGG ! HM ! O+
! JP 7M9GP N HMNH I MOP NHPP PM g 7 : 9 GNP +
PPU JN HP P NHT 7MNHP G NHMN HP I MT AP PMOT 7 J
MLL PHP ! G !+
" = - " V 27 2 7 ! O H I K I 7 N ! Q NHP U ! Q N 99
GNJ77 H G GJGL K ! I P 7J99T+ S 2 99 LP GP P P ! I T
K J GP 7 9 TM9NT NH JQH NHP K !79 KN AP G P APN PP ! NHMN
M ! O I T A9 O+
! 2 99 9MT N JGN JL ! NHPP 8 M ! O NH J GHM9N 7 ! O M
OPM P 7MNHP ! I T 9 P+ = 4 &

4 % 2 HP] JM N G PMO (% 2N G L AMA9T NHP GM I P O MG % %% H KH
G JGPO AT H GN LHP 9T ! HP M I ! Q 7 NHP H P + X P Q P NHP H 9P 7
NH G LMGGMQP H KH G L AMA9T I PM ! N N AP J ! NP99 Q A9P MKK O ! Q N NHP PMO
! Q 7 NHP 7 9 + HP] JM N G HM P M7NP (' 8 6 HMT ! ! ! T O 9LH ! I T
A T I T A T KPMGPD 9PN H I N N AT+R MLP HMG M NHP T NHMN 3OQM 7P Q ! G
H I GP97 N AP ! P H G NM9U ! Q 7 H G H GPG 8 AJN P M P ! K9 ! PO N NH ! U 7
NHP P AP M ! T I PM ! ! Q G I P 7 NHP OG M P I PM ! N MG M ! I NMN ! 7 NHP G J ! O
7 NHP N GH ! Q ! O ! M ! O NHMN 6 9PN H I N N AT R HMG NHP GM I P P7P P ! KP+
$ 8 " $ O9 ! ! H G 6 P X 9O 7 X OG R @ 9 ! NP
L PNG NHP 2NM9 M ! (6 M O I ! PGG 7 G QHN KKMG ! PO AT HJ I J G HM OP ! PO
! NHP PTPG KM99PO M KMNM MKN 8 " .
$ ' SNHP 8 ' LP9 I M ! NPG J N ! JL ! ' % 48 $ ' NHP
PMO ! Q 7M99 NHP 9O PO N ! G G M ! MAA P MN ! 74 & $ '

= $ 8 '' ! 8 ' ' 8 SNHMN G NHP M99 ! P N M ! O NHP MNP ! P N= 2N
G NHP GM I P 7 I 7 K ! GN JKN ! MG 6 M GP I M ! M ! O M I P T+R
F HPGP 9 ! PG M P L ! NPO MG M N L9PN ! NHP 7 9 8 AJN NHP 9O I PN KMg I M ! KP
7 P G GJLL9 PO NHP O GN KH S
6 & MNG M ! O I KP M ! O GJKH G I M99g OPP +
X MG H G I PMN NHMN GP P ! TPM +R
F MLP99g HMG M ! QP ! JG ! NP N GH NHMN H 9OP & 9M ! O MG NHP ! QHN
1 9M ! O 8 NHMN NHP 9 ! PG M P LM N 7 M ! 9O AM99MO 7 H KH ! P 9 ! P HMG APP ! '
MKK OP ! NM99T I NNPO8 M ! O NHMN P GH J9O PMO S $
6 H 9OP & 9M ! O N NHP OM U N P K I P+
$ = $
" G O MG GN 99 SO P 7 H M ! O 7J I
2 G I P99 NHP A9 O 7 M N GH I M ! +R

3 3' 2+S ' (' ' &B(& " 3' "6! 3'
' -

' '"' 7

!' 39P P' G' APNNP ' NHM!' NHP' LP!' M 8' NMUP' N' NHM!U
7J99T' ' 2' 99' L PKP' JN' NHP' K I7 N' NH' HMN' MOO N !' 2'
KM!' ' 2' 99' ! N' AP' 9 !Q' 7 I' T J+
' #99' NHP' L P' 7' H G' NG' HMG' Q P!' MT' N ' H G'
I LMN P!KP' HP' Q OG' P M O' T J 'U !O!PGG' [
9; 4 '

' ' '=, #' " ; 0

"3' 0 MNP PNN ' KM99G' I P8 M!O' NP99G' I P' P ' G' M!'
M!Q9P ' !' NHP' 9MUP' 7$ OM U!PGG+ - MT' !! KP!N' M!O'
AP M P' NHP' 7 J9' 7 P!O+
$ >!! ' - NHPP' !J!K9P' NP99' I P' HPNHP ' M' I MO I M!' AP' M'
QP!N9P I M!' 'M' TP I M!' \
? ' #' U !Q' M' U !Q' [
>!! ' 8 HP%G' M' TP I M!' NHMN' HMG' M' QP!N9P I M!' N ' H G'
G !'8 7 'HP%G' M' I MO' TP I M!' NHMN' GPPG' H G' G !' M' QP!N9P I M!'
AP7 P' H I+
? ' 'HM P' M' NH JGM!O' NH' PO' AJ ! !Q' GL NG'
IP' H GG !Q' D !' JL !' NHP I S`
9 "3' HP' 7 J9' 7 P!O' A NPG' I T' AMKU+
>!! ' " P%G' I MO' NHMN' N JGNG' !' NHP' NM I P!PGG' 7' M' 97' M'
H GP%G' HPM9NH 'M' A T%G' 9 P' 'M' H P%G' MNH+
? ' 2N' GHM99' AP' O !P' 2' 99' M M Q!' NHP I ' GN M QHN S'
IP' G N' NH J' HP P' I GN' 9PM !PO' EJGN KP 8S' = !' '
H J' GML P!N' G ' G N' HP P+' = !' ' 0 9+' S 'TP' GHP'
7 WPG[S
"3' / U' HP P' GHP' GNM!OG' M!O' Q9M PG[S
XM!N !PGN' NH J' PTPG' MN' N M9' I MOM I ' 'D
IP' %P 'NHP' A J !' PGGT' N ' I P' ; ;
>!! ' " P 'A MN' HMNH' M' 9PMU+
#!O' GHP' I JGN' ! N' GLPMU'
X HT' GHP' OM PG' ! N' K I P' P 'N ' NHPP+
"3' HP' 7 J9' 7 P!O' HMJ!NG' L ' I' !' NHP' KP' 7' M'
! QHN !QM9P+' " LOM!KP' K PG' !' I %G' AP99T' 7 'N ' H NP'
HP !QG+' MU' ! N' A9MKU' M!QP98 2' HM P' ! ' 7 O' 7 'NHPP+
' " 'O 'T J' G '\ NM!O' T J' ! N' G ' M I MC%O
X 99' T J' 9 P' O !' M!O' PGN' JL !' NHP' KJGH !G' \
? ' 2%99' GPP' NHP 'N M9' 7 GN S !Q' !' NHP' P OP!KP+S'
H J' APO' I M!' 7' EJGN KP' NMUP' NHT' L9MKP8S' = !' ' '
#!O' NH J' H G' T UP 7P99 ' 7' P]J NT' = !' 'O 9+
P!KH' AT' H G' G OP' SD4 J M P' 7' NHP' K I I GG !+
N' T J' N +' = !' 7
"3' / PN' JG' OPM9' EJGN9T+
9PPLPGN' ' MUPGN' NH J 'E 99T' GHPLHP O' \
HT' GHPPL' AP' !' NHP' K !8
#!O' 7 ' !P' A9MGN' 7' NHT' I ! U !' I JNH+
HT' GHPPL' GHM99' NMUP' ! ' HM I +
-J [NHP' KMN' G' Q PT+
? ' # M Q!' HP ' 7 GN8 %N G' : !P 9+' 2' HP P' NMUP' I T'
MNH' AP7 P' NH G' H ! J MA9P' MGGP I A9T ' GHP' U KUPO' NHP' L '
U !Q' HP ' 7MNHP +
>!! ' IP' H NHP ' I GN PGG+' 2G' T J ' !M I P' : !P 9' \
? ' HP' KM!! N' OP!T' N+
>!! ' T' T J' I P KT' 2' N U' T J' 7 ' M' E !N GN 9+
? ' #!O' HP P%G' M! NHP ' H GP' M L%O' 9 UG' L K9M I '
X HMN' GN P' HP ' HPM N' G' I MOP' 7+S N L' HP ' NHP P[
I G' M I G' G O' 7 P[S JLN !' !' NHP' L9MKP[
OM9GP' EJGN KP ' HT' HMGN' NH J' 9PN' HP ' %GKMLP' \FE

"3' 9PGG' NHT' 7 P' NG[
6 ' 1' L NT[S ' HP P' G' NHP' LMN P!KP' !
HMN' T J' G ' 7N' HM P' A MGNPO' N ' PNM !' \
"3' T' NPM G' APQ !' N ' NMUP' H G' LM N' G ' I JKH+
HPT' I M ' I T' K J!NP 7P N !Q+' - "
? ' HP' 9 NN9P' O QG' M!O' M99 ' $
MT ' 9M!KH ' M!O' PPN HPM N ' GPP ' NHPT' AM U' MN' I P+
"3' I ' 99' NH ' H G' HPMO' MN' NHP I ' S
MJ!N ' T J' KJ G[
P' NHT' I JNH' ' A9MKU' ' H NP
% NH' NHMN' L G !G' 7' N' A NP8
MGN 77 ' Q PT H J!O ' I !Q P9' Q I
" J!O' ' GLM! P9 ' A MKH' F ' 9T I ' 8 D
1 ' A ANM 9' N UP F' ' N J!O9P NM 98 F
I ' 99' I MUP' H I ' PPL' M!O' M 98
0 ' NH' NH !Q' NHJG' I T' HPMO+
5 QG' 9PML' NHP' HMNKH ' M!O' M99' M P' 79PO+
5 'OP ' OP' OP+' PGPT+' IP' I M KH' N ' MUPG' M!O' 7M G '
M!O' I M UPN N !G8S - ' I ' NHT' H !' G.' O T+
? ' HP!' 9P N' NHP I ' M!MN I CP' &PQM!' 8 GPP' HMN' A PPOG'
MA JN' HP ' HPM N' 2G' NHP P' M!T' KMJGP' !' !MNJ P' NHMN' I MUPG'
NHPGP' HM O' HPM NG' \SD4 J' G ' 2' P!NP NM !' 7 ' !P' 7' I T'
HJ!O PO8 !9T' 2' O ' ! N' 9 UP' NHP' 7MGH !' 7' T J ' QM I P!NG8
T J' 99' GMT' NHPT' M P' - P G M!8 AJN' 9PN' NHP I ' AP' KHM!QPO+
= !' '
' 'Q O' I T' 9 O' 9 P' HP P' M!O' PGN' M H 9P+
? ' MUP' ! ' ! GP' I MUP' ! ' ! GP8 O M ' NHP' KJ _
NM !G' ' 'G ' X P%99' Q ' N ' GJLLP ' %NHP' I ! !Q+
>!! ' #!O' 2%99' Q ' N ' APO' MN' ! !+

B '

!' IP' H NHP ' 7 P!O' X HP P' G' NHP' U !Q' I T'
I MGNP '\
' "P P' G 8 AJN' N JA9P' H I ' ! N ' H G' NG' M P' Q !P+'
!' : O' 7 P!O' 2' L NHPP' NMUP' H I ' !' NHT' M I G' 8
2' HM P' %P HPM O' M' L9 N' 7' OPMNH' JL !' H I '
HP P' G' M' 9 NNP ' PMOT8 9MT' H I ' ! %N+
#!O' O P' N M O' 5 P ' 7 P!O' HP P' NH J' GHM9N' I PPN'
NH' P9K IP' M!O' L NPKN !+' MUP' JL' NHT' I MGNP 8
27' NH J' GH J9OGN' OM99T' HM97' M!' H J ' H G' 9 7P+
X NH' NH !P ' M!O' M99' NHMN' 77P ' N ' OP7P!O' H I +
NM!O' E!' MGGJ PO' 9 GG' ' MUP' JL' NMUP' J L 8
#!O' 7 99 ' IP' NHMN' 99' N ' G IP' L G !'
: P' NHPP']J KU' K !OJKN+
= ' 1LL PGGPO' !MNJ P' G9PPLG' S
H G' PGN' I QHN' TPN' HM P' AM9 I %O' NHT' A UP!' GP!GPG+
X H KH ' 7' K ! P! P!KP' 99' ! N' M99 +
NM!O' !' HM O' KJ P+S IP' HP9L' N ' APM ' NHT' I MGNP 8
H J' I JGN' ! N' GNMT' APH !O+' = !' ' -$ /
!' IP' K IP' M MT+
= 4 & '$ %' ' "' 'O 9' (3'
',!..' ' 7 =
"3' X HP!' P' J ' APNNP G' GPP' APM !Q' J ' PG+
X P' GKM KP9T' NH !U' J ' I GP PG' J '7 PG+
X H ' M9 !P' GJ77P G ' GJ77P G' I GN' %NHP' I !O' 8
/PM !Q' 7 PP' NH !QG ' M!O' HMLLT' GH G ' APH !O' 8
JN' NHP!' NHP' I !O' I JKH' GJ77P M!KP' O NH' %P GU L+
X HP!' Q P7' HMNH' I MNPG ' M!O' APM !Q' 7P99 GH L+
" '9 QHN' M!O' L NMA9P' I T' LM !' GPP I G' ! +
X HP!' NHMN ' H KH' I MUPG' IP' AP!O' ' I MUPG' NHP' U !Q' A 8
" P' KH 9OPO ' MG' 2' 7MNHP %O' SD I ' M MT
M U' NHP' H QH' ! GPG' ' M!O' NHTGP97' AP MT+

; X P' L !N' NHP' O PKN !' 7 'NHP' P!N M!KPG' 7' NHP' KHM MKNP G' MG' !' NHP' 7 9 +
' 9 %% ' H G' G O !M 9T' L !NPO' 8$ DD ;' !' NHP' 7 9 ' N' G' $ DD ;' !'
!P' 7' NHP']JM N G' $ %D
F HP' Q !M9']JM N G' HM P' 6 / U' HP P' HP' GNM!OG' M!O' Q9M PG' M!NPGN' NH J'
PTPG R' BK+' HP ÁM9O' M9NP PO' $ 'N ' %$ +' M!O' P M O' HMLL 9T' GJQQPGNPO' 8 %'
7 '8 % ' ? HP' NPWN' 7' NHP']JM N G' G' G ' PWKPPO !Q9T' K JL' N' HMN' ' !' NH GP'
LMGGMQPG' H KH' O ' ! N' KKJ' !' NHP' 7 9 ' G IP' 9 KP!GP' 7' P I P!OMN !' GPP I G'
M M!NPO+
' ' ' $ ' $ +' 3 %%2+' MG' M' G !Q' P!NP PO' !' NHP' A 9NG' 7' NHP' NM_
N !P G% I LM!T' !') +

) H G' !OP 7J9' LMGGMQP ' APQ !! !Q' NH' NHP' GLPPKH' 7' 3OQM ' 6' HP' 7 J9' 7 P!O'
A NPG' I T' AMKU R' M!O' P!O !Q' HP' P ' G' ! N' Q P!' !' NHP' 7 9 +' @ PP' 2!N OJKN T'
N KP+
F3 ($SM' 7P I M9P' HM P +' @ PP' ! NP' !' # KN' 2+' K+ +
F 2 S :9 I IP S9PM !P SM' HJ!N !Q' O Q ' G ' KM99PO' 7 I ' NHP' ' ' %$!'
H KH' HP' MG' HP9O' N 99' HP' MG' 9PN' G9 L+
F) *' MKK O !Q' N ' NPP P!G ' MG' NHP' &J! K' O' 7 ' M' NH9PGG' O Q+' @ PP'
! NP' !' "P! T' +' # KN' 22+' K+ 2+
F ' ! ' ' 2!' NHP' N MQPOT' 7' 6' # ' X I M!' U 99PO' NH' !O!PGG' R' @ '
P' HM P' 6' 4 J ' O QG' M P' N J!O9P NM 9G' M!O' KJ G+R
1/+' 22+' ' /' $

X HP!7M9GP L ! ! H GP !Q NH JQHNG OP7 9P NHPP
2!NHT EJGN L 7 PLPM9G M!O PK !K 9PG NHPP+
X HMN 99 HML I P N ! QHN GM7P %GKMLP NHP U !Q[
/J U 9J U+D?

3 3 22 F ! ! : 9 GNP %G -

P M!NG+

! - GN GLPPO 9T N I T 9 O T J HJGAM!O8 GH H I
NH G 9PNNP SNHP M I T 7 O M!KP G 9M!OPO 8S PPU JN NHP
N M N : 9 GNP +D = 4 & -! !.' P M!NG+
3 "M!Q H I !GNM!N9T
! -9JKU JN H G PTPG+
! /PM P H I N I T O GL9PMGJ P+S30 I J!O UPPL T J
J G GNP K I LM!T8 NHP P P!QPG P M P A J!O N NMUP
JL !T J N M N JG 7MNHP M P ! N 7N 7 T J APH 9O !Q+
#O GP NHP OJUP HP P T J M P Q !Q N M I GN 7PGN !MNP
L PLM MN !8 P M P A J!O N NHP 9 UP+ 1J L GNG GHM99 AP
G 7N M!O !NP99 QP!N APN WN JG+ OM P P99 OPM G GNP 8S
7M P P99 I T 9 O 7 : 9 GNP +

NP M O+

" ! \ X HP P%G NHP U !Q\
7 !' T 9 O 7 : 9 GNP HMNH K ! PT%O H I HP!KP
I P 7 P G W M!O NH NT 7 H G U! QHNG+
" N]JPGN GNG M7NP H I I PN H I MN QMNP8
X H NH G I P NHP 7 I 7EJGN KP TPN J L P
HM99 O M K J NPGT N J MNH H KH I P!
MT A9M I P AJN ! N K !N 9+ X H %G NHP P \ HP N M N \

B P M!NG 2

3 2!Q MNP7J9 7 W[%N G HP+
! !O 7MGN H G K UT M I G+
!' X HMN I PM!' T J Q MKPG\S : O I T 7 P!OG K !_
G OP
4 J M P I T QJPGNG O I P ! 7 J9 L9MT 7 P!OG+
! !O H I 2 GMT+ ^ P M!NG("
3 "M O HM O S1 7 9NHT N M N [
! ! I P K 7J9 9MOT MG T J M P 2%I ! !P++
! NH G KHM A !O H I S 99M ! NH J GHM9N 7 !O S
;# , & '- -("
! T NHP U !O Q OG %N G I GN Q! A9T O !P
L9JKU I P AT NHP APM O+
- H NP M!O GJKH M N M N [
! MJQHNT 9MOT+
HPGP HM G H KH NH J O GN M GH 7 I I T KH !+
X 99]J KUP! M!O MKKJGP NHPP 2 M I T J H GN8
X NH AAP G% HM!OG I T H GL NMA9P 7M J G
4 GH J9O ! N J779P NHJG+ X HMN 99 T J O \
! I P G HMN 9PNNP G HMO T J 9MNP 7 I O M!KP \
3 P G I L9P M!G P %O 7 P U! NHP N JNH+
! #!O HMN K !7POP MKT HM P T J NH NHP N M N G
/MNP 7 NPO !NHP U !QO I \
3 H GP HM!OG HM P T J GP!N NHP 9J!MN K U !Q\
LDU+

HP 9 !PG !A MKUPNG M P ! N !NHP 7 9 2!NHP 7 9 M7NP 6]J KU K !OJKN R
:9 GNP P!OG H G GLPPKH NH 6 I P K I P M MT+R H GP OG M P !N OJKP
!NHP]JM N M7NP NHP GLPPKH 7 P!N+
R /

! 2 HM P M 9PNNP QJPGG !Q9T GPN O !+
X H KH KM I P 7 I !P NHMN%G 7 M !PJN M9 HPM N
#!O ! N 7 I !P LL G%O+
! J!! !Q+
3 #!O 7M9GP+
! X HP P HMGN NH J GP!N NHP U !Q\
! 5 P +
3 X HP P7 P N 5 P \ X MGN NH J ! N KHM Q%O MN
LP 9S
! X HP P7 P N 5 P \ /PN H I M!G P NHMN+
! 2 M I N PO N NHP GNMUP M!O 2 I JGN GNM!O NHP K J GP+
3 X HP P7 P N 5 P \
! PKMJGP 2 J9O ! N GPP NHT K JP9 !M 9G
-9JKU JN H G L 9O PTPG 8 ! NHT 7 P KP G GNP
2!H G M! !NPO 79PGH GN KU APM GH 7M!QG+
HP GPM NH GJKH M GN I MG H G AM P HPMO
2!HP99 A9MKU ! QHN P!OJ %O J9O HM P AJ T%O JL+
#!O]JP!KH%O NHP GNP79PO 7 PG TPN L 9O HPM N+
"P HP9L NHP HPM P!G N M !+
27 9 PG HMO MN NHT QMNP H 9%O NHMN GNP !N I P+
H J GH J9OGN HM P GM O 6: O L NP NJ !NHP UPT8R
#99 K JP9G P9GP GJAGK A%O S JN 2 GHM99 GPP
HP !QPO P!QPM!KP P NMUP GJKH KH 9O P!+
! PP%N GHM9N NH J !P P S OP99 G H 9O NHP
KHM S
L !NHPGP PTPG 7NH !P 2%99 GPN I T 7 N+F
!" P NHMN 99 NH !U N 9 P N 99 HP AP 9O+
: P I P G I P HP9L 1 K JP9[1 TP Q OG[
3 1!P G OP 99 I KU M! NHP 8 NHP NHP N +
! 27 T J GPP P!QPM!KP S
7 1 " 9O T J HM!O I T 9 O8
2 HM P GP %O T J P P G !KP 2 MG M KH 9O8
JN APNNP GP KP HM P 2 !P P O !P T J
HM!' ! N A O T J H 9O+
3 " ! T J O Q\
7 1 27 T J O O PM M APM O JL !T J KH !+
2%O GHMUP N !NH G]JM P9 X HMN O T J I PM!\
! $ H9T 99M ![= 2-$ "& -
7 1 MT NHP!K I P !M!O NMUP NHP KHM!KP 7M!QP +
= - 5. 3 . -2!& " "
3 : P I P NHT G O+S= ! ! P M!N+" #
LPMGM!N GNM!O JL NHJG[
=7 - -2! "$! -("$ "- (-
7 1 1 2 M I G9M ![S T 9 O T J HM P !P PTP 9P7N
GPP G I P I GKH P7 !H I S1[=
! /PGN N GPP I P L P P!N N S1JN 9P EP99T[
X HP P G NHT 9JGN P! \F
! #99 OM U M!O K I7 N9PGG+SDXHP P%G I T G !
30 I J!O\
30 I J!O P!U !O9P M99 NHP GLM UG 7!MNJ P+
]J N NH G H O MKN+
3 1JN N PMKHP JG 99M !['
H J KM99%GN !H I NHMN HMNPG NHPP N MG HP
HMN I MOP NHP P NJ P 7NHT N PMG !G N JG8
X H G N Q O N L NT NHPP+
! 1 I T 7 99 PG[
HP!3OQM MG MAJG%O+S
!O Q OG 7 Q P I P NHMN M!O L GLP H I [
3 : NH JGN H I JN MN QMNPG M!O 9PN H I G I P99
" G MT N 5 P +S" G%N I T 9 O \ " 9 U T J\
! 2 HM P PKP %O M HJ N SO 99 I P 9MOT+S
J !' JN NHMN PTP9PGG 99M !8SDNH NH G G9M P
L !NHP OJ!QH 99+S&PQM! 2 A9PPO MLMKP
!N I P9T K I PG NH G HJ N : P I P T J M I+
= 4 "(5# 8S P M!NG ("
^ 7 1 2%99 !P P KM P HMN KUPO!PGG 2 O +
27 NH G I M!K I P N Q O+
% 7 1 27 GHP 9 P9 !Q

HP]JM N G ''
X P I N NHP JGJM9 GNMQP O PKN !MN NH G L9MKP MG XP99 MG M GJAGP]JP!N GNMQP
O PKN !7 PMG !G Q P!' !299JGN MN !' *L+ +

?

7 ' %X J9O' 2' K J9O' I PPN' H I ' I MOM I ' [2' J9O' GH '
X HMN' LM NT' 2' O ' 7 99 +
3 ' OM P' NHPP' P99+' = 4 &

3 3' 2+S ' !& 5' ' 5 P +

') 1 ' "' ' " -- "' ' ' '. -

a !' XHP!' GHM99' P' K I P' N ' NHP' N L' 7' NHMN' GM I P' H 99' \
"3 ' 4 J' O ' K9 I A' JL' N' ! ' ' 9 U' H ' P' 9MA J +
!$ PNH !UG ' NHP' Q J!O' G' P P!+
"3 ' "
A9P' GNPPL
" M U ' O+ ' T J' HPM ' NHP' GPM' \
!' ' N J9T+' $
"3 ' XHT ' NHP!' T J ' NHP ' GP!GPG' Q ' I LP 7PKN'
T' T J ' PTPG% M!QJ GH+
!' ' I MT' N' AP ' !OPPO
PNH !UG' NHT' KP' G' M9NP %O' 8 M!O' NH J' GLPMU%GN'
2!' APNNP7' LH MGP' M!O' I MNNP ' NHM!' NH J' O OGN+
"3 ' 4 J' M P' I JKH' OPKP %O' 8 !' ! NH !Q' M I ' 2' KHM!Q%O+'
JN' !' I T' QM I P!NG+
!' PNH !UG ' T J' M P' APNNP ' GL UP!+
"3 ' I P' !' G 8 HP P%G' NHP' L9MKP' 2S GNM!O' GN 99+ S " '
7PM 7J9
!O' O CCT' %N G ' N ' KMGN' !P%G' PTPG' G ' 9 [%
HP' K G ' M!O' KH JQHG ' NHMN' !Q' NHP' I O MT' M +
H ' GKM KP' G ' Q GG' MG' APPN9PG' ' " M97' MT' O !'
" M!QG' !P' NHMN' QMNHP G' GM I LH P' 8 O PMO7J9' N MOP[F
PNH !UG' HP' GPP I G' ! ' A QQP ' NHM!' H G' HPMO
HP' 7 GHP I P!' NHMN' M9U' JL !' NHP' APMKH+
LLPM ' 9 UP' I KP' 8 M!O' T !% NM99' M!KH !Q' AM U+'
5 I ! GH%O' N ' HP ' K KU' D ' HP ' K KU ' M' AJ T'
#9 I GN' N ' G I M99' 7 ' G QHN ' NHP' I J I J !Q' GJ QP+

$' $ '(()!" ' HP' 6' M!KH !Q' AM U' R' HMG' M' G I M99' A MN' N !Q ' M!O ' MG' NHP'
AM U' MG' O I ! GHPO' N ' M' K KU ' NHP' K' KU' MG' M' AJ T' 6' M9 I GN' N ' G I M99' 7 ' G QHN+R
F 5 '% ' H G' MG' 7 I P 9T' L !NPO+' 5 *' % '1' MG' 7' 3 OQM ' MGUPO' : 9 GNP '
7' HP' HMO' Q !P8 HP PMG' : 9 GNP ' HMG' L P JG9T' N 9O' H I ' 6' : ' NH J' 7J NHP ' 778 R'
M!O ' HP!' : 9 GNP ' MQM !' GLPMUG' N ' H I ' HP' GMTG' 6' : !P' G +R
=' ' ($' ' M99' NHP' 9O' PO N !G+' ' % %' ' ($' I MT' G Q! 7T' PMKH' L9MKPO'
MN' NHP' P!O' 7' NHP' NHP +' I P' NH !U ' H P P ' NHMN' NHP P' G' M' G9 QHN' NTL Q MLH KMG'
P ' M!O' NHMN' P' GH J9O' PMO' ' % %' ' ($' X P' KM!' 7 !O' ! ' PWM I L9P' 7' M'
G I 9M ' JGP' 7' ' ($;' M!O' TPN' NHP' LH MGP' K ! PTG' NHP' I PM! !Q+
HR 3 ' 2!' M' L P JG' LMGGMQP ' 6' I P' %P ' NHP' A J !' PGGT ' N ' I P R' A J !'
G Q! 7 PG' M' P 8 M!O' G ' !' NHP' 6' OM T' > JPP!' R' NA U' +' KM!N ' +' GNM!CM' 9 S

6' T' 9 NN9P' A MN' KM!' GM7P9T' LMGG' NH G' LP 9 JG' " B

2!' 9N !%G' 6' I JG' R' P' HM P S

6 # !O' P P T' A GUT' " ' 7 I ' G OP' N ' G OP+R

" P P ' MG' X M N !' P99' PWL9M !G' NHP' O' " ' G' M' !O !Q ' OPPL ' M!O' !M '
M99PT ' NH' M' J9PN' MN' NHP' A NN I +' JKH' M' GL N' G' M' A J !' APKMJGP' N' G' M'
A J!OM T S M' !MNJ M9' O G !8 M!O' NH G' G' NHP' GP!GP' !' H KH' M' P ' G' KM99PO' M'
)(*

J !' NGP97' JN+' 27' 3 OQM ' 9 P ' 1 ' A9PGG' H I ' %S
' 7P99 ' 7M P' NHPP' P99+
"3 ' : !P ' G +D' OM P P99+ S
;G ' .-$ "'. -' ! 3'
!O' TPN' 2' U! ' ! N' H ' K !KP N' I MT' A'
HP' N PMGJ T' 7' 9 7P' HP!' 9 7P' NGP97'
4 P9OG' N ' NHP' NHP7N ' " MO' HP' APP!' HP P' HP' NH JQHN+
T' NH G' HMO' NH JQHN' APP!' LMGN+ S #9 P' ' OPMO' \
" ' T J' G [7 P!O' [S " PM ' T J ' G ' \SGLPMU' [
HJG' I QHN' HP' LMGG' !OPPO SD4PN' HP' P PG
X HMN' M P' T J ' G ' \
!' # MT ' M!O' 9PN' I P' O P+
"3 ' " MOGN' NH J' APP!' MJQHN' AJN' Q GGM I P D' 7PMNHP G ' M +'
' I M!T' 7MNH I ' O !' L PK L NMN !Q+
H J' HMOGN' GH P PO' 9 UP' M!' PQQ' ' AJN' NH J' O GN' A PMNHP' 8
" MGN' HPM T' GJAGNM!KP8 A9PPO%GN' ! N8 GLPMU%G N # M N' G J!O+'
P!' I MGNG' MN' PMKH' ' I MUP' ! N' NHP' M9N NJOP'
X H KH' NH J' HMGN' LP LP!O KJ9M 9T' 7P998
HT' 9 7P%G' M' I MK9P' ' LPMU' TPN' MQM !+
!' JN' HM P' 2' 7M99P!' ' ' ! ' \
"3 ' O I ' NHP' O PMO' GJ I I N' 7' NH G' KHM9UT' A J !'
/ U' JL' M HP QHN8 SNHP' GH 99 Q Q%O' 9M U' G ' 7M '
M!! N' AP' GPP!' ' HPM O ' O ' AJN' 9 U' JL+
!' # 9MKU ' 2' HM P' ! ' PTPG+ S
2G' PNKHPO!PGG' OPL %O' NHMN' AP!P7 N+
' P!O' NGP97' AT' OPMNH' \' % MG' TPN' G I P' K I 7 N+
X HP!' I GP T' K J9O' APQJ 9P' NHP' NT M!N%G' MQP+
!O' 7 JGN MNP' H G' L JO' 99+
"3 ' : P' I P' T J ' M I
L' SG ' 8S " ' G%N' \ OPP9' T J' T J ' 9PQG' \ 4 J' GNM!O+
!' !!' P99 ' N ' P99+
"3 ' H G' G' MA P' M99' GN M!QP!PGG
L !' NHP' K !' %NHP' K9 77' HMN' NH !Q' MG' NHMN'
X H KH' LM NPO' 7 I ' T J' \
!' ' #' L ' J!7 NJ!MNP' APQQM +
"3 ' #G' 2' GN O' HP P' AP9 ' I PNH JQHN' H G' PTPG'
X P P' N ' 7J99' I !G' 8 HP' HMO' M' NH JGM!O' ! GPG
" I G' HP9U%O' M!O' M %O' 9 UP' NHP' P! OQPO' FGPM8
2N' MG' G I P' 7 P!O' ' HP P7 P' NH J' HMLLT' 7MNHP +
H !U' NHMN' NHP' K9PM PGN' Q OG' H ' I MUP' NHP I ' H ! J G'
17' IP!%G' I L GG A 9 N PG' HM P' L PGP %O' NHPP+
!' 2' O ' P I P I AP ' ! ' ' HP!KP7 NH' 2%99' APM '
#799 KN !' N 99' N' O ' K T' JN' NGP97+
3! JQH ' P! JQH ' M!O' O P+' HMN' NH !Q' T J' GLPMU' 7
2' N U' N' 7 ' M' I M!' 8 7NP!' %N J9O' GMT
6 HP' 7 P!O' NHP' 7 P!O' HP' 9PO' I P' N ' NHMN' L9MKP+
"3 ' PM ' 7 PP' M!O' LMN P!N' NH JQHNG+ S JN' H ' K I PG'
HP P' \

' '. - 5' " -- "' &.' 2 '. !2 -

HP' GM7P ' GP!GP' 99' !P%P ' MKK I I OMNP'
" G' I MGNP ' NHJG+
? ' ' NHPT' KM!! N' N JKH' I P' 7 ' K ! !Q'
2' M I ' NHP' U !Q' H I GP97
"3 ' 1' NH J' G OP L P K !Q' G QHN[
? ' MNJ P%G' MA P' M N' !' NHMN' PGLPKN+ SD HP P%G' T J '
L PGG I !PT+' HMN' 7P99 ' HM!O9PG' H G' A ' 9 UP' M' K '
UPPLP $D' O M ' I P+' M' K9 NH P %G' TM O+FS / U' 9 U' M

A J !+' AP' 6 KH9UT' A J ! R' !' NHP' LMGGMQP' AP7 P' JG' G' !' NHP' GM I P' MT' NHP'
KH9UT' A J!OM T 73!Q9M!O' N M OG' Q M!KP+
F1 ' HG' G' NHP' PMO !Q 7NHP' JM N G8 NHP' 7 9 ' . 3! OQPO'
G NHP' I P' L PN KM9 O' M!O' HMUGLP P HMG' NHP' OPM !' HG P!JG M!O' #O ! G8 S
6' 99' NHP' 9O M PG 99 HM P' H I ' GPP!' ! ' I P+
XH GP ' NH NHP' IPPN !Q K9 JOG' K !NP!O+R

F ' ' ' NHP']JM N G8 NHP' 7 9 % ' PKU' N ' J' GJ L GP' K !
G QP G NHP' PMO !Q 7 NHP' 7 9 ' QH N+' 27' P' 7 99 ' NHP' K JGP 7 7 PM %G NH JQHG'+
P GHM99 GPP' NHMN' HP' 7M!K PG' H 1GP97 M' 2K !Q MN' NHP' HPMQ 7 HG M IT+' 2N' G HG
L P QM P N ' K !' I !PT S6 NHPT' KM!! N' N JKH IP 7 ' K ! !Q R P 9P PG
M P A ' JQHN N ' H I S6 HP PG T J' J 2
G %$ ' ((.8!) - ' MG NHP' JGN K H ' UPL N' K G7 I' K I S !P J!L MKN GPQ'
I' NHP L LP' JGP 7NHP A +' #GKHM I ' I' HG 6 W LH9JG R NHJG QPGK APG !P H'
6' HM!QPG HG A ' 9 UP' M%K UPPLP' ' R S6 #! NHP' K P PNHO !' M!O' 9M PNH
JN' HG AJN' KUG' MG' NH JQH HP GH J9O' GH N MN' K GR
- O' ' ' $: SO M ' 9 UP' M 7M I JG 3!Q9 GH M KHP SDH+PM KHP' 7
HP T' HMGP S

6' #!' M ' 7 -' $' 9 !Q
L' N ' NHP' HPMO' O P ' HP+R

"3 " M 9 QP!N9P G +
GLPPO T J X HMN%G T J 99O
"3 5 T J HPM MJQHN G 7M AMNN9P N M O \
GN GJ P M!O J9QM 8 1 5 !P HPM G NHMN+
XH KH KM!O GN !QJ GH G J!O+
"3$ JN AT T J 7M J +
" !PM %G NHP NHP 8M IT \
PM M!O !GLPPOT 7 N8 NHP IM !OPGK T
NM!OG !NHP H J 9T NH JQHN+
"3 , 2NHM!U T J G NHMN%G M99+
$ H JQH NHMN NHP]JPP! !GLPK M9 KMJGP G HP P+
"P M IT G I %O !+
;"3 2NHM!U T J G + 9 4 : P!N+
! 4 J P P QP!N9P Q OG NMUP IT A PMNH 7 I IP 8
/PN ! N IT GP!GL N NP I LN IP MQM !
O P AP7 P T J L9PMGP [
"3 XP99 L MT T J 7MNHP +
! Q O G HMN M P T J \
"3 #$ I GN L M!O I MOP NM IP N 7 NJ!P%G A9 G
XH AT NHP M N 7U! !M!O 7PP9 !Q G G+
#I L PQ!M!N N Q O L NT+ : P IP T J HM!O+
2%99 9PMO T J N G IP A O !Q+
! "PM NT NHM!UG
HP A J!NT M!O NHP AP! C !7HPM P!
A N M!O A N[

NP M O+

7 2 #L K9M I%O L CP[GN HMLLT[
HMN PTP9PGG HPMO 7NH !P MG 7 GN 7 M I%O 79PGH
M GP IT 7 NJ!PG+S H J 9O J!HMLLT N M N +
P79T NHTGP97 P IP I AP S HP G O G JN
HMN IJGN OPGN T NHPP+
! 9PN NHT 7 P!O9T HM!O

-JN GN P!QNH P! JQH N +; ' !,,!- -
7 2 XHP P7 P A 9O LPMGM!N
5M %GN NH J GJLL N M LJA9 GH%O N M N \ "P!KP8
/PGN NHMN !7PKN !7H G 7 NJ!P NMUP
/UP H 9O !NHPP+ /PN Q H G M I +
"3 H%99 ! N 9PN Q C NH JN J NHP %KMG !+
7 2 /PN Q G9M P NH J O PGN+
"3 : O QP!N9P IM! Q T J QM N M!O 9PN L 9U
LMGG+ #!KH%JO HM%APP!C MQQP %O JN 7 IT 9 7P %N J9O
! N HM%APP!C 9 !Q MG %N G AT M N! QHN+ MT K IP ! N
!PM NH% 9O IM!8 UPPL JN KHP %TP GP N T HPNHP
T J K GNM O IT AM99 D AP NHP HM OP H% 99 AP L9M !
NH T J+
7 2 1JN OJ!QH 99[
"3 H% 99 L KU T J NPPNH C IP8 ! IMNNP
T J 7 !G+ 9 5. 3 # "' ' ! '- '"!20
7 2 9M P NH J HMGN G9M ! IP SD 99M !NMUP IT LJ GP8
27P P NH J 9N NH P AJ T IT A OT8
#!O Q P NHP 9PNNP G H KH NH J 7 !O%GN MA JN IP+
30IJ!O PM 9 7 : 9 GNP 8 GPPU H I JN
L !NHP 3!Q9 GH D LM NT S 1 J!N IP9T OPMNH+ 9: -$
"3 2U! NHPP P99 #GP KPMA9P 99M !8
#G OJNP JG N NHP KPG 7NHT I GN PGG+
#G AMO!PGG J9O OPG P+
! XHMN G HP OPMO \
"3, N T J O ! 7MNHP # - 5!&+S
/PN%G GPP NHPGP L KUPNG 8 NHP 9PNNP G NHMN HP GLPMUG 7
[MT AP IT 7 P!OG+S "P G OPMO 8 2M I !9T G T
"P HMO ! NHP OPMNH%G IM!+S/PN JG GPP S
/PM P QP!N9P MW8 M!O IM!!P G A9M IP JG ! N
U! J P!PI PG% I !OG P%O L NHP HPM NG 8
HP LMLP G G I P 9M 7J9+

0%"' 8% HP]JM N $2
3 ' 8 HP]JM N G $: GP ! H G 6 - !K M9 : 9 GGM T R Q PG
" ' 8 % M ! NH K J!N T O 7 = ' 3OQM G GLPMU !Q NHP IP GPNGH P
O M9PKN
F ' %$ NHP 7 9 8 NHP]JM N G 3 %$ @ PP 2!N OJKN T N KP+
$

:^ 6 /PN J PK L KM9 G AP P IP I AP PO 4 J HM P IM!T LL
NJ! N PG N KJN H I 778 7 T J 99 M!N ! N N IP M!O L9MKP 99 AP 7 JN7J99T
77P PO HP P G ! NH !Q O !P 7 HP PNJ !NHP K !]JP 8 NHP!M I 2 NHP
L G !P M!O H G APO IT QM 98 7 I NHP 9 MNHPO M I NH HP P 7OP9 P IP M!O
GJLL9T NHP L9MKP 7 T J 9MA J +
6 4 J @ 7P G 2 J9O GMT M77PKN !MNP GP M!N D
I A
1J!O GN !QJ GH%O GLMKP 7 IM!%G 99$+S D
#L9 N JL !HP NJ JG HJGAM!O%G 9 7P8
#!O NHP PWKHM!QP IT A NHP [S "P P !NHP GM!OG+
HPP 2%99 MUP JL NHP L GN J!GM!KN 7 PO
17 IJ NHP JG 9PKHP G8 M!O !NHP IMNJ P N IP+
X NH NH G J!Q MK JG LMLP GN UP NHP G QHN
17 NHP OPMNH L MKN G%O OJUP O H I %N G P99+
HMN 7 NHT OPMNH M!O AJG !PGG 2 KM!NP99+
9: 4 " 33 3!& (!"5
! HP U !Q G I MO " GN 77 G IT 9P GP!GP+
HMN 2 GNM!O JL M!O HM P !QP! JG 7PP9 !Q
17 IT HJQP G G[PNNP 2 P P O GN MKN
GH J9O IT NH JQHNG AP GP P %O 7 I IT Q P7G8
#!O PG AT !Q IMQ !MN !G 9 GP
NP U! 9POQP 7 NHP IGP9 PG+

B

"3 : P IP T J HM!O8
OM 77 IPNH !UG 2 HPM NHP APMNP!O I +
IP 7MNHP + 2%99 APGN T J NH M 7 P!O = 4 &

3 3 22+S ,8 -HTG K M! : P!N9P IP! "! ~$ " 3

"7

! 1NH J Q O P!N H GHM99 2 9 P M!O U+
IMNKH NHT Q O!PGG T 9 7P 99 AP N GH N+
#!O P P T IPMGJ P 7M 9 IP+
AP MKU! 9POQ%O IMOM I G %P LM O+
#99 IT PL NG Q NH NHP I OPGN JNH8
I P ! K9 LL%O AJN G +
! P APNNP GJ NPO
HPGP PPOG M P IP I PG 7NH GP GP H J G 8
2L NHPP LJN NHP I 79L+
-M O ! OPM I MOM I
4PN N AP U! !GH NP!G IT I MOP ! NP!N
TA !2 IMUP N NHMN T J U! I IP ! N+
99 N IP M!O 2 NH !U IPPN+
! HP!AP N G IT Q O 9 O+SO9 O PG NHP U !Q \
= ! -HTG K M!
5- MOM I G9PPLG GN 99+
! 1T J U !O Q OG+
J P NH G Q PMN A PMKH !H G MAJGPO !MNJ P[
HP J!NJ!%O M!O EM !Q GP!GPG 1 !O JL
17 NH G KH 9O KHM!QPO 7MNHP [
5- L9PMGP T J IMEPGNT+
HMN P IMT MUP NHP U !Q \ HP HMNH G9PLN 9 !Q+
! P Q P !%O AT T J U! 9POQP M!O L KPPO
2%NHP G MT 7T J ! 99+ 2G HP M MT%O 9
* #T IMOM I 8 !NHP HPM !PGG 7G9PPL+
XP LJN 7 PGH QM IP!NG !H I+
5- P AT Q O IMOM I HP! P O M MUP H I 8
2O JAN ! N 7H G NP I LP M!KP+
= ! P T P99+
5- -9PMGP T J O M !PM +SD/ JOP NHP IJG K NHP P+F
! 1 IT OPM 7MNHP [&PGN MN !HM!Q
HT IPO K !P ! IT 9 LG 8 M!O 9PN NH G U GG
&PLM NH GP 9P!N HM I G NHMN IT N G GNP G
"M P !NHT P P P!KP IMOP[

X P L !N NH G GJAGK LN !MG !NHP 7 9 + 2N MG O !M 9T Q P!NHJG S
6 4 J 7P@G 2 J9O GMT E !O T J
M77PKN !MNP GP M!N+R
4 SK9 NHPO+
F HP 9 !PG !A MKUPNG M P I NNPO !NHP 7 9 U

M. STONE, PINXT

W. RIDGWAY, SCULPT

LEAR AND CORDELIA.

(KING LEAR.)

LONDON. VIRTUE & Cº

" ' 4PN 3O I J!O' MG' AP9 %O'8
HP' !P' NHP' NHP 'L G !%O'7 ' I T' GMUP
#!O' M7NP 'G9P 'HP GP97+
' 3 P!'G +S P 'NHP '7MKPG+
" ' 2'LM!N'7 '97P' IP'Q O'2' IPM!'N 'O +
5PGL NP' 7' I !P' !'!MNJ P+' >J KU9T' GP!O S
P'A P7' !' N SN 'NHP' KMGN9P'8 7 ' I T' N'
2G' !'NHP'97P' 7'/PM 'M!O' !' OP9 M S
MT 'GP!O' !'N IP+
' &J!' J!'1' J!S
"3' ' H ' I T'9 O'cS X H 'HMG' NHP' 77 KP'\GP!O'
HT'N UP!' 7' PL P P+
" ' X P99'NH JQHN' !'8 NMUP' I T'G O+
: P' N'NHP' KMLNM !+
(' "MGNP'NHPP'7 'NHT'97P+' 9 4 '
" ' "P' HMNH'K I I GG !'7 I'NHT' 7P' M!O' IP'
'HM!Q' OP9 M' !'NHP'L G !'M!O'
'9MT'NHP' A9M I P' JL !'HP ' !'OPGLM +
HMN' GHP' 7 O O' HP GP97+
' HP' Q OG' OP7P!O' HP [PM 'H I'HP!KP' M H 9P+
;' ('-'(! '!..

' '2 ' ;" '" ' -' -# ' '
17HKP ' "'! -

? ' " 9'H 9'H 9[S1'T J'M P' IP!' 7'GN !PG'8
"MO'2'T J'N !QJPG'M!O'PTPG+'2%O' JGP'NHP I'G '
HMN'HPM P!%G' MJ9N'GH J9O'K MKU S HP%G'Q !P'7 'P P [S'
2'U! ' HP!' !P' G'OPMO'M!O' HP!' !P'9 PG8
HP%G'OPMO'MG'PM NH S/P!O' IP'M'9 U !Q Q9MGG'8
27'NHMN'HP'A PMNH' 99' I GN' 'GNM !'NHP' GN !P+
XHT'NHP!'GHP'9 PG+
' 2G'NH G'NHP'L I G%O'P!O'\
"3' 1' I MQP' 7'NHMN'H '\
(' OM99'M!O'KPMGP[
? ' H G'7PMNHP'GN G'8 GHP'9 PG[7' N'AP'G
2N' G'M'KHM!KP' H KH'O PG' POPP I'M99'G G'
HMN'P P'2'HM P'7P9N+
' 1' I T'Q O' I MGNP [= 3
? ' - NHPP'M MT+
"3' % G'! A9P' P!N'T J'7 P!O+
? ' #'L9MQJP'JL !'T J' I J NHP P G'N M N G'M99[
2' I QHN'HM P'GM %O'HP 8 ! 'GHP%G'Q !P'7 'P P [
OP9 M' OP9 M'GNMT'M'9 NN9P+' " M [
XHMN' G%N'NH J'GMT%GN\S " P ' KP' MG' P P'G 7N+
:P!N9P'M!O'9 8 M!'PWKP99P!N'NH !Q' !' IM!'8S,
2'U 99%O'NHP'G9M P'NHMN' MG'M'HM!Q !Q'NHPP+
..$ % G'N JP' I T'9 OG'HP'O O+
? ' 5 O'2'! N'7P99 '\
2'HM P'GPP!'NHP'OMT' NH' I T'Q O'A N !Q'7MJ9KH !'
2' J9O'HM P' I MOP'NHP I'GU L''2'M I' 9O'! +
#!O'NHPGP'GM I P'K GGPG'GL G' IP+SXH 'M P'T J'\
!P'PTPG'M P'! N' %NHP'APGN S2%99'NP99'T J'GN M QHN+
'27'7 NJ!P'A MQ' 7'N 'GHP'9 %O'M!O'HMNPO+
1!P' 7'NHP I' P'APH 9O+
Ð ? ' H G' G'M'OJ99'G QHN+' # P'T J'! N' P!N'\
' HP'GM I P8
4 J'GP M!N' P!N' XHP P' G'T J'GP M!N' M JG'\

? ' " P%G'M'Q O'7P99 '2'KM!'NP99'T J'NHMN8
"P%99'GN UP'M!O'] J KU9T'N ' " P%G'OPMO'M!O' NNP!
' ' I T'Q O'9 O'8 2'M I'NHP' P T' I M!'8S
? '2%99'GPP'NHMN'GN M QHN+
' HM+N'7 I'T J'7 GN' 7'O 77P P!KP'M!O'OPKMT'
"M P'7 99 PO'T J'GMO'GNPLG+
? ' 4 J'M P' P9K IP'H NHP
' ' ! ' IM!' P9GP8 M99%G' KHPP 9PGG' OM U' M!O'
OPMO9T+S
4 J'P9OPGN'OMJQHNP G'HM P'7 P O !PD'NHP I GP9 PG
#!O'OPGLP MNP9T'M P'OPMO+
? ' #T'G '2'NH !U
' "P'U! G'! N' HMN'HP'GMTG8 M!O' M !' N' G'
HMN' P'L PGP!N'JG'N 'H I+
"3 P T'A N9PGG+

' '177 KP

..' 3O I J!O' G'OPMO' IT'9 O+
' HMN%G'AJN' 'N 79P'HP P+S
4 J'9 OG'M!O'! A9P'7 P!OG'U! ' J' !NP!N+
XHMN'K I7 N'N 'NH G'Q PMN'OPKMT' HMT'K IP'
HM99'AP'MLL9 PO' O 'JG' P' 99' PG Q!
5J !Q'NHP'97P' 7'NH G' 9O' I MEPGNT+
'H I' J'MAG 9JNP'L P SD4 J'N 'T J' QHNG8
= !' ' '79<D 3 +
X NH'A N'M!O'GJKH'MOO N !'MG'T J'H ! J G'
"M P' I P'NHM!' IP NPO+S#99'7 P!OG'GHM99'NMGNP'
HP' MQPG' 7'NHP ' NJP'M!O'M99'7 PG'
HP'KJL' 7'NHP 'OPGP !QG+S 'GPP'GPP'[
? '#!O' IT'L '7 9' G'HM!Q%O [' ' ! '!'97P' '
XHT'GH J9O'M'O Q'M'H GP'M' MN'HM P'97P+
#!O'NH J'! 'A PMNH'MN'M99'\ H J%9N'K IP'! ' I P+
P P '!P P '!P P '!P P '!P P [S
- MT'T J'J!O 'NH G'AJNN !'' HM!U'T J'G +S
5 'T J'GPP'NH G'9 / U' !'HP S9 U SHP'9LG S
/ U'NHP P'9 U'NHP P[S' = '" -
"3' "P'7M !NG[S T'9 O' IT'9 O S
' PMU'HPM N8 2'L NHPP'A PMU[
"3' / U'JL' IT'9 O+
$' ' PW'! N'H G'QH GN8 1'9PN'H I'LMGG[HP'HMNPG'H I'
HMN' J9O'JL !'NHP' MKU' 7'NH G' N9QH'Ð 9O'
N PNKH'H I' JN'9 !QP +
"3' "P' G'Q !P' !OPPO+
' HP' !OP' G'HP'HMNH'P!OJ %O'G'9 !Q'
"P'AJN'JGJ L%O'H G'97P+
' PM'NHP I'7 I'HP!KP+S1J'L PGP!N'AJG !PGG'
2G'QP!P MG' P+' O P!OG' 7' IT'G J9'T J'N M !
= !'7 ' "' '
&J9P' !'NH G' PM9 I'M!O'NHP'Q %O'GNMNP'GJGNM !+
? '2'HM P'M'E J !PT'G 'GH N9T'N 'Q 8
T' I MGNP'KM99G' IPDS2' IJGN'! N'GMT'! +
($ HP' P QHN' 7'NH G'GMO'N IP' P' I JGN' APT8
LPMU' HMN' P'7PP9'! N' HMN' P' JQHN'N 'GMT+
HP' 9OPGN'HMNH'A !P' I GN' P'NHMN'M P'T J!Q'
HM99'!P P'GPP'G' IJKH'! '9 P'G'9 !Q+
= 4 & $2 ' '" "' A

' $'- %0' SNHP'P!O' 7' NHP' 9O'7 PN 9O' !'NHP' K LNJ PG+' HP'
6' I MQP' 7'NHMN'H 'R' G'NHP'GM I P'MG' 6'NHP'Q PMN'O I%G' I MQP'R' 7' MKAPNH+
'F ! ' HP' ! G' X P'HM P'L P JG9T'HMO' ! 'JGPO'
!'NHP'GM I P'GP!GP' 7' % 2
R' ' 2'- ' '' %' $ 0 @' '? GHJM' &PT! 9OG' H GP' NMGNP' !' !P'
A M!KH' 7'M N'P!N N9PG' H I' N 'NHP'Q PMNPGN'K !G OP MN !' HP!'HP' 77P G'M!' L ! !'
JL !'M! NHP 'A M!KH' AP9 P PG' NHMN' /PM 'MLL9 PG' NHP' PWL PGG !' ' ''2'N 'H G'
O 9'M!O' ! N' OP9 M+' M9 !P' NH' Q PMN' Q M NT' GMTG' !'K !N P N !Q'
NH G' L ! !'6'/PM 'HMG'EJGN' GPP!'H G' OMJQHNP 'HM!QPO'HM !Q'J!7 NJ!MNP9T' APP!'
MO I NNPO'N '9MNP'N 'L PGP P' HP ' "7P' NH JQH' N IP' P! JQH' N 'LJ! GH' NHP' LP
LPN MN ' 7' NHP' MK N8 AJN' P' HM P'! 'MJNH NT' HMNG P P'7 'GJLL G !Q'H G'O 9'
HM!QPO' M9G +R' M9 !P' HMG' M9G 'GH !'NHMN' NHP' PWL PGG !' MG' JGPO' AT' HMU'
GLP P' !' NHP 'L9MKPG' MG' M' O' 7'NP!OP !PGG+' 2N' I QHN' !OPPO' AP' HP P' P I L9 TPO

G MPNA !Q'9 UP'NHP' 6'PWKP99P!N' PNKH'R' 7 1NHP99 8 AJN' P' KM!! N'M O'NH !U !Q'
NHMN' HMUGLP P' !'NH G' L9MKP' I PM!N'N 'PWL PGG' M' LPKJ9 M 'NP!OP !PGG'OP PO'7 I'
/PM %G' K !7JGPO' PK 99PKN !' 7' H G' PQM O'7 'H G' L '7 99 P 'NHP' O 9' H I'
P' HM P'9 GN' M7NP 'NHP' NH O' MKN+' 2!'NHP' OPLNH' 7' H G' O GN PGG 'OJ !Q'NHP' GN I'
/PM 'GMTG' 6'- '7 9' M!O' U!M P'2'HM P' !P' LM N' !' IT' HPM N' NHMNG' G T' TPN'7 '
NHPP+R' #!O' ! ' HP!'NHP' 9MGN' M!O' OPPLPGN' KM9M I NT' HMG' 7M99P!' JL !'H I 'H G'
PWL PGG !G' GHMLP' NHP I GP9 PG' JN' 7' NHP' !O GN !KN!PGG' NH' H KH' HP' P G' NHP'
L PGP!N' M!O' NHP' LMGN 'M!O' OP9 M' G'H G'6'L '7 9+R' +
Ð $' HP' Q !M9' PMOG' $' - LP' I MOP' NHP'K PKN !+
F 2' % '(''%' ' HP']JM N 'HMG' NHP'9 !P' NHJG S
6' T' I MGNP 'KM99G' M!O'2' I JGN' ! N' GMT' ! +R
F H G' G'NHP' Q !M9' GNMQP' O PKN !+

' 2+

=' ' R ='#.' $ ' ' ' ' $ ' 3 ' '
.' .' .' .' @

' & (' CFG' F CAD?H' A>' @B O' F? ' ?' HACG' BKAH' CF ' K? ? G' JF OF' ' OGDC?HME' H GH AB ' #FG' OA@@GHC?CAD ' HAC' LG H ' @B -O?H ' F?PG' DG ?DNGN' CF ' K? ? G' KGDF?K ' ? ' BH HCGMM LMG' HAH GH G' ?HN' CFGDG>ADG' MG>C' C' ? ' CFGE' >ABHN' C' J CFABC' LG CAJ H ' ?' H MG' OAH-SGOCBDG' AH' C ' @G?H H ' ?HN' @KADC' F?(KGDG' FAJGPGD' FAJ ' LE' CFG' OAHCG C' CF?C' FG' J?' JGMM' ?OQB?HCGN' J CF' CFG' KDAKGDCE' A>' CFG G' EMM?LMG ' H' AM@ ?CAH ' JF OF' @KME' ?' GD G ' A>' ABHN ' A' BHH?CBD?M ' CF?C' ?HO GHC' @B O?H ' KDAF L CGN' CFG D' B G ' #FG' @AH(F' JD CGD ' AH' @B O' ?E ' ' ' ' ' " ;' CFG' HCGDP?M' .' .' HOMBN H ' ?' .' AD' F?DK' /CF ' OAH C H ' A>' CFDGG' CAHG ' J CFABC' CFG' HCGD-PGHC AH' A>' ?' G@ CAHG ' G KDG GN' H' CFG' @ANGDH' O?MG' LE' CFG' MGCCGD ' ' + ' ' . ' JABMN' >AD@' ?' @B O?M' KFD? G' G CDG@GME' N ? DGG?LMG' CA' CFG' G?D' !N@BHN ' KG?(H ' A>' GOM K G ' ? ' KADCGHC ' ?HN' KDAN G ' OA@K?DG ' CFG' N MAO?C AH' A>' GPGHC ' CFG' ' " ' ' 'K .' CA' CFG' BHH?CBD?M' ?HN' A>>GH PG' ABHN ' .' .' .' :

G' O?HHAC' ?PA N' G KDG H ' ?H' AK H AH' CF?C' %D ' . BDHGE' F? ' A@G-JF?C' APGD C?CGN' CF ' @?CCGD' C' ' HAC ' JG' CF H(' CF?C' !N@BHN' ' CFG' N MAO?C AH' A>' GPGHC ' CA' CFG' BHH?CBD?M' ?HN' A>>GH PG' ABHN X ' .' .' .' LBC' CF?C' H' F ' ?>>GOC?C AH' A>' FB@@ H ' CFG' ?@BC' ? ' !N ?D' GHCGD ' FG' G@KMAE ' BHH?CBD?M' ?HN' A>>GH PG' ABHN ' #FG' KAGC ' JG' DG?N ME' LGM GPG ' F?N' ?' KBDKA G' H' CF ' LBC' JG' NA' HAC' QB CG' GG' CF?C' CFG' N OADN?HC' ?DD?H G@GHC' A>' CFG' ?@BC' F? ' ?HE' DG>GDGHOG' CA' CFG' JADN ' JF OF' !N@BHN' F? ' SB C' BCCGDGN' H' CFG' J?E' A>' OA@K?D-AH ' G' KDGCGHN ' CA' LG' CF H(H ' ?MABN ' ?HN' CMG' @BM?CGN' CFAB FC ' JF OF' FG' G KDG G ' ?DG' OAHHGOCGN' J CF' NG? ' A>' JF?C ' BHH?CBD?M' ?HN' N AH?HC' H' CFG' ?@G' J?E' CFG' @B O?M' HACG ' JF OF' FG' BCCGD ' ?DG' ?M A' BHH?CBD?M' ?HN' N AH?HC' #FGE' ?DG' ?' KDGCGHNGN' ?OOA@K?H-@GHC' CA' F ' CFAB FC ' LBC' CFGE' ?DG' HAC' ?H' HCGDKDGC?C AH' A>' CFG@

') R =' ' ' 8 ":

J #FG' AAM' A>' $G?D ' J CF' DG>GDGHOG' CA' CFG' KBDKA G ' A>' CFG' ND?@?' F? ' LGGH' CFB ' NG OD LGN' LE' AMGD N G R ='#FG' AAM ' HA' OA@@C?CAD ' HAC' LG H ' @B -LB>>AAH' CA' @?(G' CFG' DABHNM H ' M?B F R FA' >ADOGN' OAHNG OGH AH' A>' F?(KGDG8' GH B ' CA' CFG' C? CG' A>' F ' ?BN GHOG' OOADN H ME' CFG' KAGC' KDGK?DG ' >AD' F ' HCDXNBOC AH ' JF OF' FG' HGPGD' NAG ' J CF' ?HE' A>' F ' OA@@AH' OMAJH ' ?HN' >AAM ' LE' LD H H ' F@' HCA' MP H ' OAHHG AH' J CF' CFG' K?CFA ' A>' CFG' KM?E' G' ' ?' JAHNGD>BM' ?' ODG?C AH' ?' ?M L?H I' . BC' CFG' KDA@HGHC' K?DC' JF OF' CFG' AAM' C?(G ' H' CFG' @A C' K? AH?CG' OGHG ' A>'$G?D R ='F ' J MN' L?LLM H ' ?HN' H K DGN' N AOE I' R JGDG' HAC' H' CFG' M FCG C' NG DGG' AKKA GN' CA' CFG' (HAJMGN G' A>' F?(KGDG8' ?BN GHOG' #FG' NA@G C O' >AAM ' J CF' JF OF' CFGE' JGDG' >?@M?D' JGDG' >AD' CFG' @A C' K?DC' M (G' CFG' >AAM' JF OF' D' #FA@? ' &GCDG' NG OD LG ' H' F ' = * CAK ? R =' G' A' CBN GN' J CF' JADN ' ?HN' ?E H ' LDAB FC' >ADCF' A' ABC' A>' C@G' ?HN' KM?OG ' CA' @?(G' KADC' ?HN' @ADG' M?B FCGD ' CF?C' FG' F@ GM>' J?' A>CGHGD' M?B FGN' ?C' CF?H' F ' SG C ' JGDG ' , GC' CFG' >AAM F' >GMMAJ' LDAB FC' ABC' HAJ' ?HN' CFGH' BOF' HN>>GDGHC' ?HN' DG? AH?LMG' CB>>' CF?C' FG' @?NG' CFG' KDAPGDL' C@G' JF OF' ?CF' ' G' CF?C' FAACGCF' A>C' ?C' CFG' M? C' F?MM' FC' CFG' @?D(I' . BC' C' @B C' HAC' LG @? HGN' CF?C' BOF' >AAM ' ? ' CFA G' JFA' JGDG' ?N@CCGN' CA' >?@M?D CE' J CF' CFG' D? OLMG' GHDE') ' CFG' F?B FCE' AM GE ' ?HN' CFG' KF MA-AKF O' ?HN' MG?DHGN' &ADG ' JGDG' PBM ?D' ?HN' M OGHC AB ' SG CGD ' AD' HO?K?LMG' A>' ?>>GOC AH' ?HN' N M (G' #FGE' JGDG' D?CG>BM ' HA' NABLC ' CA' CFA G' JFA' CDG?CGN' CFG@' J CF' (HNHG R CFGE' JGDG' LCCGD' ?HN' DGPGH G>BM ' ='?MM MOGH GN' I' ? ' CFGE' JGDG ' CA' CFA G' JFA' DGKBM GN' ?HN' CG? GN' CFG@' HCAHE' C?>>ADN ' H' F ' =' +BNG' A>' AHABD I' ?E ' FG' ='F?N' (HAJH' ?' DG?C' ?HN' OA@KGCGHCME' J G' @?H ' JFA' JABMN' @BOF' DG KGOC' ?HE' @?H' JFA' J?' AAN' CA' F ' >AAM I' FGH' D' #FA@? ' &ADG' DG HGN' CFG' F?HOGMMAD F K ' FG' ?PG' F ' >AAM' ?CC AH ' CA' CFG' $ADN' &?EAD' A>' $AHNAH ' ='BKAH' CF ' OAHN C AH ' CF?C' FG' FABMN' GPGDE' EG?D' J?C' BKAH' F@' CF?C' FABMN' F?PG' CF?C' A>>OG I' C' ' N>>OBMC' CA' LGM GPG' CF?C' KAAD' ?CC AH ' CD?H >GDDGN' EG?D' ?>CGD' EG?D' CA' ?' HGJ' @? CGD' J?' ?' F?KKE' J CF' CFG' $ADN' &?EAD' A>' $AHNAH' ?' J CF' CFG' FG?PGHME CG@KGDGN' F?HOGMMAD' JFA' KG?(H ' A>' >AAM ' H' GHGD?M' ?E ' = C' ' ?' DG?C' DGKDA?OF' CA' NA' ?HE' A>' CFG@' FBDC' AD' H$BDE I U

/' < => ;.' ?==@' ' AB' C '

' ' # '

FA' (HAJ ' LBC' ?CC AH' JABMN' F?PG' OMBH ' CA' F ' @? CGD' H' F ' @ ->ADCBHG ' M (G' CFG' AAM' A>' $G?D R

6' H '9MA J G' N ' JNEPGN'
" G' HPM N GN JKU' !EJ PG \R

FGH' AM GE' J?' N D?OGN' FG' OFGD FGN' F ' >AAM' ?COF' ?' AHG' A>' CFG' >GJ' OA@>ADC ' CF?C' JGDG' MG>C' CA' F @4 ?HN' ?C' M? C' GHC' F@' CA' F ' O?KD O AB ' @? CGD' ?' CFG' @A C' P?MB?LMG' KDG GHC' FG' OABMN' LG CAJ ' G' O?H' G? ME' @? HG' CF?C' H' CFG' GK?D?C AH' AM GE8' >AAM' =' @BOF' K H8N' ?J?E I' ?' $G?D8' N N' ,' HOG' @E' EABH ' M?NE8' A H ' HCA' D?HOG I' MM' A@@GD ' GHDE') 8' SG CGD' AH' CFG' ACFGD' F?HN' ?OOADN H ' CA' CD?N C AH ' F?CGN' ?DN H?M' AM GE ' G' J?' CFG' =' JGGC' ?HN' L CCGD' >AAM I' #FGDG' ' ?' PGDE' OBD AB ' CADE' H' ?' CD?OC' GHC CMGN' = #FG' G C' A>' HH G I' LE' "ALGDC' D@ H' V 476 ' JF OF' G FL C ' HAC' AHME' CFG' M OGH G' A>' CFG' NA@G C O' >AAM ' LBC' CFG D' HN>>GDGHOG' CA' CFG' OAH GQBGHOG ' A>' CFG D' >DGGNA@ ' C' J?' H' ?' M?CGD' KGD AN' CF?C' $?BN' DGPGH GN' F@ GM>' BKAH' DOF G' D@ CDAH ' G' OAKE' CFG' CADE' >DA@' = #FG' G C' A>' HH G I' J CFABC' ?LD N @GHC R

=' H' ?' C@G' ?KKA HCGN' CFG' (H ' V GHDE' CFG' ! FCF ' N HGN' ?C' HN AD' H' CFG' OF?KGM E?DN' ?C' ?DN H?M' AM GE8' ?C' CFG' C@G' JFGH' FG' J?' LB MN H ' CF?C' ?N@D?LMG' JAD(' A>' F ' CA@L4 ?C' JFA G' ?CG' CAAN' ?' HB@LGD' A>' KAAD' KGAKMG' CA' LG' GDPGN' A>' ?M@ ' JFGH' N HHGD' J?' NAHG' J CF H' ' ?HN' ? ' MM' A@@GD ' VCFG' SG CGD ' K? GN' LE ' CFGE' ?MBCGN' F@ ' C?(H ' F@' >AD' ?' JADCFE' KGD AH? G' JF OF' KMG? GN' F@' H' FG' OA@G ' ?HN' >HN H ' CFG' (H ' ?C' N HHGD' ?HN' CFG' O?D-N H?M' LE' ?CCGHN H ' CA' N D?OG' F@' CF?C' FG' HGPGD' MAPGN R ?DDE' V ?E ' FG ' MGHN' @G' CGH' KABHN 8 F?C' CA' NA' W8 ?E ' CFG' (H ' #A' K?E' CFDGG' AD' >ABD' A>' CFG' O?DN H?M8' ODGN CAD ' VQBACF' FG ' CA' JFA@' @E' JADN ' K? GN' ?HN' CFGE' ?DG' OA@G' HAJ' >AD' CFG' @AHGE 8 #F?C' CFAB' F?MC' MM 8 QBACF' FG ' DGN CAD ' A>' @ HG 8 V ?E ' CFG' O?DN H?M ' 8MM' PG' EABD' D?OG' @E' FG?N ' >' ?HE' @?H' O?H' SB CME' ? (' @G' ?' KGHHE 8 A' ' V ?E ' MM' MGHN' @G' CGH' KABHN ' ' >' ' K?E' C' HAC' JFGDG' CFAB' AJG C' C' 8MM' PG' CFGG' CJGHCE' >AD' C 8 %A' A 8 ?E ' CFG' (H ' #F?C' ' J MM' @E' MG G' V ?E ' CFG' O?DN H?M ' CFAB F' ' (HAJ' ' AJG' HAHG 8R ' CF' CF?C' FG' MGHN ' MM' CGH' KABHN ' MM' AG ' CA' CFG' ?CG ' ?HN' N CD LBCG ' C' CA' CFG' KAAD' ?HN' LDAB FC' CFG' G@KCE' L? ' #FGDG' ' CFE' L? ' ? ?H' V ?E ' FG ' CFE' ODGN CAD ' ?DG' ?C >GN' ?HN' @E' JADN' ABC' A>' N?H GD 8 F A' DGOG PGN' C' V ?E ' CFG' (H ' CFG' LDGJGD' AD' CFG' L?(GD' W8 G CFGD' ?DDE' V ?E ' MM' A@@GD ' LBC' O?DN H?M' ?H JGD' @G' AHG' CF H R CA' JFA@' NA C' CFAB' AJG' CFE' ABMW8 #A' +AN 8 QBACF' FG ' #A' JFA@' CFE' JG?MCFW8 #A' CFG' KAAD 8 ?E ' FG #?(G' CFE' >AD>G C' ?DDE' V ?E ' CFG' >AAM 4' AKGH' OAH>G AH' AKGH' KGH?HOG ' ' FG?N' ' CF HG ' >AD' CA' CFG' KAAD' ?C' CFG' ?CG ' K?N' F ' NGLC' JF OF' FG' E GMN ' ' NBG' ' AD' >' CFE' CAHE' FG?DC' J MM' HAC' E GMN' C' A' ?PG' CFE' FG?N' LE' NGHE H ' CFE' JADN' ?HN' MGHN' C' @G' #FAB' (HAJG C' ?@' KAAD' ?HN' F?PG' HG CFGD' JG?MCF' HAD' J C ' ?HN' JF?C' CFAB' MGHNG C' CA' CFG' KAAD' +AN' J MM' K?E' CFGG' CGH>AMN' G' ' @E' BDGCE' ?DDG C' F@' >AD' LE' @E' CDACF' F?H ' @G' JFGH' K?E' CFGG 8 #FG' (H ' M?B FGN' ?C' CFG' SG C' ?HN' A' N N' CFG' O?DN H?M' >AD' ?' FAJ' LBC' C' D GPGN' F@' CA' SG C' ?J?E' CGH' KABHN' A' , GC' JAD G' CD O(' CF?H' CF ' MM' A@@GD ' GDPGN' F@' ?>CGD' >AD' HNGGN' FG' OABMN' HGPGD' ?LNG' F@ ' ?HN' CFG' >AD>G CBDG' A>' F ' FG?N' F?N' M (G' CA' F?PG' LGGH' K?N' F?N' FG' HAC' KA AHGN' F@ GM> I

#FG' ?OC AH' A>' $G?D8' >AAM' H' A>>GD H ' CFG' (H ' F ' OA OA@L' ?KKG?D ' >' JG' @?E' DGME' BKAH' ?' CADE' H' GDD HOF G>8' ='$ >G' ?HN' %G?CF' A>' H ' F?DMG ' I' CA' F?PG' >BDH FGN' ?H' G ?@KMG' CA' DOF G' D@-CDAH ' R =' G' CAMN' CFG' (H ' VO?@G ' CFG' D C ' FG' O?@G' CA' OF?H G' O?K ' J CF' F@' ' FEW8 ?N' CFG' (H ' .GO?B G' VDGKM GN' DOFGG ' CFAB' F? C' GHC' CFG' D HOG' HCA' K? H ' >DA@' JFGHOG' FG' ' HGPGD' M (G' CA' DGCBDH 8 . BC 8 ?N' CFG' (H ' JF?C' J MC' CFAB' ?E' >' CFAB' GG C' F@' OA@G' L?O(' ? ?H' W8 &?DDE 8 ?E ' CFG' SG CGD' ' J MM' C?(G' A>>' CFG >AAM8' O?K ' JF OF' ' GC' AH' CFE' FG?N' >AD' GHN H '' F@' CF CFGD' ?HN' GC' C' BKAH' CFG' (H ' A>' K?H8' >AD' MGCC H ' F@' OA@G' FA@G' ? ?H 8I

G' F?PG' ?MDG?NE' F?N' AOO? AH' H' #JGM>CF' F?HN' ' , AB' $ (G' C' CA' @?(G' A@G' AL GDP?C AH ' AH' CFG' BLSGOC' A>' F?(KGDG8' >AAM ' K?DC OBM?DME' H' OAHHGOC AH' J CF' CFG D' C? G' A>>OG ' ?HN' JG' J MM' FGDG' @GDGME' OAKE' >DA@' %ABOG' CF?C' K?DC' A>' F ' NG OD KC AH' A>' CFG D' OA CB@G' JF OF' DGM?CG ' CA' CFG' OA OA@L' R =' ' FAAN' DG G@LM H ' ?' @AH(8' OAJM' JF OF' ?C' ?' PGDE' G?DME' KGD AN' C' J?' OGDC?HME' NG HGN' CA' C@C?CG ' OAPGDGN' CFG' FG?N' GHC DGME' ?HN' >GMM' NAJH' APGD' K?DC' A>' CFG' LDG? C' ?HN' FABMNGD ' C' J?' A@GC@G ' NGOAD?CGN' J CF' ? 8' G?D ' AD' GM G

?KGMM F? '?' @□ C?(GH CFGADE CF2C ?@GMAC□ '?' H?@G >AD □HOFG CGD' AHG A5' CFG KM?OG 'JFGDG DCFBD' FGMM' F□ '"ABHN' #?LMG' .BC CFG OAHCG C A5' %D?EJCAH8 'KAGG' FAJ 'B 'CF2C ?@GMAC□ '□H' A@GD GC-FDG' ?HN' CFG AD□ □H?M' □MMB CDC?CAD' A5' %D?ECAH' CFB 'NG OD□LG '□C R' =' .E' ABCF ?NLBDE□ 'CF2C ?@GMAC' ?' F□MM A5'?' @□MG OA@K? '?C CFG CAK'>ABD CDGHOFG 'O□DOM□H '□C' ?HN' LGCJ□ C GPGDE' A5' CFG@' ?H' G?DCFGH J?HN' CFG OAHCGHC 'A5' □C' J□CF□H'?LABC CJGHCE'?DDG '>BMM' A5' DB□H '?HN DGM□C' A5' AMN' LB□MN□H HC□QBG' DGKAD□' @?(G 'CF□' AHG' A> DCFBD8 'KM?OG 'A5' F□' "ABHN' #?LMG'? 'CFG'@ F□GDG' □H I' ?H' @GD CGMM 'B 'CF2C'□H' CFG @AAD 'HG?D' ?@GMAC M?D G' QB?H□C□G 'A5' GG G ?DG' LDGN 'LBC' □C' @?E'LG' NABLCGN' J□FGCFGD' CFG' M□HG' =' 8N' ND□PG' EG' O?O(M□H 'FA@G' CA' ?@GMAC I' F?' DG>GDGHOG' CA' CF□ '>?O□' ?DLBDCAH' BKKA G 'CF?C' A@G KDAPGDL□?M' KGGOF□H' CFG AMN' DA@?HOG 'A5' DCFBD' F?' BKKM□GN' CFG ?MMB □AH'A5' JF□OF JG' CF□H('CFGDG □ 'M□CCMG NABLC

U@ ' R %$' ' 3 ' ' ' ' ' # 'L ' " .2' YO

?DD□ AH'□H'F□ 'NG OD□KC□AH' A5' iH M?HN'KBLM□ FGN' J□CF' AM□H FGN8' FDAH□OMG' □PG 'BKAH'CFG' JFAMG'CFG @A C @□HBCG'?HN' ?C□ ?C□CADE ?OOABH□' A5' CFG C?CG' A5' AO□GCE□H' iH M?HN' □H' F?(KGDG8 'G?ME EG?D ' F?(KGDG' KDAL?LME' JDACG >DA@' F□ 'AJ1H' AL GDP?C□AH' JFGH' FG NG OD□LGN' CFG

6'APQQM G' H ' N1' M iQ' KPG
N UP' i'NHP 'iJ1A%O'MiO'I N7PO'AM P'M I G'
- iG' OPi'L KUG'iM9G'GL QG' 7' GPIM T+R

.BC'CFGDG'?DG' A@G'PGDE'DG@?D(?LMG' □@M?D□CG'□H' ?DD□ AH8'NG OD□K-C□AH' R

=' BOF' ?'?DG' □NMG' LG ?D ' CFDAB F' CFGD' AJ1H' NG>?BMC' ?DG' A5' CJA' ADC ' ?1N' OAHC□HBG' CFG□D' G C?CG' G□CFGD' LE' O? B?1M' AD' @GDG' PAMBHC?DE' @G?H ' CFA G' CF?C ?DG' BOF' LE' O? B?1M' @G?H ' ?DG □H' CFG LG □HH□H 'SB CME'CA' LG' DG>GDDGN' G□CFGD' CA' CFG >□D C' AD' GOAHN' ADC' A5' KAAD' ?>ADG' @GHC□AHGN' VCFG' KAAD' LE' □@KACGHOE' ?1N' CFG' KAAD' LE' O? B?MCE ' LBC' NG GHGD?C□H ' □HCA' CFG' CFD□>CMG ' ADC' CFGE' NA' J1F?C CFGE O?1H' CA' OAHC□HBG' CFG□D' @□ GDE' ?1N' J□CF' BOF□ □@KGN□@GHC' ? ' ?@GMAC' A5'CFG' AMN' DA@?HOG R

%D?ECAH'□H' F□ ' =' AME ML□AH i' F?' CFG'>AMMA J□H ' DG>GDGHOG' CA' CFG

6' / UP' M1P9 N' HNM'L9MKP' MG' P P;TPN' PI i%D

)□ ⅃AH 'I R
6'#¡OTPN?'GMT'ATNTG J9P'?'HM P'i 'GM9N'AMK i
P'i 'K UpipT'AT H GNP'K 9 LLPG N 'IMUP+R
>' GD0E'?HN'#ED⅃F□CC'JGDG'BHQBG□AH?LME'D□ FC'1G' FABMN'F?PG'HA'
N□>>□0BMCE'□H'G KM?□H□H'CF?C'CFG D '□H' F?(KGDG'JFA'KBG'CFG
GGW'=□# CFG K?CG'?M□PGI'⅃?'?'0AA(' ?HN'CF□'□HNGGN'GG@'CFG
H?CBD?M'□HCGDKDGC?C□AH'A>'CFG'GGDD?'>DA@'CFG'0AHCG'(.BC'%ABOG'
@?HC?@'CF?C'$'D ', % 2'?HN'CFG='#BDH?@GHC'
A>'#ACCGHF?@'I'⅃?'?'MCCMG'0AO('#FG'0AO(HGE'CFGH'A>'$G?D8'>AAM'
@?E'LG'CFG'$AHNAHGD'⅃FA'LADG'CF?C'H?@G'A>'0AHCG@KC'LG>ADG'CFG
C□@G A>'F?('KGDG' H'#⅃GM>CF' □ FC'CFG'OMAJH'?E'=';'?@'?>D?N
CF□' DG?C'MBLLGD'CFG'JADM'⅃□MM'KDAPG'?'OAO(HGE'I'?HN' F?BOGD'□H
□H'OAH>□D@?C□AH'A>'CF□'AK□H□AH'?'M□HG'>DA@'?HN'MA⅃@?H8'
F□'='GPG8'#?MG I'?KKG?D'CA'G@KMAE'□C⅃□CF'?'□@□M?D'@G?H□H R
BMMGD'□H'F□'='ADCF□G I'□PG'B'C⅃A'G K M?H?C□AH'A>'CFG CGD@ R
='2+' HG'OA?(8N'AD'OAO(GD8N'@?NG'?'⅃?HCAH'AD'HG CMG OAO('A>'
NGM□O?CGME'LDGN'?HN'LDAB F□'BK'A'CF?C'⅃FGH'DAJH'@GH'AD'⅃A@GH'
CFGE'0?H'GHNBDG'HA'F?DN F□K'HAD'OA@KADC'⅃□CF'K?□H C?(□H
='2' HG'BCCGDME'□ HADZHC'A>'FB L?HNDE'?HN'FB J□>GDE' BOF'?'□'
KD?O□'GN'□H'CFG'OABH□DE'A'CF?C'CFGE'@?E'LG'KGD'B?NGN'?HECF□H'
?LABC'DBD?M'OA@@AN□CG'?HN'CFG'AD□'□H?H'CFGDGA>'?HN'CFG'C?MG'A>'
CFG'O□C□TGH8'AH'⅃FA'(HGJ'HAC'CFG'M?H'B?'G A>'CFG'OAO('LBC'O?MMGN'
□C'HG□'F□H'□'0A@@AHME'(HAJH'I
#FG'C?MG'A>'CFG'OAO('HG□'F□H'□'D?PGME'□PGH'LE'&□H'F□GB'□H'
F□'='+B□NG'□HCA'CFG'#AH'BG'I'?HN'□'DGKG?CGN'□H' BOOGGN□H'
N□OC□AH?D□G' F?CGP□D'LG'CFG'AD□'H'CFGDG'O?H'LG'HA'NABLC'CF?C
$AHNAH'J?'?HO□GHC□E'(HAJH'LE'CFG'H?@G'A>' AO(HGE' BMMGD'?E'
,'C'□'@AG'CF?H'>ABD'FBHND□N'EG?D'AMN'>AD'JFGH' B F'.□'AC'
?NNGN'?DC□>O□?M'>ADC□>O?C□AH'CA'CFG'H?CBD?M' CDGH CF'A>'F□'0?CMG'?C
.BH?E'□H' B>>AM('FG' ?PG'ABC'CF□'DFE□G'CFGDGD□H'P?BHC□H'□C'>AD'
□@KDG H?LMG R
'XP P'?'i'IT'KMGN9P'7 J1Q□T
L i'NHP' p' 7'XM pipT
2' J9D'ip'KM P'7 'NHP' iQ' 7' KUpipT%S
@G?H□H'CFGDGLE' □H ' MGHCE'CFG GOAHN'CFGH'KG?OG?LME'KA G GN'
A>'$ANHAH'JF□M C A@G'ACFGD'KM?OG'N□N'DG □ C F□@'CFAB F'?>CGD'
'J?DN'FG' A'FB@LMGN'CF□' B F'CF?C'FG'J?'>?□H'J□CF'M?D G'B@'A>
@AHGE'?HN'KMGN G'>AD'F□'MAE?MCE'CA'DGNGG@'CF□'F□'0?CMG'>DA@'
'%*
H'CFG'?HO□GHC'L?MM?N'A>','#FG'#BDH?@GHC'A>'#ACCGHF?@'I'KD□HCGN'
LE' GD0E'□H'F□','"GM□QBG I'⅃G'F?PG'CFG G M□HG
6'#'N'NHMM'7PGN'NHPT' P'GP TO' NH'M' TKHP'M MT+
3 P T'TT P'MiO'TT P'HMO'M'K UPiMT+R
GD0E'□H'F□'+MA ?DE' ?K'=' A(GH?E' GG@'CA'LG'?'N□@□HB□PG'>AD
0AA(' >DA@'CMG'$?□H'0AQB□H?□AD'0AQB□H?□B' #FG'@G?H□H
GG@'CA'LG'CF?C'IPGDE'>PG'>PG'?HN'>PG'F?N'?'0AA('AD'0BMM□AH'CA'?CCGHN'
CFG@'I' #ED⅃F□CC'VHACG'AH',' ?HCGDLBDE'#?MG I'PGD G /274'0□CG'
□H'OAH>□D@?C□AH'A>'CF□'AK□H□AH'?'M□HG'>DA@' MA⅃@?H8'
)□ ⅃AH 'I R
6'#¡OTPN?'GMT'ATNTG⅃9P'?'HM P'i 'GM9N'AMK i
P'i 'K UpipT'AT H GNP'K 9 LLPG N 'IMUP+R
>' GD0E'?HN'#ED⅃F□CC'⅃GDG'BHQBG□AH?LME'D□ FC'1G' FABMN'F?PG'HA'
N□>>□0BMCE'□H'G KM?□H□H'CF?C'CFG D '□H' F?(KGDG'⅃FA'KBG'CFG
GGW'=□# CFG K?CG'?M□PGI'⅃?'?'0AA(' ?HN'CF□'□HNGGN'GG@'CFG
H?CBD?M'□HCGDKDGC?C□AH'A>'CFG'GGDD?'>DA@'CFG'0AHCG'(.BC'%ABOG'
@?HC?@'CF?C'$'D ', % 2'?HN'CFG='#BDH?@GHC'
A>'#ACCGHF?@'I'⅃?'?'MCCMG'0AO('#FG'0AO(HGE'CFGH'A>'$G?D8'>AAM'
@?E'LG'CFG'$AHNAHGD'⅃FA'LADG'CF?C'H?@G'A>'0AHCG@KC'LG>ADG'CFG
C□@G A>'F?('KGDG' H'#⅃GM>CF' □ FC'CFG'OMAJH'?E'=';'?@'?>D?N
CF□' DG?C'MBLLGD'CFG'JADM'⅃□MM'KDAPG'?'OAO(HGE'I'?HN' F?BOGD'□H
□H'OAH>□D@?C□AH'A>'CF□'AK□H□AH'?'M□HG'>DA@'?HN'MA⅃@?H8'
F□'='GPG8'#?MG I'?KKG?D'CA'G@KMAE'□C⅃□CF'?'□@□M?D'@G?H□H R
BMMGD'□H'F□'='ADCF□G I'□PG'B'C⅃A'G K M?H?C□AH'A>'CFG CGD@ R
='2+' HG'OA?(8N'AD'OAO(GD8N'@?NG'?'⅃?HCAH'AD'HG CMG OAO('A>'
NGM□O?CGME'LDGN'?HN'LDAB F□'BK'A'CF?C'⅃FGH'DAJH'@GH'AD'⅃A@GH'
CFGE'0?H'GHNBDG'HA'F?DN F□K'HAD'OA@KADC'⅃□CF'K?□H C?(□H
='2' HG'BCCGDME'□ HADZHC'A>'FB L?HNDE'?HN'FB J□>GDE' BOF'?'□'
KD?O□'GN'□H'CFG'OABH□DE'A'CF?C'CFGE'@?E'LG'KGD'B?NGN'?HECF□H'
?LABC'DBD?M'OA@@AN□CG'?HN'CFG'AD□'□H?H'CFGDGA>'?HN'CFG'C?MG'A>'
CFG'O□C□TGH8'AH'⅃FA'(HGJ'HAC'CFG'M?H'B?'G A>'CFG'OAO('LBC'O?MMGN'
□C'HG□'F□H'□'0A@@AHME'(HAJH'I
#FG'C?MG'A>'CFG'OAO('HG□'F□H'□'D?PGME'□PGH'LE'&□H'F□GB'□H'
F□'='+B□NG'□HCA'CFG'#AH'BG'I'?HN'□'DGKG?CGN'□H' BOOGGN□H'
N□OC□AH?D□G' F?CGP□D'LG'CFG'AD□'H'CFGDG'O?H'LG'HA'NABLC'CF?C
$AHNAH'J?'?HO□GHC□E'(HAJH'LE'CFG'H?@G'A>' AO(HGE' BMMGD'?E'
,'C'□'@AG'CF?H'>ABD'FBHND□N'EG?D'AMN'>AD'⅃FGH' B F'.□'AC'
?NNGN'?DC□>O□?M'>ADC□>O?C□AH'CA'CFG'H?CBD?M' CDGH CF'A>'F□'0?CMG'?C
.BH?E'□H' B>>AM('FG' ?PG'ABC'CF□'DFE□G'CFGDGD□H'P?BHC□H'□C'>AD'
□@KDG H?LMG R
'XP P'?'i'IT'KMGN9P'7 J1Q□T
L i'NHP' p' 7'XM pipT
2' J9D'ip'KM P'7 'NHP' iQ' 7' KUpipT%S
@G?H□H'CFGDGLE' □H ' MGHCE'CFG GOAHN'CFGH'KG?OG?LME'KA G GN'
A>'$ANHAH'J□M C A@G'ACFGD'KM?OG'N□N'DG □ C F□@'CFAB F'?>CGD'
'J?DN'FG' A'FB@LMGN'CF□' B F'CF?C'FG'J?'>?□H'J□CF'M?D G'B@'A>
@AHGE'?HN'KMGN G'>AD'F□'MAE?MCE'CA'DGNGG@'CF□'F□'0?CMG'>DA@'
'%*
H'CFG'?HO□GHC'L?MM?N'A>','#FG'#BDH?@GHC'A>'#ACCGHF?@'I'KD□HCGN'
LE' GD0E'□H'F□','"GM□QBG I'⅃G'F?PG'CFG G M□HG
6'#'N'NHMM'7PGN'NHPT' P'GP TO' NH'M' TKHP'M MT+
3 P T'TT P'MiO'TT P'HMO'M'K UPiMT+R
GD0E'□H'F□'+MA ?DE' ?K'=' A(GH?E' GG@'CA'LG'?'N□@□HB□PG'>AD
0AA(' >DA@'CMG'$?□H'0AQB□H?□AD'0AQB□H?□B' #FG'@G?H□H
GG@'CA'LG'CF?C'IPGDE'>PG'>PG'?HN'>PG'F?N'?'0AA('AD'0BMM□AH'CA'?CCGHN'
CFG@'I' #ED⅃F□CC'VHACG'AH',' ?HCGDLBDE'#?MG I'PGD G /274'0□CG'
□H'OAH>□D@?C□AH'A>'CF□'AK□H□AH'?'M□HG'>DA@' MA⅃@?H8'
□H'CFG'?HO□GHC'L?MM?N'A>','#FG'#BDH?@GHC'A>'#ACCGHF?@'I'KD□HCGN'
LE' GD0E'□H'F□','"GM□QBG I'⅃G'F?PG'CFG G M□HG
6'#'N'NHMM'7PGN'NHPT' P'GP TO' NH'M' TKHP'M MT+
3 P T'TT P'MiO'TT P'HMO'M'K UPiMT+R
GD0E'□H'F□'+MA ?DE' ?K'=' A(GH?E' GG@'CA'LG'?'N□@□HB□PG'>AD
0AA(' >DA@'CMG'$?□H'0AQB□H?□AD'0AQB□H?□B' #FG'@G?H□H
GG@'CA'LG'CF?C'IPGDE'>PG'>PG'?HN'>PG'F?N'?'0AA('AD'0BMM□AH'CA'?CCGHN'
CFG@'I' #ED⅃F□CC'VHACG'AH',' ?HCGDLBDE'#?MG I'PGD G /274'0□CG'
□H'OAH>□D@?C□AH'A>'CF□'AK□H□AH'?'M□HG'>DA@' MA⅃@?H8'
□H'CFG'?HO□GHC'L?MM?N'A>','#FG'#BDH?@GHC'A>'#ACCGHF?@'I'KD□HCGN'
LE' GD0E'□H'F□','"GM□QBG I'⅃G'F?PG'CFG G M□HG
6'#'N'NHMM'7PGN'NHPT' P'GP TO' NH'M' TKHP'M MT+
3 P T'TT P'MiO'TT P'HMO'M'K UPiMT+R
GD0E'□H'F□'+MA ?DE' ?K'=' A(GH?E' GG@'CA'LG'?'N□@□HB□PG'>AD
0AA(' >DA@'CMG'$?□H'0AQB□H?□AD'0AQB□H?□B' #FG'@G?H□H
GG@'CA'LG'CF?C'IPGDE'>PG'>PG'?HN'>PG'F?N'?'0AA('AD'0BMM□AH'CA'?CCGHN'
CFG@'I' #ED⅃F□CC'VHACG'AH',' ?HCGDLBDE'#?MG I'PGD G /274'0□CG'
□H'OAH>□D@?C□AH'A>'CF□'AK□H□AH'?'M□HG'>DA@' MA⅃@?H8'
LG□H'?D?TGN'CA'CFG'DABHN I' #ED⅃F□CC'□H GH□AB ME' B G C'CF?C'CFG
?BCFAD'A>'CFG G'DFE@G'=';□H O?MMH'$AHNAH' AO(GHGE'@□ F□KA □LME
?MBNG'CA'CF?C'□@?'□H?DE'OABHCDE'A>'□NMGHG'?HN'MB BDE'⅃F□OF'J?'
?HO□GHC□E'(HAJH'LE'CFG'H?@G'A>' A(?□ HG'AD' AO? HG'?'H?@G
⅃F□OF' □O(?F?'FAJH'CA'LG'NGD□PGN'A>' AQB□H?' G' F?'CFGDG
KBLM□ FGN'?H G'OGMMGHC'NG'OD□KC□AH'A>'CFG'OABHCDE'A>' A(?□ HG'□H'AMN
?MMBNG'CA'□C R
'-M G'PGN'L ⅃'⅃I' KHP'JI'LM G'OP KMQIP+%
#FG'>G'C□P?M'A>' AO? H?'?C ?KMG 'NG ODL□GN'LE' GE MGD'?KKG?D'CA'
F?PG CFG ?@G >ABHN?□AH' C' KDAL?LME' OA@@GHOGN' BHNGD'CFG
AD@?H' APGDH@GHC I
'XHPI'HPILP'G'GL IIP
3IQ9MIO%G O IP8%
=' R='S$ ' [J' 'O '$ [' 7'BK+
'222+
#□ 'KDAKFGOE□' HAC'>ABHN'□H'CFG'QB?DCA '?HN'□C ⅃?'CFGDG>ADG
A@G⅃F?□ F? C□ME'OAHOMBNGN'CF?C□C ⅃?' ?H'□HCGDKAM?C□AH' A>'CFG
K M?EGD ' C□'>ABHNGN'BKAH'?'KDAKFGOE'□H' F?BOGD'⅃F□OF□'□'CFB'
QBACGN'□H' BCCGHF?@8'= D□'A>' AGCDEI'V561'R
6 X HPI'7M NH'7M 9G' I'L PGNPG'GM G
#IO'9 OG% APGNG'M P'H 9OPI'7 '9M G
#IO' AAP T'G'MMIP'7 'LJ KHMGP+
#IO'9PKHP T'7 'G 9MKP
HPI'GHM99'NHP' PM9I' 7'#9A i'
P'A J9HN'K 'Q PMN'K I7JG i+R
CA'BKKDG 'CFG@I
#FG'>G□ HGN'@?NHG 'A>'iN ?□'? B@G'CFDAB FABC'CF?C'FG'DGKDG-
GHCGN'?'NG@AH□?O' □ '>□D C G KDG □AH'□ '=' ⅃?E' CFG'>ABN'□CFG
>AMMA⅃'@G I'?HN'□H'CF□'?HN'CFG BL GQBGHC'OGHG'CFG' ?@G'□NG?□'
OAH C?HCME'DGKG?CGN' = FA' □PG'?HEC□H'CA'KAAD'#A@'⅃FA@'CFG
>ABN'>GHN'F?CF'MGN'CFDAB F'>DG'?HN'CFDAB F'>M?@G WIR'='#F□'□'CFG'>ABN
>GHN' MLLGDC□ □LLGC IR = G?GD' @AM(□H'KG?OG'CFAB'>ABN'>GHN IR'
= #FG'>ABN'>GHN'F?BHC'⅃AHNGD'□GHC'KBC'M?H B?'G□H'CFG'@ABCF'A>'?'
KGDG'F?'J□CF'⅃AHNGD>BN'SBN @GHC'KBC'M?H B?'G□H'CFG'@ABCF'A>'N ?D'
CF?C'J?'□H'A@G'NG DGG'>?@□M?D'CA'F□'>?BN□GHOG' H'CFG'EG?D'473

6' HP'L iKP' 7OM UipGG G'M'QPiN9PlMi8
?E R'
?HN' F?(KG?DG I ?HN' J.GGH' LGGH' J.GH' ?HN' B GN' LE' GEJAAN' *N?MM'
R " DJ ;' ' " DR'H' JF=OF' GH G '.' B GN' LE' &'?N' #A@' ?HN' A'.'
CF?C A>' ?'>ABDCF' @?MM(.H'?M A' @GHC.AHGN' C'E ?D HGC' FGH' FG
#FG' H?@G'.A>'CFDGG' A>'CFG G>.GHN'?DG B GN' LE' &'?N' #A@'?HN' A'.'
@GDOG' #FGDG' O?H' LG' HA' NABLC'CM.GDG>ADG'CF?C CFG JADN'.'KBDG' ? AH'
?HE' C?M.?H' JADN' F'?N' LGGH'.HCDANBOGN'G OGKC' BOF' ? ' DGM?CGN'CA' OA@-
.C ' @BOF' CA' LG' NABLMGN' JFGCFGD' ?C CFG C@G' JFGH' GEJAAN' JDACG'
LAA(' .H' AAN ' AD' CJGHCE' F.MM.H ' .H' M?HN ' AD' J.DF' FAB G-
FAMNGD' CA' LG' ?MMAJGN' LE' CFG SB C.OG ' J.MM' LG' LABHN' .H' DGOA H.T?HOG
CA' DGC?.H' F.@' .H' F.' GDP.OG' >AD' AHG' JFAMG EG?D' >'FG LG' C?(GH CFG
1/ ⁴ 22⁴ ' -'

CF.' B G' A>'.C ' .KDALL?LME' NGD.PGN' >DA@' CFG DG@?D(?LMG' JADN ' B GN' LE'
FD. C' AH' CJA' AOO?.AH ' V&?D(' ⁴ +GC' CFGG LGF=HN' $B(G' ⁴ +GC' 6 ' <
@G' ?C?H ' $ 1KK?DGHCME' ?' 0A@@AH' KF?? G ?@AH ' CFG 0G J ' H' CFG
+GD@?H' PGD .AH' A>' CFG #G C?@GHC' LE' $BCFGD' $B(G' P' 6' ' DGHNGDGN'
$ ' , , $ '($ ' C ' HAC BHM.(GME'CF?C CF.' CG C @?E' F?PG
LGGH' ?NAKCGN'.HCA' CFG >AD@ ' >AD' G ADO. H ' KGD AH ' BKKA GN' CA' LG'
KA G GN' ?HN' CFB ' .C O?@G '.HCA' 0A@@AH' B G
=' %D' 0AFH AH'.@? .HGN' FG F?N' >ABHN' CFG JADN' B GN' H ?H' AMN' KD.HC
0AK.GN' LE' G?DHG >DA@' ?H' ?HO.GHC' MMB@ .H?CAH' DGKDG GHC.H ' CFG F?D-
DAJ.H ' A>' FGMM' #FG' NGP.M ' DGKDG GHCGN' ? ' LMAJ.H ' ?' FADH' >DA@'
JFO.F' KDAOGGN ' CFG JADN' ' #F=' @?E' LG' .HCGHNGN' @GDGME' CA'
G KDG ' LE' MGCCGD ' CFG ABHN' >DA@' CFG FADH' .>'.C DG?MME' LG' ?' JADN ' .C
J?E' CA' CFG KM?OG' A>' F=' L.DCF I' ?DD. AH' F?' ' NG ODILGN' CFG KDG-
P.AB ' C?CG A>'CFG M?J' J.CF F=' 'OF?D?OCGD' C.O' >ADOG ?HN' .@KM.O.CE' LBC'
J.CF' @?MM' MG?H.H ' CA' CFG @GOO>BM' .NG' R ='#FG' KBH' F@GHC' CF?C ' '
ADN?.HGN' >AD' CF=' (.HN' A>' KGAKMG ' ?NN.H ' J.FGDG>ADG' CFG GHN' @B C' HGGN '
DG>D?.H' CFG@' >DA@' CFG.D' ?NN.H ' J.FGDG>ADG' CFG GHN' @B C' HGGN '
LG' @?DC?M' M?J'CA'LG' G GDO. GN' BKAH' CFG@' ? ' BKAH' CF.PG ' DALLGD '
NG K. GD ' A>'?MM' M?J ' ?HN' GHG@.G ' CA' CFG OA@@AH JG?MCF ?HN' JGM>?DG
Q>'CFG' M?HN' F?C' HAC?LMG' DALLGD.G ' K.M>GD.G ' @BDNGD ' D?KG ' ?HN'
CG?M.H ' A>' EABH ' OF.MNDGH' LBDH.H ' LDG?(H ' ?HN' N> BD.H ' CFG.D'
M.@L ' CA' @?(G CFG@' K.C<BM' .H' CFG . FC A>' CFG KGAKMG' ' HGGN' HAC' CA'
DGFG?D G' LBC' >AD' CFG.D' .NMG DA BG.H ' ?LABC' CFG' OABH<DE' CFG' M?J'
ADN?.HGC' CF=' @?HHGD' A>' OADDGOC>AH' #FG' DA' BG' LG.H ' ?KKDGFGHNGN'
OA@@.CCGN' CA' KD' AH ' ?HN' CD.GN' .H' CFG HG C ? .TG ' VJ.FGCFGD' CFGE' LG
A>' ?AM' NGM.PGDE' AD' G .AH ' A>' CFG KG?OG ' .>' FG' F?KKGH' CA' LG' OAH-
P.OCGN' >AD' ? P? ?LAHN' G.CFGD' LE' .HQBG C' A>' A>>.OG AD' CFG CG C.@AHE' A>'
CJA' FAHG C ?HN' ODGN.LMG' J.CHG G ' BKAH' CFG.D' A?CF ' FG . ' CFGH
.@@GN?CGME' ?NSBN GN' CA' LG' D.GPAB ME' J.F.KKGN ' ?HN' LBDHGN' CFDAB F
CFG' D. CMG' A>' CFG D. FC G?D' J.CF' ?' FAC' .DAH' A>' CFG 0A@K? ' A>' ?H' .HOF
?LABC' ? ' ?' @?H>G C?C.AH' A>' F=' J.O(GN' M>G' ?HN' NBG' KBH' F@GHC'
DGOG.PGN' >AD' CFG' ?@G' HN' CF=' $BN @GHC' . ' CA' LG' G GOBCGN' BKAH '
F.@' G ODKC' A@G' FAHG C' KGD AH' JADCF' >PG' KABHN ' .H' CFG' QBGGH@ '
LAA(' .H' AAN ' AD' C.JGHCE' F.MM.H ' .H' M?HN ' AD' A@G' D.OF' FAB G-
FAMNGD' CA' LG' ?MMAJGN' LE' CFG' SB C.OG ' J.MM' LG' LABHN' .H' DGOA H.T?HOG
CA' DGC?.H' F.@' .H' F=' GDP.OG' >AD' AHG' JFAMG EG?D' >'FG LG' C?(GH CFG
1/ ⁴ 22⁴ ' -'

O '.HP%G KM99%O'.M!O' MH.R.S
FG B G ' H?@G ' J.F=OF' ?DG' ?M A' >ABHN' .H' ?D HGC' J.FGDG &.ANA' J?'
0?MMGN' CFG KD.HOG' A>'?MM' ACFGD' NGP.M ' V GG' MMB CD?C.AH' ;'K' 326
') R='& ' $;O $;' ' $ R/
G' F?PG' LGGH' >?PABDGN' J.CF' CFG >AMMA J.H ' HACG' J.F=OF' .MMB CD?CG '
CF=' K? ? G' ?HN' CF?C.H' &'?OLGCF R
6'¥# !N'NHPP' NKH[%'HP' JIL 7PG' !T !'K PG.RS
LE' &.D' # ' "ANN ' BD' DG?NGD ' J.MM' LG' D?C'>GN' LE' CFG' PGDE' F?KKE
G KM?H?C.AH' A>' ?' @?CCGD' J.F=OF' F?' .F=CFGDCA' LGGH' KGDKMG GN' ?HN'
BHOGDC?.H
=' #FG' JADN' ' AOOBD ' C J.=OG' .H' F?(KG?DG ' ?HN' ' HAC' >ABHN' .H'
CFG' JAD(' A>' ?HE' ACFGD' AMN' !H N. F' ?BCFAD' HAD' ' .C' OAHC?.HGN' .H' ?HE'
?HO.GHC' N.OC.AH?DE' C F?' ' LGGH' BKKA GN' CF?C.C ' KD.HCGN' LE' @. C?(G
>AD' 3 ;'?HN' A@G' 0A@@GHC?CAD ' KDAKA G CA' DG?N' ' 0 J ;'CF?C
CDGG'LGH ' FGMM' ? ' ?' 0F?D@' ? ?.H C'CFG' KA'J.GD' A>' J.COFG ' ? ?.H C' J.FA@'
CFG' JADN' ' B GN' FAGPGD' ' 0AHPGD ?HC' J.CF' CFG' NGC?M ' A>' GGHN '
?' JAD(' CFDAB F' CFG' KD.HC.H KDG ' J.MM' LG' ?C. C'?C CFG' JADN' ' ;
;'_8K*' CF?C.C J? ' J.GMM' BHNGD CAAN' ?C CFG' C.@G' FGHGPGD' ?
JADN' A00BD ' H' J.D.CH ' J.F=OF ' ' HAC' BHNGD CAAN' LE' CFG' 0A@KA .CAD'
FG ' H' CFG' F?L.C' A>' KD.HCH ' H' .C' KM?OG' A@G' JADN' HG?DG C' H'
?KKG?>?HOG' HA' @?CCGD' J.FGCFGD.C' @?(GH G A>'.CFG' K? ? G AD' HAC'
J ? ' N. 0APGDGN' AH' CFG' OAH>G .AH' A>' CFG' K?DCG ' OAHOGDHGN ' ?HN' CFG
OAHCD.PGD ' A>' .C' NG GDPGNME' KBH' FGN I' FGH' N ?D' ?E ' CF?C CFG
>ABM' >GHN' = F?CF' M?N' (H.PG ' BHNGD' F=' ' K.MA J ' ?HN' F?MCGD ' H' F=' ' KG J I'
F?(KGDG' DGKG?C ' AHG' A>'CFG' O.DOB@ C?HOG ' A>'CFG.@KA CBDG' NG ODILGN'
C@G ?' HGJ' F?MCGD' ?HN' C.A' LM?NG ' A>' (H.PG ' N.N' MG?PG' CFG ?@G BKAH'
CFG ?MMGDE' >MAD' H' FGD' @? CGD8 ' FAB G' ' DG?? G?DOF J? ' @?NG H'
CFG FAB G CA' (HA.J' FA.J' CFG ?N' F?MCGD' ?HN' (H>G LM?NG ' O?@G CF=CFGD'
C.MM &.?' &.?HE' H' FD ' HG C >C' ?N' CF?C.C J ?' DGKADCGN' CF?C CFG NGP.M'
M?N' CFG@' H' CFG' ?MMGDE' CF?C' A@G' A>'CFA G CF?C' JGDG' KA G GN' @= FC
G.CF=GD' F?H ' CFG@ GMPG ' J.CF' CFG' F?MCGD' AD' (MM' CFG@ GMPG ' J.CF' CFG
LM?NG I' H' ?D HGC' JG' >HN' CF?C =' D?C'DGCCA' MLGDN= LLC' ALGD
N.N?HOG ' #AOAL?CCA ' JGDG' >AB.' NGP.M ' A>'CFG' DABHN' AD' @ADD.OG
#FG G'>AB.' F?N' >ADC ? ' C?HC ' BHNG.CFG@'? ' CFG@ GMPG ' NA' OAH>G I'
#FG' H?@G ' A>'CFDGG' A>' CFG G >.GHN ' ?DG B GN' LE' &'?N' #A@ ' ?HN' A'.'
CF?C A>' ?'>ABDCF' @?MM(.H'?M A' @GHC.AHGN' C'E ?D HGC' FGH' FG
?E R'
?HN' F?(KG?DG I ?HN' J.GGH' LGGH' J.GH' ?HN' B GN' LE' GEJAAN' *N?MM'
R " DJ ;' ' " DR'H' J.F=OF' GH G .' B GN' LE' &'?N' #A@' ?HN' A'.'
@GDOG' #FGDG' O?H' LG' HA' NABLC'.MCDGG>ADG'CF?C CFG' JADN'.'KBDG' ? AH'
?HE' C?M.?H' JADN ' F'?N' LGGH'.HCDANBOGN'G OGKC' BOF' ? ' DGM?CGN'CA' OA@-
FAMNGD' CA' LG' ?MMAJGN' LE' CFG' SB C.OG ' J.MM' LG' LABHN' .H' DGOA H.T?HOG
CA' DGC?.H' F.@' .H' F=' GDP.OG' >AD' AHG' JFAMG EG?D' >'FG LG' C?(GH CFG
1/ ⁴ 22⁴ ' -'

%D' ?@BGM ?D HGC'?>CGD.J?N ' .DOFL. FAK'A>' ,AD(' KBL.M' FGN'?'PGDE'
G CD?ADN.H?DE' LAA(' GHC.CMGN' = ' %GOM?D?C.AH' A>' i DG 'AB' AK. F'
@KA CBDG ' CA' J.CFND?J'CFG' FG?DC ' A>' GD' &.?SG CE8' BL5GOC '>DA@'
CFG.D' ?MMG '?HOG ' BHNGD' CFG' KDGCGH0G' A>' 0? C.H ' ABC' NGP.M ' KD?OC. GN'
LE' IN@BHN ' ' G CAH ' ?' 0G B.C ' ?HN' N.PGD ' "A@. F' KD.G C ' F=' '
J.O(GN' ? AO.?CG I' ?DLBDCAH' CFB ' NG ODILG ' CFG O.DOB@ C?HOG' CA'
J.F=OF' CF=' ' J.AD(' DG>GD ' R =')F.MG' CFG' K?H.?DN ' J.GDG' KDGK?D.H ' CFG.D'
?D@?N?' ?.H C' I H M?HN' CFG' 0G B.C ' J.GDG' FGDG' LB E' ?.C' J.AD(' CA' KDA-
@ACG' C' LE' @?(H ' 0AHPGDC ' ' HG' @GCFAN' CFGE' G@KMAEGN' J ?' CA'
N. KA G ' KDGCGHNGN' NG@A=?O ' LE' J.F=OF' ?DC>?OG' CFGE' @?NG' GPGD?M
FBHNDGN' 0AHPGDC ' ?@AH C' CFG' 0A@@AH' KGAKMG' #FG' KD.HO.K?M' OGHG'
A>' CF=' ' >?DOG' J ?' M?.N' .H' CFG' >?@.ME' A>' AHG' &.D' ' IN@BHN' GO(F?@' ?'
"A@?H' ?CFAM.O' J.FGDG' &.?DJ.AAN' ?' GDP?HC' A>' HCAHE' .?L.H CAH8'
VJ.FA' J ?' ' ?>CGDJ.?DN ' G GOBCGN' >AD' CDG? AH ' #D?E>ADN ' ?H' ?CCGHN?HC
BKAH' &.D' GO(F?@ ' ?HN' ?D?F' ?HN' D. J.AAN' .MM?@ ' ?HN' HHG
@.CF ' CFDGG.OF?=OG.D@?N ' .H' CF?C'>?@.ME' O?@G' .HCA' CFG' KDG C &'F?HN '
>AD' OBDG' .BC' CFG' N. O.KM.HG' A>' CFG' K?CGHC ' J ?' ' A' MAH ' ?HN' GPGDG'
?HN' CFG' KDG C ' A' GM?CG ?HN' O?DGMG ' J.CF' CF=GD' BOOG ' CF?C' CFG' KMAC'
J ?' N. OAPGDGN' AH' CFG' OAH>G .AH' A>' CFG' K?DCG ' OAHOGDHGN ' ?HN' CFG
OAHCD.PGD ' A>' .C' NG GDPGNME' KBH' FGN I' FGH' N ?D' ?E ' CF?C CFG
>ABM' >GHN' = F?CF' M?N' (H.PG ' BHNGD' F=' ' K.MA J ' ?HN' F?MCGD ' H' F=' ' KG J I'
F?(KGDG' DGKG?C ' AHG' A>'CFG' O.DOB@ C?HOG ' A>'CFG.@KA CBDG' NG ODILGN'
C@G ?' HGJ' F?MCGD' ?HN' C.A' LM?NG ' A>' (H.PG ' N.N' MG?PG' CFG ?@G BKAH'
CFG ?MMGDE' >MAD' H' FGD' @? CGD8 ' FAB G' ' DG?? G?DOF J? ' @?NG H'
CFG FAB G CA' (HA.J' FA.J' CFG' ?N' F?MCGD' ?HN' (H>G LM?NG ' O?@G CF=CFGD'
C.MM &.?' &.?HE' H' FD ' HG C >C' ?N' CF?C.C J ?' DGKADCGN' CF?C CFG NGP.M'
M?N' CFG@' H' CFG' ?MMGDE' CF?C' A@G' A>'CFA G CF?C' JGDG' KA G GN' @= FC
G.CF=GD' F?H ' CFG@ GMPG ' J.CF' CFG' F?MCGD' AD' (MM' CFG@ GMPG ' J.CF' CFG
LM?NG I' H' ?D HGC' JG' >HN' CF?C =' D?C'DGCCA' MLGDN= LLC' ALGD
N.N?HOG ' #AOAL?CCA ' JGDG' >AB.' NGP.M ' A>'CFG' DABHN' AD' @ADD.OG
#FG G'>AB.' F?N' >ADC ? ' C?HC ' BHNG.CFG@'? ' CFG@ GMPG ' NA' OAH>G I'
#FG' H?@G ' A>'CFDGG' A>' CFG G >.GHN ' ?DG B GN' LE' &'?N' #A@ ' ?HN' A'.'
CF?C A>' ?'>ABDCF' @?MM(.H'?M A' @GHC.AHGN' C'E ?D HGC' FGH' FG
?E R'
?HN' F?(KG?DG I ?HN' J.GGH' LGGH' J.GH' ?HN' B GN' LE' GEJAAN' *N?MM'
R " DJ ;' ' " DR'H' J.F=OF' GH G .' B GN' LE' &'?N' #A@' ?HN' A'.'
@GDOG' #FGDG' O?H' LG' HA' NABLC'.MCDGG>ADG'CF?C CFG' JADN'.'KBDG' ? AH'
?HE' C?M.?H' JADN ' F'?N' LGGH'.HCDANBOGN'G OGKC' BOF' ? ' DGM?CGN'CA' OA@-
FAMNGD' CA' LG' ?MMAJGN' LE' CFG' SB C.OG ' J.MM' LG' LABHN' .H' DGOA H.T?HOG
CA' DGC?.H' F.@' .H' F=' GDP.OG' >AD' AHG' JFAMG EG?D' >'FG LG' C?(GH CFG
1/ ⁴ 22⁴ ' -'

H?CBD?MME ' ?DD?H GN ' ?HN ?OOADN H ' CA CFG CD OC M?J ' A> @GCDG I JF OF LE BOF OD C O @ ' NGHA@ H?CGN KDA ?O ' 0AFH AH J? ' CFADAB FME 0AH CGHC H F ' N M (G A> CFG =' AL GDP?C AH A> K?DC OBM?D I ?HN CFG = ?CCGHC AH CA N C HOC ALSGOC I H . A JGMM8 ' = $ >G I JG F?PG ? @ADG NGC? MGN ?OOABHC A> F ' KAGC O?M ODGGN ' J CF DG>GDGHOG CA CF ' PGDE NG OD KC AH A> %APGD OM >> R = 0AFH AH ?N CF?C CFG NG OD KC AH A> CFG CG@KMG ' H < #FG & ABDH H ' . D NG 8 J? ' CFG >HG C KAGC O?M K? ? G FG F?N GPGD DG?N ' FG DGOAMMGOCGN HAHG H F?(KG?DG GQB?M CA C R

@Y " ' P P P!O G NHP 7MKP 7 NH G NM99 L 9P
X H GP M!K P!N L 99M G PM 'NHP ' I M A9P HPMOG+
' APM 'M9 7N NG M KH%O M!O L !O% JG 78
T NG !' P QHN I MOP GNPMO7MGN M!O J! I PMA9P+
/ U !Q N M!] J 99 NT[2N GN UPG M!' M P
!O NP ' !' I T MKH !Q G QHN ' $ $HP N I AG
!O I !J I P!NM9 KM PG 7 OPMNH / U K 9O
!O GH N M KH 99 !PGG N ' I T N P I A9 !Q HPM N[%

< . BC 8 ?N + ?DD O (' ?MM ?M?D@GN >AD CFG AN A> F ' NAM?CDE ' < JG (HAJ' HAC CFG G CGHC ?HN P?D GCE A> F ' KAJGD ' G ?DG CA BKKA G CM GDG ?DG B0F K? ? G ' H F ' JAD (' ' F?(KGDG @B C HAC B>>GD >DA@ CFG L?NHG ' A> ABD @G@AD G 8 0AFH AH ' N PGDCGN LE CF ' GHCFB ? C O SG?MAB E ' JGHC AH J CF DG?C ?DNABD R < A ' D ' AH DGPG F? ' V @M H ' AH CFG CD? O G? GDHG ' A> + ?DD O (' LBC ' 0A@KA H ' F@-GM> ' FG ?NNGN ' < D ' CF ' ' HAC 0A@K?D H ' AH DGPG AH CFG JFAMG J CF F?(KG?DG AH CFG JFAMG ' LBC AHME @?HC?H H ' CF?C AH DGPG F? ' AHG >HGD K? ? G CF?H ?HE CF?C O?H LG >ABHN H F?(KG?DG

F?C ' @G?H ' CF?C EAB O?H FAJ @G HA K? ? G JFGDG CFGDG ' @KME ?' NG OD KC AH A> @?CGD ?M ALSGOC J CFABC ?HE HCGD@ CBDG A> @AD?M HAC AH ' JF OF KDANBOGN B0F ?H G>>GOC 8 & D ' & BDKFE @GH-C AHGN F?(KG?DG8 ' NG OD KC AH A> CFG H FC LG>ADG CFG L?CCMG A> HOABDC ' LBC C J? ' AL GDPGN C F?N @GH H C ' & D ' %?P G ' B G CGN CFG KGGOF A> 0BM GC ' H JF OF FG >I BDG ' FGD GM> ?J?(H ' H CFG CA@L A> FGD ?HOG CAD ' A@G AHG @GHC AHGN CFG NG OD KC AH A> %APGD OM >> ' 0AFH AH R < A ' D ' C FABMN LG ?MM KDGO K OG R ?MM P?0BB@ ' >FG ODAJ ' @KGNG EABD ?MM ' #FG N @H FGN ?KKG?D?HOG A> CFG LA?C ' ?HN ACFGD O DOB@ C?HOG ' ?DG ?MM PGDE AAN NG OD KC AH ' LBC NA HAC @KDG ' CFG @HN ?C AHOG J CF CFG FADD LMG NG?' A> @@GH G FG FC ' #FG @KDG AH ' N P NGN ' EAB K? ' AH ' LE 0A@-KBC?C AH ' >DA@ AHG C? G A> CFG CDG@GHNAB ' K?OG CA ?HACFGD ' ?N CFG DM H < #FG & ABDH H ' . D NG 8 ?N FG 0ABMN HAC O? C FGD FAG CA CFG CAK A> AHG A> CFG KMM?D ' H CFG CG@KMG ' C JABMN HAC F?PG ?NGN CFG NG?' LBC JG?(GHGN C 8 I

#?(GH ? ' KGOG ' A> KBDG NG OD KC AH ' CFGDG ' AHME AHG J?E A> CG C H ' CFG N >>GDGHC P?MBG A> CFG K? ? G ' H F?(KGDG ?HN AH-DGPG R CF?C ' LE 0AH NGD H ' JF?C NG? ' CFG @HN DGOG PG ' >DA@ CFG ' N >>GDGHC @ANG ' ?NAKCGN CA 0AHPGE NG? ' . BC CFG OD C O @ A> 0AFH AH ' GPGH > C OABMN F?PG G C?LM FGN CF?C CFG K? ? G A> AH-DGPG ' C?(GH ?K?DC J? ' = >HGDI CF?H CF?C A> F?(KGDG ' BCCGDME APGDMAA (' CFG ' KDAKD GCE A> G?OF K? ? G ' #FG =' DM I' H =' #FG & ABDH H ' . D NG I' ' AM MAQB H R BCCGD H ' ?' K GOG A> PGD >-O?C AH ' F?D@AH AB ' GHAB F ' HNGGN ' LBC J CFABC ?HE ND?@?C O KBD-KA G ' #FG @ANG H JF OF ! N ?D NG OD LG ' CFG OM >> ' >AD CFG KGO ?M H>AD@?C AH A> CFG LM HN +MA CGD R AHG JFA 0ABMN HAC MAA (' >DA@ ?' KDGO K OG ' #FG ODAJ ' ?HN 0FAB F ' CFG ?@KF DG ?CFGDGD ' CFG >I FGD@?H ' CFG L?D (' CFG BD G CF?C ' GGH LBC HAC FG?DN R G?OF A> CFG G ' HO NGHC?M CA CFG KM?OG ' ' GMGOCGN ? ' ?' C?HN?DN LE JF OF +MA CGD O?H @G? BDG CFG ?MC CBNG A> CFG OM >> ' #D?H KA G CFG NG OD K-C AH HCA CFG GHGD?M C G ' A> AH DGPG8 ' NG OD KC AH A> CFG O?CFGND?M ' ?HN CFG ND?@?C O KDAKD GCE ?C MG? C ' BCCGDME NG CDAEGN ' #FG FG FC A> CFG OM >> ' CFGH AHME KDG GHCGN ? ' ?H @? G CA +MA CGD8 ' @ HN

BKAH CFG P? BG ? GDC AH A> F ' 0AHNBOCAD ' $GC CFG NG OD KC AH LG H ' >AD G ?@KMG ' A@GCF H ' ?>CGD CFG >? F AH A> AH DGPG R

6' " ' 7PM 7J9 G NHP POQP 7 NH G H QH K9 77[$%

?HN 0AHC HBG J CF ?' KDAKGD ? ADC@GHC A> 0F?M (E OD? ' ?HN BM> ' LGMAJ ' > JF?C JADCF CFGH JABMN LG ! N ?D8 ' 0AHOMBN H ' M HG R

6'2 99 9 U ! ' I P8
/ PGN I T A M !' NJ ! ' M!O NHP OP7 K P!N G QHN
LL9P O !' HPMO9 !Q

#FG @ HN A> +MA CGD @ FC F?PG CFB ' DGOG PGN A@G = NG?' A> @@GH G FG FC I' LBC HAC ?H NG?' CF?C FG 0ABMN ?KKDGO ?CG = LE 0A@KBC?C AH I' #FG PGDE NG>GOC ' JF OF 0AFH AH @KBCG ' CA F?(' KGDG8 ' NG OD KC AH 0AH C CBCG C ' ND?@?C O @GD C ' G F?PG HA FG -C?C AH H ?E H ' >BDCFGD CF?C CFGE 0AH C CBCG C ' BDK? H ' KAGC O?M LG?BCE ' ?K?DC >DA@ C ' ND?@?C O KDAKD GCE

') R ' 0 ' 0 '
' ' $ ' $ ' $ 4 ' ' I

#FGDG O?H LG MCCMG NABLC CF?C F?(KGDG J? ' MAO?MME ?OQB?HCGN J CF CFG HG FLABDFAAN A> %APGD ' #FG OM >> ' H F ' C @G ' ?8 ' ?NS?-OGHC KADC AH ' A> CFG 0A? C ?DG HAJ ' JGDG OGMGLD?CGN >AD CFG KDANBO-C AH A> ?@KF DG ' %D?ECAH ' H F ' =' AME ML AH I' F? ' CFG G M HG R

6' I P ' H G 99 GPMG !%O I JNH NHMN GP9T J!OP GN O
& A' 5 P %G !P QHA J !Q K9PP PG 7 GM I LT P ' N ' PWK NP
" G OJ99 M!O G KU9T NMGNP ' M!O GN ' JL MLLPN NP+R

#FG M? C M HG FAJ ' B ' CFG B G ' A> ?@KF DG ' C J? ' ?HN ' KDGK?DGN ? ' ?' K O (MG ' ?HN C J? ' H B0F NG@?HN CF?C C J? ' @GHC AHGN LE GE JAAN H ?' AH ' GHB@GD?C H ' CFG OD G ' A> $AHNAH R

6 2' HM% KU GM I LH P ' KU GM I LH P +R

U ') R , ' $ ' " ' $ ' " ' 2

#FGDG ' ?' LG?BC>BM NG OD KC AH A> CFG A ?@GD H " A@GA ?HN 0BM GC

#' 9 P ' I MT APGN OP NHP Q GGM I P '
HMN O9PG !' NHP M!N !' GJ I I P ' M 4
!O TPN ! N 7M99 ' G ' 9 QHN G M! NT+R

C ' HGGNMG ' CA HQB DG JFGCFGD F?(KGDG J? ' ?J?DG CF?C CFG

>M@E CFDG?N ' JGDG CFG KDANBOC AH A> KNGD ' ' KGH GD @GHC AH ' CFG@' ? ' =' OADOFGN NGJ I' CFABC GHCGD H ' HCA ?HE NGC?M A> CFG OAHCDAPGD E LGC JGGH H?CBD?M C ' ? ' CA CFG O?B G ' A> CFG KFGHA@GHAH ' H OAHHGOC AH J CF CFG KNGD ' JG @?E QBACG +MLGDC F CG8 ' DG@?D (' ?CC?OFGN CA F ' HCGDG C H ' NG OD KC AH A> ?' FAJGD A> A ?@GD ' R

=' #FG DG@?D (' CF?C ' F?MM @?(G AH CFG G OALJGL M (G ?KKG?D?HOG ' O?MMGN A ?@GD ' ' CF?C ' CD?H G ?HN BKGD C C AB ' ? ' CFG ' HAC AH ' ?LABC CFG@' JGDG >AD@GDME ' HALANE H' CFG G N?E ' NABLC ' LBC CF?C CFGE ?DG CFG DG?M KDANBOC AH A> @?MM KNGD ' JF OF J?D@' H CFG >GMN ' H' >HG JG?CFGD H' ?BCB@H ' ?HN F?PG ?' KAJGD A> FAAC H ' ABC JGL ' >DA@' CFG D C?M ' A' ? ' CA DGHNGD CFG@ GMPG ' LBAE?HC ?HN M FCGD CF?H ?D ! PGDE N?E H >HG JG?CFGD ' H' ?BCB@H OF G>ME ' NA ' GG CFA G KNGD ' FAAC H ' ABC CFG D JGL ' ?HN @ABHC H ' ?MA>C ' CFGE J MM A' A> >DA@' EABD >H GD > EAB J MM C?(G CFG@' HCA EABD F?HN ' $? C B@@GD AHG ?M FCGN AH @E' LAA (' ? ' ' J? ' DG?N H ' H' CFG K?DMABD ' ?HN ' DBHH H ' CA CFG CAK A> CFG K? G ' ?HN FAAC H ' ABC ?' JGL ' CAA (' C ' NGK?DCBDG >DA@' CFGHOG ' . BC JF?C ' @A C JAHNGDGN ?C J? ' CF?C C JGHC A>> J CF OAH NGD?LMG PGMAO CE H ?' KM?OG' JFGDG HA ?D J? ' C DD H ' ?HN ' ?@' BDG CF?C ' N N HAC ? C C J CF @E' LDG?CF ' A' CF?C CFG G M CCMG OD? JMGD ' GG@' CA F?PG ' JF MG @ABHC H ' A@G MAOA-@AC PG KAJGD ' J CFABC CFG' B G A> J H ' ?HN CA @APG H' CFG ?D >? CGD CF?H CFG ?D C GM> I R ' '("

!

' ? ' >?D ? ' DG ?DN ' CFG 3 ' F FG C JAD (' A> ?DC ' @B C ?MJ?E ' LG ?' >?MBDG ' f F?C OD C O @' V?HN H' CF?C CGD@' JG HOMBNG NG OD KC AH ?HN ?H?ME ' GPGD FGMKGN B ' CA ?H ?NGQB?CG HAC AH A> CFG . GMPGNGDG KAMMA' AD CFG ?DCAAH ' A> " ?>>?GMMG W G @?E CDE CA ?KKME GHGD?M KD HO KMG ' CA CFG K?DC OBM?D H C?HOG ' ? ' >?D ? ' DG ?DN ' CFG NG?M A> BOF KDANBOC AH ' AD ' JF?C ' @ADG OA@@AH ' JG @?E G TG BKAH CFG ?MGHC KA HC ' A> CFG D @?CGD?M ?HN @GOF?H O?M G OGM-

MGHOG ' > JG ?NAKC CF ' OA@K?D?C PGME G? E ' ?HN CFGDG>ADG OA@@AH OABD G ' OD C O @' KBC ' AH CF?C CGOFH O?M ?HN KGN?HC O >AD@' JF OF ' CFG LG GCC H ' H A> ?MM JFA ?CCG@KC CA @?(G CFG DG?C JAD (' A> K?HC H AD OBMKCBDG OA@KDGFGH LMG LE CFG @GN B@' A> JADN ' > JG C?(G CFG @ADG N >>OBMC K?CF ' JG ?DG QB O (ME HPAMPGN H' CFG P? BG ?HN AL OBDG ' ?HN GHN H' G KM?H?C AH ' J CFABC G KM?H?C AH ' =' #FG AD DG G O CE A> ADDG A I' ?>CGD ?MM ' ?HN H' ALGD CDBCF ' CGMM ' ? ' @B0F

)%&

? ' CFG' OD□C□O ' F?PG' CAMN' B ' HN' □ ' □C' N□>>GDGHC' J□CF' KAGCDE' A>' CFG' PGDE' F□ FG C' ADNGDW' F?C' OD□C□O□ @' >AD' G ?@KMG ' O?H' @?(G' CFG' F?D@AHE' A>' ?' PGDE' DG?C' KAG@' OA@KDGFGH □LMG' CA' CFA G' JFA' F?PG' HAC' CBN□GN' BOF' ?' KAG@' ? ?□H' ?HN' ? ?□H ' C□MM' ?MM' □C ' O?CCGDGN' M□ FC ' ?HN' ?MM' □C ' LDA?N' @? G ' A>' F?NAJ ' ?DG' LMGHNGN' □HCA' AHG' KGDP?N□H ' C□HC' BKAH' JF□OF' CFG' @□HN' DGKA G ' CFDAB F' CFG' □H>MBGHOG' A>' CF?C' @□ FCE' KAJGD' LE' JF□OF' CFG' >ADOG' A>' OAHCD? C' □ ' BLSGOCGN' CA' CFG' F□ FGD' >ADOG' A>' BH□CE' W D□C□O□ @' @?E ' CA' ?' OGDC?□H' G CGHC ' C□@BM?CG' B ' CA' CFG' ?KKDGO□?C□AH' A>' CFG' DG?C' K?DC ' A>' CFG' F□ FG C' ODG?C□AH ' A>' KAGC□O?M' GH□B ' LBC' □H' CFG' G ?OC' NG DGG' □H' JF□OF' □C' □ ' BO-OG >BM' □H' MG?N□H ' CA' ?' OA@KDGFGH □AH' A>' NGC?□M ' □ ' □C' □HSBD□AB ' CA' CFG' F□ FGD' KBDKA G' A>' □C ' PAO?C□AH R CF?C' A>' □MMB@□H?C□H ' ?' JFAMG ' C' □ ' KDGO□ GME' CFG' ?@G' J□CF' DG ?DN' CA' CFG' @ANG ' □H' JF□OF' GPGH' CFG' @A C' C? CG>BM' @□HN ' ?CCG@KC' CA' OAHPGE' □@KDG □AH ' CA' ACFGD ' A>' CFG' G>>GOC ' A>' DG?M' OGHGDE ' #FNDG' ?DG' KDAL?LME' DGOAMMGOC□AH ' M□H GD□H ' ?DABHN' @A C' A>' B ' A>' A@G' OA@L□H?C□AH' A>' H?CBD?M' D?HNGBD' AD' LG?BCE' JF□OF' O?H' HGPGD' LG' >AD ACCGH R JF□OF' F? ' @APGN' B ' GPGH' CA' CG?D ' F?C' O?H' JG' NG OD□LG' A>' BOF' OGHG W' #?(G' ?' OA@@AH' □H C?HOG R ?' O?M@' D□PGD' MGGK□H ' □H' CFG' @AAHM□ FC R >?@□M□?D' F□MM ' □H' CFG□D' @? E' ABCM□HG ' MAA(□H ' @ABHC?□H M□(G R CFG' JGMM (HAJH' P□MM? G' AH' CFG' D□PGD8 ' L?H(' □P□H ' >ADCF' □C ' OACC? G' M□ FC ' G?OF' F□H□H ' ? ' ?' C?D' □H' CFG' NGKCF' A>' CFG' CD?H K?DGHC' CDG?@' #FG' NG OD□KC□AH' A>' BOF' ?' OGHG' LGOA@G ' @GDGME' K□OCBDG QBG' C' □ ' CFG' $ ' JF□OF' O?HHAC' LG' NG OD□LGN R CFG' F?D@AHE' JF□OF' DG BMC ' >DA@' Q@G' F?KKE' OA@L□H?C□AH ' HAC' ?MJ?E ' ?HN' □HNGGN' D?DGME ' KDG GHC R JF□OF' F? ' CFB ' □HPG CGN' CFG' OA@@AHG C' CF□H ' J□CF' M□>G M? C□H ' □@KDG □AH ' #FG' =' KDGP?□M□H ' KAGC I' □H' F□ ' DG?C' KDANBOC□AH ' OAHPGDC ' JF?C' □ ' ?OO-NGHC?M' □H' H?CBDG' □HCA' ?' KD□HO□KMG' □H' ?DC ' . BC' CFG' JAD(□H ' A>' CFG' KD□HO□KMG' @B C ' CA' ?' DG?C' G CGHC ' LG' >GMC' ?HN' BHNGD CAAN' D?CFGD' CF?H' ?H?METGN' ?HN' NG OD□LGN

?TM□CC ' ?KKME□H ' F□@ GM>' CA' JD□CG' ?' GC' OD□C□O□ @' BKAH' $G?D ' ?E R =' G' J□ F' CF?C' JG' OABMN' K? ' CF□ ' KM?E' APGD ' ?HN' ?E' HACF□H ' ?LABC' □C ' MM' CF?C' JG' O?H' ?E' @B C' >?MM' >?D' FADC' A>' CFG' BLSGOC ' AD' GPGH' A>' JF?C' JG' ABD GMPG ' OAHOG□PG' A>' □C ' #A' ?CCG@KC' CA' □PG' ?' NG OD□KC□AH' A>' CFG' KM?E' □C GM>' AD' A>' □C ' G>>GOC' BKAH' CFG' @□HN ' □ ' ' @GDG' □@KGDC□HGHOG I' #F□ ' □ ' HAC' ?>>GOC?C□AH ' #FG' = G>>GOC' BKAH' CFG' @□HNI' JF□OF' $G?D' KDANBOG ' □ ' CFG' DG BMC' A>' OA@L□H?C□AH ' CAA' BLCMG' CA' LG' NG OD□LGN R ?M@A C' CAA' BLCMG' CA' LG' NG>□HGN' CA' ABD-GMPG ' ' ?HN' EGC ' CA' OAHC□HBG' CFG' GHCGHOG' A>' ?TM□CC ' =' JG' @B C' ?E' A@GCF□H I

#FGDG' □ ' ?H' ! H M□ F' JADN SA□HGD R ?BCFAD' JG' J□MM' HAC' O?MM' F□@ R JFA' F? ' F?N' CFG' CG@GD□CE' CA' ?OOA@KM□ F' CJA' CF□H ' G□CFGD' A>' JF□OF' JABMN' F?PG' LGGH' GHAB F' CA' F?PG' OAH>GDDGN' BKAH' F□@' ?' L?N' □@@ADC?M□CE ' ?FB@' #?CG' F? ' BOOGGNGN ' CA' ?H' G CGHC' JF□OF' NG>□G ' ?MM' OA@KGC□-C□AH ' □H' NG D?N□H ' CFG' ?M@ ' A>' %?P□N' ?HN' CFG' $G?D' A>' F?(KGDG' CA' CFG' OAHN□C□AH' A>' LG□H ' CAMGD?CGN ' ?HN' KGDF?K ' GPGH' ?N@□DGN ' LE' CFG' @A C' NBMM' DA ' ?HN' ?HC□ KAGC□O?M' O?K?O□CE ' #FG G' JGDG' HAC' G? E' C? (' ?HN' >AD' ?FB@' #?CG' CA' F?PG' GHSAEGN' A' G CGH □PG' ?HN' M? C□H ' ?' KAKBM?D□CE ' FG' @B C' F?PG' KA G GN' @ADG' CF?H' ADN□H?DE' KAJGD' □H' CFG' DGNBOC□AH' A>' CFG' F□ FG C' CF□H ' CA' CFG' PBM ?D' C?HN?DN ' G' GC' ?LABC' CFG' @GC?@ADKFA □ ' A>' $G?D' J□CF' ?' LAMN' F?HN ' HACF□H ' NABLC□H ' CF?C' FG' F?N' ?H' G KGO□?M' PAO?C□AH' CA' CFG' A>>□OG' A>' CB@LM□H ' CF?C' L?DL?D□O' K□MG' □HCA' DB□H ' >AD' CFG' KBDKA G' A>' LB□MN□H ' BK' A@G-CF□H ' OA@K?OC ' ?HN' KDGCCE ' ?HN' @ANGDH ' ?>CGD' CFG' >? F□AH' A>' CFG' ?DOF□CGOCBDG' A>' F□ ' AJH' ? G' G' C?M(' □HNGGN ' A>' F□ ' >G?C' □H' CFG' J?E' □H' JF□OF' CFG' OABDC' SGJGMMGD' C?M(' ?C' CFG' LG □HH□H ' A>' ?' HGJ' DG□ H ' JFGH' FG' KBMM ' CFG' ODAJH' CA' K□GOG ' ?HN' DG?DD?H G ' CFG' G@GD?MN ' ?HN' DBL□G ' A>' ABD' ! NJ?DN ' ?HN' GH□E ' ?OOADN□H ' CA' CFG' HGJG C' C? CG' =' C' □ ' ?' FG?K' A>' SGJGM ' BH CDBH ' ?HN' BHKAM□ FGN ' EGC' A' N?TTM□H ' □H' CFG□D' N□ ADNGD' CF?C' ' AAH' KGDOG□PGN' ' F?N' G□TGN' ?' CDG? BDG I' G' ?DG' D?CG>BM ' FAJGPGD ' CA' #?CG' >AD' JF?C' FG' F? ' NAHG' ' >AD' FG' F? ' GH?LMGN' B ' CA' ?E' A@GCF□H ' ?LABC' F?(KGDG8 '$G?D ' JFGH ' J□CFABC' F□@ ' JG' @□ FC' F?PG' FDBH(' □HCA' ,'G KDG □PG' □MGHOG I' G' KDAKA G' CA' FAJ' JF?C' CFG' $G?D' □ ' □H' A@G' A>' □C ' F□ FG C' ?CCD□LBCG ' LE' ?H' □HPG C□ ?C□AH' A>' CFG' KDAOG ' LE' JF□OF' AHG' A>' CFG' >GGLMG C' ?HN' @A C' KDA ?□O' A>' PGD G @?(GD ' F? ' CBDHGN' □C' □HCA' A@GCF□H ' G GHC□?MME' N□>>GDGHC' #?CG' CFB ' LGOA@G ' ?' C?HN?DN' LE' JF□OF' CA' @G? BDG ' F?(KGDG ' ?HN' JG' ?DG' DGM□GPGN' >DA@' CFG' AKKDG □PG' GH G' A>' CFG' P? C'))$

LE' CFG' SB C?KA □C□AH' A>' CFG' @□HBCG ' G' SBN G' A>' CFG' FG□ FC' A>' CFG' KED?@□N ' LE' CFG' O?MG' A>' CFG' FB@?H' ?CA@ ' ?C' CFG□D' L? G

FGMMGE ' □H' F□ ' GMAQBGHC' = %G>GHOG' A>' AGCDE I' KBLM□ FGN' □H' F□ ' = A CFB@AB ' ! ?E I' YO ' F? ' C?CGN' CFG' DABHN ' >AD' F□ ' LGM□G>' CF?C' CFG' $G?D' A>' F?(KGDG' @?E' B C?□H' ?' OA@K?D□ AH' J□CF' CFG' @? CGD-K□GOG ' A>' CFG' +DGG(' CD? GNE ' =' #FG' @ANGDH' KD?OC□OG' A>' LMGHN□H ' OA@GNE' J□CF' CD? GNE ' CFAB F' M□?LMG' CA' DG?C' ?LB G' □H' KA□HC' A>' KD?O-C□OG ' □ ' BHNABLCGNME' ?H' G CGH □AH' A>' CFG' ND?@?C□O' O□DOMG ' LBC' CFG' OA@GNE' FABMN' LG' ? ' □H' □H ' $G?D ' BH□PGD ?M' □NG?M' ?HN' BLM□@G ' C' □ ' KGDF?K ' CFG' □HCGDPGHC□AH' A>' CF□ ' KD□HO□KMG' JF□OF' NGCGD@□HG ' CFG' L?M?HOG' □H' >?PABD' A>' □H ' $G?D' ? ?□H C' CFG' ! N□KB ' #ED?HHB ' AD' CFG' ?@G@HAH ' AD' □>' EAB' J□MM ' CFG' CD□A □G ' J□CF' JF□OF' CFGE' ?DG' OAH-HGOCGN ' BHMG ' CFG' □HCGH G' KAJGD' A>' CFG' OFAD?M' KAGCDE ' G KGO□?MME' CF?C' A>' CFG' M?CCGD ' FABMN' LG' OAH □NGDGN' ? ' DG CAD□H ' CFG' GQB□M□LD□B@' □H ' $G?D ' □>' □C' O?H' B C?□H' CF?C' OA@K?D□ AH ' @?E' LG' SBN GN' CA' LG' CFG' @A C' KGD>GOC' KGO□@GH' A>' CFG' ND?@?C□O' ?DC' G □ C□H ' □H' CFG' JADMN I' G' O?H' BHNGD C?HN' CF□ ' HAJ ' . BC' □>' ?HE' JD□CGD' LG>ADG' CFG' OA@-@GHOG@GHC' A>' CFG' KDG GHC' OGHCBDE ' ?HN' □HNGGN' MAH ' ?>CGD ' F?N' C?M(GN' A>' CFG' OA@GNE' A>' $G?D' ? ' LG□H ' =' BH□PGD ?M' □NG?M' ?HN' BLM□@G I' ?HN' F?N' OFA GH' $ ' ? ' CFG' G OGMMGHOG' CA' L?M?HOG' ? ?□H C' =' CFG' □HCGH G' KAJGD' A>' CFG' OFAD?M' KAGCDE' I' A>' □M OFEMB ' ?HN' AKFAOMG ' FG' JABMN' F?PG' LGGH' DG>GDDGN' CA' CFG' ?BCFAD□CE' A>') AMC?□DG ' JFA' □H' F□ ' MGCCGD' CA' CFG' O?NG@E ' NG OD□LG ' BOF' JAD(' A>' F?(KGDG' ? ' >AD@□H ' =' ?H' AL OBDG' OF?A ' OA@KA GN' A>' @BDNGD ' ?HN' LB>>AAHGD□G ' A>' FGDA□ @' ?HN' @G?HHG ' A>' CFG' M?H B? G' A>' CM□G' ?MMG ' ?HN' A>' CFG' F□ FG C' □HCGDG C I

H' D?HOG' ?DG' HAJ' O?DOGME' FG?DN' CFG' >GGLMG' GOFAG ' A>' CFG' OAH-CG C' LGCJGGH' CFG' N□ O□KMG ' A>' CFG' DA@?HC□O' ?HN' CFG' OM? □O' OFQAM ' & ' +B□TAC' F? ' C?CGN ' J□CF' F□ ' B B?M' ?OBCGHG ' ?HN' AAN' GH G' A@G' A>' CFG' @□ C?(G ' □HCA' JF□OF' CFG' AKKAHGHC ' A>' CFG' DA@?HC□O' OFAAM' F?N' >?MMGH' >DA@' HAC' KGDOG□P□H ' CF?C' CFG' KDANBOC□AH ' A>' CF?C' OFAAM' OAHC?□HGN' J□CF□H' CFG@ GMPG ' ?' KD□HO□KMG' A>' ?DC R =' #F□ ' □HCGM-MGOCB?M' >GD@GHC' O?H' HGPGD' OG? G' ? ' MAH ' ? ' CFG' QBG C□AH' F?MM' LG' @AACGN' ? ' ?' OAHCG C' LGCJGGH' O□GHOG' ?HN' L?DL?D□ @ R CFG' LG?BC□G ' A>' ADNGD' ?HN' CFG' □DDG BM?D' □H>MBGHOG ' A>' N□ ADNGD ' ? ' MAH ' ? ' JG' M□?MM' AL C□H?CGME' DG>B G' CA' GG ' □H' CFG' E CG@' A>' JF□OF' F?(KGDG' F? ' CD?OGN' CFG' >□D C' ABCM□HG ' HACF□H ' @ADG' CF?H' ?' M□LGDCE' J□CFABC' DG CD?□HC R ?H' □HNG>□H□CG' M?C□CBNG ' JF□OF' M□G ' AKGH' ? ' @BOF' CA' CFG' >DG?(' A>' CFG' □@? □H?C□AH' ? ' CA' CFG' OABD G' A>' GH□B ' >' CFG' DA@?HC□O' E CG@' F? ' □C ' LG?BC□G ' □C' F? ' HGOG ?D□ME' □C ' ?DC' ?HN' □C ' DBMG ' ACF□H ' □ ' LG?BC□>BM' >AD' @?H' JF□OF' NAG ' HAC' AJG' □C ' G>>GOC' CA' OGDC?□H' OA@-L□H?C□AH ' A>' JF□OF' ABD' SBN @GHC' @?E' ?MJ?E ' N□ OMA G' CA' B ' CFG' GODGC' JFGH' ABD' G@AC□AH ' F?PG' LADHG' J□CHG ' CA' CFG□D' KAJGD' #FG' G@KMAE@GHC' A>' CFG G' OA@L□H?C□AH ' OAH C□CBCG ' ?DC ' F?(-KGDG' F?N' F□ ' AJH' ?DC' #A' N□ OAPGD' □C' □H' F□ ' JAD(' JG' @B C' G ?@□HG' CFG' @G?H ' JF□OF' FG' B GN ' ?HN' CFG' DG BMC ' CA' JF□OF' FG' ? K□DGN I' #FG G' OA@L□H?C□AH ' A>' JF□OF' +B□TAC' KG?(' JGDG' ? ' BH(HAJH' CA' JF?C' F? ' LGGH' O?MMGN' CFG' B B C?H' ? G' A>' ! H M□ F' M□CGD?CBDG' ? ' CFG' KDAKGDC□G ' A>' GMGOCDA @? HGC□ @' ?HN' KAAD' ?FB@' #?CG' N□N' HAC' BH>□CME' DGKDG GHC' F□ ' ? G' JFGH' FG' ?□N' A>' $G?D ' =' C' □ ' ?' FG?K' A>' SGJGM ' BH CDBH ' ?HN' BHKAM□ FGN ' EGC' A' N?TTM□H ' □H' CFG□D' N□ ADNGD' CF?C' ' AAH' KGDOG□PGN' ' F?N' G□TGN' ?' CDG? BDG I' #F ' KD□HO□KMG' A>' ?KKDAKD□?C□AH' FGDG' □ ' G QB□ □CG' . BC ' ?>CGD' ?MM ' JG' >?HOE' CF?C' #?CG' J?' A@GCF□H ' M□(G' CFG' OAO(' □H' CFG' >?LMG ' JFA ' F?P□H ' >ABHN' CFG' SGJGM ' □H' F□ ' GODGC' FG?DC' J□ FGN' □C' F?N' LGGH' ?' D?□H' A>' L?DMGE ' . G' CF□ ' ? ' □C' @?E ' FG' GC' CA' JAD(' □H' AAN' G?DHG C' □H' CFG' CD□H □H ' ?HN' KAM□ F□H ' KDAOG ' $GC' B ' KDAOGGN' CA' G ?@□HG' CFG' OF?D?OCGD' A>' F□ ' JAD(@?H F□K

AMGD□N G' F? ' DG@?D(GN' G@KF?C□O?MME ' JF?C' GPGDE' N□M□ GHC' CBNGHC' A>' F?(KGDG' @B C' F?PG' LGGH' □@KDG GN' J□CF ' CFG' CD□(□H ' SBN @GHC' JF□OF' FG' N□ KM?E ' □H' CFG' @?H? G@GHC' A>' F□ ' >□D C' OGHG ' #FG' >□D C' OGHG' A>' $G?D' □ ' PGDE' FADC ' KGD>GOCME' □@KMG ' F? ' HA' GM?LAD?CG' NG OD□KC□AH ' A>' OF?D?OCGD ' ?HN' OAHC?□H ' AHME' ?' M□ FC' ?HN' □HO□NGHC?M' HAC□OG' A>' CFG' GPGHC ' BKAH' JF□OF' CFG' ND?@?' □ ' CA' CBDH ' >' OABD G' #?CG' DGSGOCGN' CF□ ' OGHG ' ?HN' J□CFABC' CFG' HGOG ?DE' KDGK?D?C□AH' A>' CFG' N□?MA BG' LGCJGGH' GHC' ?HN' +MA CGD ' FG' LD□H ' ?C' AHOG' ! N@BHN

' P' OP' HMUGLPM P+

7 ? E ' B

□%G>ADG B ' □H CFG AM□MAQBE ' ='#FAB ' H?CBDG ' ?DC @E ANNG c F?(' KGDG ' □H F□ ' AM□MAQB□G ' @?(G ' F□ ' 0F?D?0CGD ' KBD BG ?' OGDC?□H CD?□H A>'□NG? ' CA' ?' OAHOMB □AH' ' ?HN' LE' 0?B □H ' CFG@' CA' CF□H(' ?MABN ' FG' □ ' GH?LMGN ' J□CFABC' CFG' M□ FCG C' P□AM?C□AH' A>' KDAKD□GCE ' CA' □PG' CFG' ?BN□GHOG' ?' NBG' □@KDG □AH' A>' CFG□D' M?CGHC' @AC□PG ' G' PGDE' D?DGME' G@KMAE ' CF□ ' G KGN□GHC ' LBC' FG' HGPGD' G@KMAE ' □C' □H' P?□H ' AD' AG ' LGEAHN' □C ' MG □C□@?CG' B G ' G' F?PG' ?H' G ?@KMG' □H' CFG' AM□MAQBE' A>' M? A' ?C' CFG' GHN' A>' CFG' >□D C' ?OC' A>' CFGMMA ' ?HN' CFG' AM□MAQBE' A>' !N@BHN' □H' CFG' GOAHN' OGHG' A>' $G?D' F? ' KDGO□ GME' CFG' ?@G' ALSGOC' □H' P□GJ ' #?CG ' HAC' BHNGD C?HN□H ' CFG' ?DC F?(KGDG ' ?HN' F?P□H ' HA' ND?@?C□O' ?DC' □H' F□@ GM>' @?(G ' CFG' AM□MAQBE' ?H' □H CDB@GHC' >AD' CGMM□H ' CFG' ?BN□GHOG' JF?C' F? ' F?KKGHGN' ' ?HN' □H CG?N' A>' G F□L□C□H ' CFG' @?H? G@GHC' LE' JF□OF' +MA CGD' □ ' @?NG' CA' N□ CDB C' ?HN' F?CG' !N ?D ' FG' □PG ' B ' ?' 3 ' A>' CFG' ?>>?□D ' JF□OF' !N@BHN' CGMM ' CA' CFG' ?BN□GHOG' BHNGD' CFG' KDGCGHOG' A>' C?M(□H ' CA' F□@ GM> R

6' X NH' GJKKPGG
2% P' L MKN G%O' TPN' !' A NH' NHP ' PMGT' !MNJ PG+
" P P' K IPG' NHP' 9O' IM!' KHM7%O' NH' NHP' !7 IMN !'
X H KH' 9MGN' 2' 7 Q%O' MQM !GN' IT' A NHP ' 3OQM ' 8
#' NM9P' G ' L9MJG A9P ' G ' A 9O9T' JNNP %O+
!O' HP QHNP!%O' AT' GJKH' 9JKUT' MKK OP!NG+
HMN' ! ' NHP' G9 QHNPGN' K KJ I GNM!KP' K !7 IG' H I
!O' AMGP A !' 3O I J!O ' GL NP' 7' 9M ' !HP NG+%%

C' □ ' HA' K?DC' A>' CFG' KM?H' A>' CF□ ' HAC□OG' CA' KA□HC' ABC' CFG' N□>>GDGHOG ' LGCJGGH' CFG' M?H B? G' A>'#?CG' ?HN' CFG' M?H B? G' A>' F?(KGDG ' C' □ ' J□CF' CFG' OAHNBOC' A>' CFG' ND?@?' AHME' CF?C' JG' J□ F' CA' NG?M ' +MA CGD ' A>' OABD G ' ?>CGD' CF□ ' KDGK?D?C□AH ' GHCGD ' □H' ?' >BD□AB ' K? □AH

#FG' @?□H' LB □HG ' A>' CFG' CD? GNE ' LE' #?CG8 ' ?DD?H G@GHC ' F? ' LGGH' CFB ' @?NG' BLADN□H?CG' CA' CFG' GOAHN?DE' KMAC ' . BC' $G?D' □ ' HAC' QB□CG' >AD ACCGH' ' +MA CGD' ?E ' CA' GHC R

6' T'9 O' T J' M N' NHP' U !Q' H 'K IPG' PG 9 %O'
']J N' NHP' N 9G' 7' P IL P' M!O' O OP'
" G' PM9 I G' M I !QGN' H G' OMJQHNP G≠ " PM %!' GJKKPPO' N+
JN' I JKH' 2' 7PM ' NHP' KHM!QP+%%

#A' JF□OF' GHC' DGKM□G R

2' Q P P' N ' GPP' H I +
X NH' GJKH' 9O' GNM NG' 7' LMGG !' H J 9T' GP CMO'
#G' P!OP ' I MEPGNT' AP!PMNH' NGP97+%%

G' @?E' LG' BDG' CF?C' □>' ?' ND?@?C□O' KBDKA G' JABMN' F?PG' LGGH' GDPGN' LE' ?' ' A>' CFG' CG@KGD' A>' $G?D ' □H CG?N' A>' ?H' G F□L□C□AH' A>' □C ' F?(KGDG' JABMN' F?PG' □HCDANBOGN' BOF' ?' NG OD□KC□AH ' . BC' CF?C' J? ' HAC' $ ' ?DC ' □C' J? ' >AD' CFG' SGJGM CD□H GD' CA' OAHPGE' □@KDG □AH ' LE' BOF' OMB@ E' ?HN' 0A@@AHKM?OG' @G?H ' ' G' F?PG' AHG' @ADG' HGJ' 0A@L□H?C□AH' CA' HAC□OG' □H' #?CG8 ' □HCDANBOCADE' OGHG R !N ?D' ?HN' ADNGM□?' □H' MAPG ' >' CFG' DG BMC ' A>' CF□ ' 0A@L□H?C□AH' JG' F?MM' F?PG' KDG GHCME' CA' KG?(' H' CFG' @G?HC□@G ' MGC' CFG' MAPGD ' G KM?□H' CFG@ GMPG ' CFDAB F' CFG' H□HG' M□HG ' □H' CFG' KDGK?D?C□AH' A>' JF□OF' #?CG' F? ' KBC' ABC' F□ ' KAGC□O?M' CDGH CF' R

6' ' OP9 M ' TM9' 7M ' NJ !' TPN' !KP' I P+
!O' P P' GJKKPGG7J9' J QJ!OT' PKP P'
HP' N PMGJ P' 7' NHT' APMJN PG' 7 I ' NHP' U !Q
3 P' HMLLT' J QJ!OT' 7 ' P P ' 7 9O' NHPP+
MGN' AMKU' !P' L NT !Q' 9 U' !' PNKHPO' 3OQM +
' # 9MG[HMN' J9O' NHP' PNKHPO' 3OQM ' NH
HP' I P' J!7 NJ!MNP' OP9 M' '
X H ' !' APO P!KP' N ' M' 7MNHP %G' 99
O9 PG' 7 I ' HP ' 3OQM %G' M IG' N ' J QJ!OT%G+R

#FG' GOAHN' OGHG' A>' #?CG ' M□(G' CFG' GOAHN' OGHG' A>' F?(KGDG ' G F□L□C ' CFG' CD□?M' LE' $G?D' A>' F□ ' N?B FCGD ß ?>>GOC□AH ' ? HN' CFG' BL-GQBGHC' N□P□ □AH' A>' CFG' (□H NA@ ' C' J? ' KGD>GOCME' OMG?D' CF?C' □H' OF?H □H ' CFG' ND?@?C□O' □CB?C□AH' A>' ADNGM□?' #?CG' JABMN' NG CDAE' FGD' OF?D?OCGD ' . BC' □C' □ ' HAC' J□CF□H' CFG' D?H G' A>' FB@?H' □H GHB□CE' CA' OAHSGOCBDG' FAJ' G>>GOCB?MME' FG' F? ' OAHCD□PGN' CA' DGHNGD' AHG' A>' CFG' MAPGM□G C' A>' F?(KGDG8 ' ODG?C□AH ' HAC' AHME' BH□HCGDG C□H ' LBC' KA □-C□PGME' DGKBM □PG R FG' F? ' KDANBOGN' ?' GM>□ F' ?HN' N□ □@BM?C□H ' AD-NGM□?' #FG G' ?DG' CFG' >□D C' JADN ' JF□OF' FG' BCCGD ' R

6' ' K IPG' IT' N M9+' " ' M I ' 2' O GN PGGMO'
HMN' I JGN' NH' K 9O' GLPPKH' NP I LN' NHP' KH 9P K' U !Q'
&MNHP ' N ' 9PM P' I P' O P 9PGG ' NHM!' K !OP I !' I P'
' J QJ!OT%G' P I A MKPG' [R

=' >' CFG' FG?PGHME' LG?BCE' A>' ABM' A>' ADNGM□?' KDAHABHOGN' □H' A' >GJ' JADN ' ' P □MM' HAC' PGHCBDG' CA' KG?(I' #F□ ' J? ' CFG' □@KDG □AH

JF□OF' F?(KGDG8 ' ADNGM□?' KDANBOGN' BKAH' OFMG GM ' H' CFG' JFAMG' D?H G' A>' CFG' F?(KGD□?H' ND?@?' CFGDG' □ ' HACF□H ' @ADG' G CD?ADN□H?DE' CF?H' CFG' G>>GOC' BKAH' CFG' @□HN' A>' CFG' OF?D?OCGD' A>' ADNGM□?' &D ' 0?@G AH' F? ' CDBME' ?□N ' =' ! PGDECF□H ' □H' FGD' GG@ ' CA' M□G' LGEAHN' ABD' P□GJ ' ?HN' ?>>GOC ' B ' □H' ?' @?HHGD' JF□OF' JG' >GGM' D?CFGD' CF?H' KGDOG□PG 88' H' CFG' >□D C' ?OC' FG' F? ' AHME' >ADCE CFDGG' M□HG ' ? □ HGN' CA' FGD ' FG' NAG ' HAC' ?KKG?D' ? ?□H' C□MM' CFG' >ABDCF' ?OC ' □H' CFG' >ABDCF' OGHG' A>' JF□OF' FG' F? ' CJGHCE >ABD' M□HG ' ?HN ' □H' CFG' GPGHCF ' CF□DCE GPGH ' H' CFG' >□>CF' ?OC' FG' F? ' >□PG' M□HG ' , GC' NBD□H ' CFG' JFAMG' KDA DG ' A>' CFG' KM?E' JG' O?H' HGPGD' >AD GC' FGD ' ?HN ' ?>CGD' □C ' @GM?HOFAME' OMA G ' FG' M□H GD ' ?LABC' ABD' DGOAMMGOC□AH ' ? ' □>' JG' F?N' GGH' A@G' LG□H ' @ADG' LG?BC□>BM' ?HN' KBDGD' CF?H' ?' CF□H ' A>' G?DCF ' JFA' F?N' OA@@BH□O?CGN' J□CF' B ' LE' ?' F□ FGD' @GN□B@' CF?H" CF?C' A>' JADN ' HN' EGC' FG' □ ' HA' @GDG' ?L CD?OC□AH ' FG' □ ' HACF□H ' @ADG' HAD' MG ' CF?H' ?' KGD AH□-->□O?C□AH' A>' CFG' FAM□HG ' A>' JA@?HFAAN ' FG' □ ' ?' ODG?CBDG' >AD@GN' >AD' ?MM' E@K?CF□G ' @APGN' LE' ?MM' CGHNGDHG ' KDA@KC' >AD' ?MM' NBCE ' KDGK?DGN' >AD' ?MM' B>>GD□H ' LBC' FG' O?HHAC' C?M(' A>' JF?C' FG' □ ' ?HN' JF?C' FG' KBDKA G ' #FG' □H ' A>' D?HOG' NG OD□LG ' CFG' ?KK?DGHC' DG GDPG' A>' FGD' OF?D?OCGD' ?

6' #' NM O !PGG' !' !MNJ P
X9 KA' 7NP!' 9PM PG' NHP' H GN T' JJGL UP'
HMN' N' !NP!OG' N ' O +R

FG' FGD GM>' ?E R

627'7 '2' M!N' NHMN' Q9 A' M!O' 9T' M N
' GLPMU ' M!O' LJ L GP' ! N8 G !KP' HMN' 2' P99' !NP!O+
2%99' O %' AP7 P' 2' GLPMU+R

. BC' CFG' OAHOGKC□AH' A>' ?' OF?D?OCGD' CF?C' FABMN' >MM' ABD' @□HN ' J□CFABC' @BOF' C?M(' ?HN' J□CF?M' @? H□MAQBGHC' C?M(' J? ' A@GCF□H ' CAA' GCFGDG?M' >AD' #?CG ' CFG' SGJGM KAM□ FGD' A' ADNGM□?' □ ' CBDHGN' □HCA' ?' DGHOF' □HCD□ ?HCG ' FG' NAG ' HAC' KDA>G ' ? ' FGD' □ CGD ' KDA>G GN ' HAC' LGO?B G' FG' J?HCGN' CFG' =' M□L' ?HN' A□ME' ?DC I' LBC' LGO?B G' FG' NG □DGN' CA' ?0OA@KM□ F' ?' GODGC' KBDKA G ' CF?C' J? ' CA' LG' O?DD□GN' LE' □MGHOG' LGCCGD' CF?H' LE' JADN R FG' JABMN' MA G' FGD' NAJGD' CF?C' FG' @□ FC' @?DDE' !N ?D' HG' @ADG' KGO□@GH' A>' CFG' #?C□>□O?C□AH' A>' ADNGM□?' ?HN JG' F?PG' NAHG ' #FG' MAPG' OGHG ' LG' □C' BHNGD CAAN ' A' >AD J?DN ' ?HN' □H' CFG' CF□DN' ?OC' ADNGM□?' FGD GM>' J?HNGD□H ' ?LABC ' GHOABHCGD ' ! N ?D' □H' F□ ' @?N' N□ □□□ G ' #FG' ='C?DN□HG ' □H' H?CBDG' I' A>' F?(KGDG' □ ' CFB ' □HCGDKDGCGN' □H' CFG' KDANBOC□AH' JF□OF' ='+?DD□O(' ?HN' F□ ' >AMMAJGD ' CFG' FAJ@GH' A>' CFG' OGHG I' F?PG' □H>M□OCGN' BKAH' B ' ?M@A C' BK' CA' CFG' KDG GHC' FABD ' BHNGD' CFG' ?HOC□AH' A>' %D ' 0AFH AH' R

6' ' IP' N ' IT' M IG ' NH J' OPM PGN ' APGN' 7' IP!+
!O' NMUP' NHP' U !OPGN' G' NHMN' P%P ' P P' GL UP'
T' M' L NPGN !Q' I M O+
' 2G' %' L GG A9P' O
' T' NHP' OPM ' NM9' GN PM I ' NHMN' AMNHPG' MT' HPM N
HPGP' HM99 %O' MQG' 7' N9 !P' M!O' !MUPO' NJP+
HPGP' MAEPKN' NMGGP9G ' NHPGP' 7M!NMGN K' GH POG
' IP' M P' OPM P ' NHM!' NHP' KHPGN' L I L'
17' LJ L9PO' I !M KHG+R

GGN' JG' G F□L□C' @ADG' A>' CFG' ADNGM□?' JF□OF' □ ' HAC' F?(KGDG8 ' W

#FG' @□ GN' OF?D?OCGD' A>' F?(KGDG8 ' $G?D' F? ' LGGH' ?N@□D?LME' N□ -GOCGN' LE' AMGD□N G R ='#FG' CD?H G' EGC' LE' HA' @G?H ' BHH?CBD?M' @□ CBDG' A>' GM>□ FHG ' GH □L□M□CE ' ?HN' F?L□C' A>' >GGM□H ' NGD□PGN' >DA@' ?HN' >A CGDGN' LE ' CFG' K?DC□OBM?D' D?H(' ?HN' B ? G ' A>' CFG' □HN□P□NB?M' CFG' □HCGH G' NG □DG' A>' LG□H ' □HCGH GME' LGMAPGN R GM>□ F ' ?HN' EGC' OF?-D?OCGD□ C□O' A>' CFG' GM>□ FHG ' A>' ?' MAP□H ' ?HN' (□HNME' H?CBDG' ?MAHG' R ' CFG' GM> BKKADCMG ' MG?H□H ' >AD' ?MM' KMG? BDG' AH' ?HACFGD8 ' LDG? C R CFG' OD?P□H ' ?>CGD' E@K?CFE' J□CF' ?' KDAN□ ?M' N□ □HCGDG CGNHG ' >DB CD?CGN' LE' □C ' AJH' A CGHC?C□AH ' ?HN' CFG' @ANG' ?HN' H?CBDG' A>' □C ' OM?□@ R ' CFG' ?H □GCE ' CFG' N□ CDB C ' CFG' SG?MAB E ' JF□OF' @ADG' AD' MG ' ?OOA@K?HE' ?MM' GM>□ F' ?>>GOC□AH ' ?HN' ?DG' ?@AH C' CFG' BDG C' OAHCD?N□ C□HOC□AH ' A>' @GDG' >AHNHG ' >DA@' CDBG' MAPG' ?HN' JF□OF' AD□ □H?CG' $G?D8 ' G? GD' J□ F' CA' GHSAE' F□ ' N?B FCGD ß P□AMGHC' KDA>G □AH ' JF□M C' CFG' □HPGCGD?CG' F?L□C ' A>' APGDG□ HCE' OAHPGDC' CFG' J□ F' □HCA' OM?□@' ?HN' KA □C□PG' D□ FC ' ?HN' ?H' □HOA@KM□?HOG' J□CF' □C' □HCA' OD□@G' ?HN' CDG? AH R CFG G' >?OC ' CFG G' K? □AH ' CFG G' @AD?M' PGD□C□G ' AH' JF□OF' CFG' JFAMG' CD? GNE' □ ' >ABHNGN ' ?DG' ?MM' KDGK?DGN' >AD' ?HN' J□MM' CA' CFG' DGCDA KGOC' LG' >ABHN' □@KM□GN ' □H' CFG' >□D C' >ABD' AD' >□PG' M□HG ' A>' CFG' KM?E I' #FGE' ?DG □@KM□GN ' OGDC?□HME ' LBC' CFG' OF?D?OCGD' JF□OF' CFGE' @?(G' BK' □ ' HAC

1 /' 22' ' >'

NG OD□LGN' LE' F?(KGDG' FGH' "G ?H' ?HN' +AHGD□M' KG?(' M□ FC□H ME' A>' CFG□D' >?CFGD' □@@GN□?CGME' ?>CGD' FG' F?' LGGH' M?P□ F□H' F□' (□H NA@' BKAH' CFG@' □C' □' HAC' CFG' ALSGOC' A>' CFG' KAG' CA' @?(G' B' BHNGD C?HN' $G?D' LBC' CA' @?(G' B' BHNGD C?HN' "G ?H' ?HN' +AHGD□M' #F□ '? ?□H' J?' F?(KGDG8' ?DC' #?CG' CFG' 0GKDG GHC?C□PG' A>' CFG' PBM ?D' HAC□AH' A>' ?DC' @B C' F?PG' ?' NG>□HGN' OF?D?OCGD R A@GCF□H' KA □C□PG' A@GCF□H' GHGD□O R ?' L?N' @?H' ?' AAN' @?H R ?' @□MN' @?H' ?' K? □AH?CG' @?H R' ?' AAN' AH' ?' ODBGM' AH' * KAH' CF□' KD□HO□KMG' CFG' $G?D' A>' #?CG' □' $' $ ' D ' .GO?B G' +AHGD□M' OF?D?OCGD□ C□O?MME' KG?(' A>' =' CFG' BHDBME' J?EJ?DNHG ' CF?C' □H>□D@' ?HN' OFAMGD□O' EG?D' LD□H' J□CF' CFG@ I' +MA CGD' □H' #?CG' □' @?NG' CA' ?E' A>' $G?D R

6 4P' HMG' H G' NP I LP' P P' APP!' J!7 W%O
H 9% K' M!O' GJOOP!8%%

?HN' ?' □>' CF□' JGDG' HAC' GHAB F' CA' N□ CBDL' ?H' ?BN□GHOG' □H' CFG' KDAKGD' OA@KDGFGH□ AH' N>' CFG' DG?M' $G?D' JG' @B C' F?PG' ADNGM□?' O?MM' F□@' =' CFG' OFAMGD□O' (□H I' ?HN' M? C' A>' ?MM' $G?D' F□@ GM>' @B C' G OM?□@' □H' CFG' CD□?M' OGHG' =' 8#□' ?□N' CF?C' ?@' OFAMGD□O I' HN' HAJ' CFGH' CF?C' JG' F?PG' AC' ?' OFAMGD□O' (□H R ?' □@KMG' BH@□ GN' D?HC□H' DA?D□H' OFAMGD□O' (□H R FG' □' □□□' ?' >□C' OAHN□C□AH' CA' LG' C□DDGN' BK' LE' =' CFG' FAJ-@GH' A>' CFG' OGHG I' F?DMG' $?@L' JABMN' LG' □@@ADC?M' ?' ?' OD□C□O' □>' FG' F?N' AHME' JD□CCGH' CFG G' JADN R =' #?CG' F?' KBC' F□' FAA(' □H' CFG' HA CD□M' A>' CF□' MGP□?CF?H' >AD' +?DD□O(' ?HN' F□' >AMAJGD' CFG' FAJ@GH' A>' CFG' OGHG' CA' ND?J' CFG' @□ FCE' LG? C' ?LABC' @ADG' G? □ME I' MM' CFG' JAHNGD>BM' D?N?C□AH' A>' F□' OF?D?OCGD' ?DG' BCCGDME' NG CDAEGN' ?MM' CFG' CF□H' K?DC□C□AH' JF□OF' GK?D?CG' K? □AH' >DA@' J□MNHG ' ?HN' J□MNHG ' >DA@' □H ?H□CE' ?HN' □H ?H□CE' >DA@' ?' K?DC□?M' DG CAD?C□AH' CA' CFG' @A C' □HCGH G' A>' FB@?H' >GGM□H R ?' >?CFGD8' OAHOGHCD?CGN' MAPG R ?MM' CFG G' CD?OG' A>' JF?C' F?(KGDG' AHME' OABMN' G>>GOC' ?DG' BCCGDME' NG CDAEGN' LE' CFG' C? G' OAHOGKC□AH' A>' $G?D' BOF' ?' J?' GHNBDGN' ?@AH C' B' >AD' @ADG' CF?H' ?' OGHCBDE' FGH' CFG' =' FAJ@GHI' L?H□ FGN' CFG' AAM' CFGE' DGHNGDGN' □C' □@KA □LMG' CF?C' CFG' AD□ □H?M' H?CBDG' A>' $G?D' FABMN' LG' BHNGD CAAN' C' □' CFG' AAM' JFA' □HCGDKDGC' CA' B' CFG' AMN' @?H8' GH □C□PG' CGHNGDHG ' ME□H' ?C' CFG' LACCA@' A>' F□' □@K?C□GHOG' G' O?HHAC' LG?D' CA' FG?D' CF?C' =' CFG' AAM' F?CF' @BOF' K□HGN' ?J?E I' =' A' @ADG' A>' CF?C' ' F?PG' HACGN' □C' JGMM I' DA@' CFG' AAM' $G?D' O?H' LG?D' CA' FG?D' CDBCF' F□' SG?MAB' KD□NG' □' HAC' ?M?D@GN' FG' □HNGGN' O?MM' F□@' =' ?' KG C□MGHC' ?MM I' =' ?' L□CCGD' > A A M L B C' CFG

6 - ' !7 I' PMU' M!O' OPGL G%O' 9O' I M! R

□H' CFG' NGKCF' A>' F□' @□ GDE' F?P□H' O?DOGME' ?HECF□H' □H' CFG' JADMN' CA' MAPG' LBC' CFG' AAM' CFB' OM□H' CA' F□@' R

6' T' NG' $ PQ !' N' NJ !+S
I P' !' I T' A T' " 'O GN' I T' A T' \' # N' K 9O' #·
2' M I' K 9O' I TGP97+S X HP P' G' NH G' GN M ' I T' 7P99 ' '
HP' M N' 7' J' !PKPGG N PG' G' GN M!QP+
HMN' KM!' I MUP' 9P' NH !QG' L PK JG' I P' T J' H P98
- '7 9' M!O' 2K!M P' 2' HM P' !P' LM N' !' I T' HPM N'
HMN%G G T' TPN' 7 'NHPP+R

HN' ?MM' CF□' □' AHG' □H' CFG' C? G' $G?D' #FG' =' BH□PGD ?M' □NG?M' ?HN' BLM□@G' I' OA@GNE' A>' JF□OF' CFG' AAM' □' CFG' KD□HO□K?M' G KAHGHC' JABMN' F?PG' LGGH' □HOA@KDGFGH □LMG' CA' CFG' B B C?H' ? G' G' ?DG' QB□CG' BDG' CF?C' #?CG' JABMN' F?PG' AC' D□N' A>' CFG' ? B@GN' @?NHG ' A>' !N ?D' □>' FG' F?N' HAC' >ABHN' □C' OAHPGH□GHC' >AD' CFG' KBDKA G' A>' C?O(□H ' ? MAPG' OGHG' CA' □C' ' □C' □' FG' F?' LDAB FC' CFG' @?N' #A@' ?HN' CFG' @?N' (□H ' □HCA' SB C?KA □C□AH' G' NA' HAC' B KGOC' #?CG' A>' OA@KDG-FGHN□H ' CFG' @GC?KFE □O?M' KD□HO□KMG' BKAH' JF□OF' F?(KGDG' JAD(GN' ?HN' JF□OF' AMGD□N G' F?' A' JGMM' G KABHNGN R = !N ?D8' ? B@GN' @?NHG ' GDPG' CFG' DG?C' KBDKA G' A>' C?(□H ' A>>' K?DC' A>' CFG' FAO(' JF□OF' JABMN' ACFGDJ□ G' LG' O?B GN' LE' CFG' CDBG' @?NHG ' A>' $G?D' ?HN' >BDCFGD' N□ KM?E' CFG' KDA>ABHN' N□>>GDGHOG' LGCJ GGH' CFG' CJA' H' GPGDE' ?CCG@KC' ?C' DGKDG GHC□H' @?NHG ' CFDAB FABC' CFG' JFAMG' D?H G' A>' ND?@?C□O' M□CGD?CBDG' J□CF' CFG' □H MG' G OGKC□AH' A>' $G?D' □C' □' @GDG' M□ FC FG?NGNHG ' ?' G KGO□?MME' □H' CJ?E' H' !N ?D8' D?P□H ' F?(' KG?DG' ?MM' CFG' JF□MG' MGC' EAB' GG' ?' >□ GN' KBDKA G' ?' KD?OC□O?M' GHN' □H' P□G J' □H' $G?D8' CFGDG□' AHME' CFG' LDAAN□H' A>' CFG' AHG' ?H B□ F' ?H' GNNE' J□CFABC' KDA DG □AH I' #?CG' F?' MG>C' B' CF□' OAHCD? C' LBC' FG' F?' C?(GH' ?J?E' CFG' AAM' JF□OF' OA@KMGCG' CFG' JAHNGD>BM' KAJGD' A>' CFG' CF□DN' ?OC' A>' F?(KGDG8' $G?D' #FG' AAM' ?' JGMM' ?' !N ?D' C?(G' A>' K?DC' A>' CFG' FAO(' JF□OF' JABMN' ACFGDJ□ G' LG' O?B GN' LE' CFG' @?NHG ' A>' $G?D'))%

JF□M C' FG' EGC' OAHCD□LBCG' CA' CFG' OA@KMGCGHG ' A>' CF?C' @AD?M' OF?A' JF□OF' F?(KGDG' F?' DGKDG GHCGN R =' ?MM' G CGDH?M' H?CBDG' □H' ?' CAD@' ?□M' @AD?M' H?CBDG' OAHPBM GN I' ' JD□CGD' A>' PGDE' D?DG' NGKCF' ?HN' N□ OD□-@□H?C□AH' F?' CFB' NG OD□LGN' CFG G' OGHG' A>' JF□OF' !N ?D' ?HN' CFG' AAM' @?(G' BK' BOF' □@KADC?HC' ?OOG AD□G R =' #FG' CJA' OF?D?OCGD ' >?CFGD' ?HN' (□H ' A' F□ F' CA' ABD' □@? □H?C□AH' ?HN' MAPG' LMGHNGN' □H' CFG' DGPGDGHN' □@? G' A>' $G?D R " $' □H' CFG□D' NG C□CBC□AH' EGC' " $' □H' CFG□D' FG□ FC' A>' DG?CHG R CFG' K□D□C' LM□ FCGN' ?HN' EGC' BHNGKDG GN R CFG' J□C' AHG' ?HN' EGC' CFG' @AD?M' J□ NA@' A>' ?' AAN' FG?DC' MG>C' BH C?□HGN' ?M@A C' BHAL OBDGN R CFG']P□MN' D? □H' A>' CFG' GMG@GHC' SA□HGN' J□CF' FB@?H' ABCD? G' ?HN' P□AMGHOG' CA' KGD GOBCG' CFG' FGMKMG ' BHDG □ C□H' ?M@A C' BHA>>GHN□H' B>>GDGD R ?HN' FG' F□@ GM>' □H' CFG' @□N C' A>' ?MM' □@? □H?LMG' @□ GDE' ?HN' NG AM?C□AH' NG O?HC□H' BKAH' F□@ GM>' AH' CFG' JF□DMJ□HN' CF?C' ND□PG' ?DABHN' F□@' ?HN' CFGH' CBDH□H' □H' CGHNGDHG ' CA' A@G' A>' CFG' J□MN' @ACMGE' ? AO□?C□AH' A>' B>>GDGD' ?@AH' JFA@' FG' C?HN R ?MM' CF□' □' HAC' M□(G' JF?C' F?' LGGH' GGH' AH' ?HE' C? G' KGDF?K' ?HE' DG?M□CE' LBC' □C' F?' @?NG' ?' JADMN' CA' ABD' □@? □H?C□AH' ?LABC' AHG' □H MG' □@? □H?DE' □HN□P□NB?M' BOF' ?' ND?J' CFG' DGPGDGHOG' ?HN' E@K?CFE' JF□OF' JABMN' GG@' CA' LGMAH' KDAKGDME' AHME' CA' M□P□H' @GH' C' □' M□(G' CFG' DG@G@LD?HOG' A>' A@G' J□MN' KGDCBDLGN' OGHG' A>' DG?M' M□>G' !PGDECF□H' □' KGD>GOCME' JAG>BM' □H' CF□' JADMN' A>' JAG' #FG' PGDE' ? B@GN' @?NHG ' A>' !N ?D' JF□OF' □>' CFG' CADE' A>' !N ?D' CAAN' ?MAHG' JABMN' LG' □H B>>GD?LMG' ?HN' JABMN' BCCGDME' NG D?NG' F□@' CA' B' GG@ ' ? AO□?CGN' ?' FG' □' J□CF' $G?D' CA' OA@G' J□CF□H' CFG' AH GOD?C□AH' A>' $G?D8' @?NHG ' C' ? DGG' J□CF' ?MM' CF?C' □' LDAB FC' CA GCFGD R CFG' H□ FCR CFG' CAD@ R CFG' FAB GMG HG R +MA CGD' J□CF' F□' GEG' KBC' ABC' R CFG' AAM R CFG' G@LM?HOG' A>' ?' @?N@?H' ?HN' $G?D' □H' F□' @?NHG ' R ?DG' ?MM' LABHN' CA GCFGD' LE' ?' CD?H G' (□HN' A>' E@K?CFE' OAH>B □AH' □H' CFG' GMG@GHC' A>' H?CBDG' A>' FB@?H' AO□GCE' ?HN' CFG' FB@?H' ABM' #FDAB FABC' ?MM' CFG' KM?E' □' CFGDG' HAC' BLM□@□CE' >GMC' ?@□N C' CFG' OAH-C□HB?M' KDG GHOG' A>' ?MM' (□HN' A>' N□ ADNGD' ?HN' OAH>B □AH' □H' CFG' H?CBD?M' ?HN' @AD?M' JADMN R ?' OAHC□HB?M' OAH O□AB HG A>' GCGDH?M' ADNGD' M?J' ?HN' AAN' W #F□' □C' □' CF?C' A' G ?MC' □C' □H' ABD' GEG I' U

#FG' MAPG' OGHG' LGCJGGH' !N ?D' ?HN' ADNGM□?' □H' CFG' >□D C' OGHG' A>' CFG' >□D C' ?OC' A>' #?CG8' $G?D' J?' ?H' ? BD?HOG' BHNGD' CFG' F?HN' ?HN' G?M' A>' #?CG' CF?C' CFG' KM?E' JABMN' GHN' F?KK□ME' G' @□ FC' LG' OAH-CD?□HGN' □H' CFG' □@KA □L□M□CE' A>' JFAMME' NG CDAE□H' F?(KGDG' CA' G F□L□C' CA' B' A@G' A>' CFG' @A C' CGDD□>□O' OAH>M□OC' A>' FB@?H' K? □AH' ?HN' CFG' @A C' CD□(□H ' N□ KM?E' A>' FB@?H' B>>GD□H ' G' OABMN' HAC' BCCGDME' OAHOG?M' CFG' CGDD□LMG' JAD(□H ' A>' CFG' @□HN' A>' $G?D' JF□OF' F?N' LGGH' M?□N' L?DG' LE' CFG' ,' G KMA □AH' A>' F□' K? □AH I' .BC' FG' C?(G' ' O?DG' CA' MGC' □C' LG' BHNGD CAAN' CF?C' CFGDG□' HACF□H' DG?M' □H' CF□' CF?C' ?MM' J□MM' LG' D□ FC' □H' CFG' GHN' CF?C' CFAB F' CFG' >M?@G' D? G' CFG' FAB G' □' □H BDGN' CF?C' ?' JGNN□H' ?HN' ?' N?HOG' J□MM' CGD@□H?CG' CFG' KM?E' @BOF' LGCCGD' CF?H' CFG' ,' NG?N' @?DOF' I' A>' F?(KGDG

?DDE□H' CFG' KD□HO□KMG' CA' CFG' GHN' J□CF' JF□OF' JG' GC' ABC' JG' PGHCBDG' CA' KD□HC' CFG' M? C' OGHG' A>' G?OF' JD□CGD' ?HN' JG' ? (' ABD' DG?NGD' CA' ?KKME' CFG' O?MG' A>' #?CG' □H' CFG' @?HHGD' JF□OF' JG' F?PG' □HN□-O?CGN' CA' CFG' ?N@G? BDG@GHC' A>' F?(KGDG' R

^ # 3+'

' $ ' 7 ' ' ! QHNG' ' ' ' ' ' %

' X H ' M P' T J' \
T' PTPG' M P' ! !P' %NH%APGN' 2%8$' NP99' T J' GN M QHN
1H' #9AM!T[X P99' G ' P' M P' T J' KMLN PG
#!O' T J' M P' K I P' N' GPP' OPMNH' LMGG' JL !' JG+
X HT' NH G' OP9MT' \S1 ' G%N' T J' H QH!PGG% L9PMGJ P'
' Q P' JG' 7 GN' NHP' N NJ P' \' MT' T J' G' O
X HT' HP P%G' 9O' P!N' M!O' 2' MG' N JQH' M' LM '
#G' P%P' A P' NT M!N' GN UP8SAJN' I T' OP9 M
T' L ' OP9 M' HP P' 1' L NT
'" ' H J' !EJ %O' I MEMPGNT' +
HP' HPP9' 7'7 NJ!P' ! 'HMG' I MOP' HP' K K9P+
#!O' A9PGG !QG' TPN' GNM!O' %N WN' NHT' Q M P' M!O' NHPP+
' I %GN' NH J' !HJ I M!' 9 O' N' G NH' JG' AMKU'
'M' 7 9%G' LM MO GP' 7'H LP' N' I MUP'
1J'O I' I P' PNKHPO' \' : 'N' 8 P' M P' N ' P99'
#K]JM !NPO' NH' I G7 NJ!P' N' AP' QJ99%O'
X NH' 9T !Q' H LP8 ! ' P' 99' H LP' ! '] P+
$ ((

' 3' ()8 0%' D * 9' +

'" ' !KP NHP!' IT !E I PG' /PM '7M9 !' NH NH !P
2' HM P PG 9 %O NHP GM I P PO PGG 7 'A NH+
7 ' X HMN GMTG IT 9 O \
' LPMU ; 7 ' I PNH JQHN 2' HPM O
HP KHM I !Q KP 7' M OPGKP!O !Q Q O+
'" ' HP N LG AT 30 I J!O M G%O' 2' HM P O GAM!OPO
H GP NHMN P I M !' M P J!OP ' IT K I I M!O+
X HMN K I 7 N I MT AP A JQHN ' KHPP 'T J 'MQP+
#!O HPM9 T J 'GM MQP !QG' GHM99 AP MLL9T%O 8
0 'N 'T J ' I MEPGNT P O ' PG Q!
4 J 'U !QO I ' GM P HMN LM N T J GP97 KL!7P %O
1!' JG !' I M MQP+
7 ' " PM 'T J NHMN ' IT 9 PQP \
' HP!' NHP P M P Q OG' M!O NJP G NHP 'KM P+
' 2 G%N L GG A9P \
/PN NHP GLHP PG GN L' NHP 'K J GP' NHP GJ!' I MUP HM9N
HP !OG AP HJGH%O ' NHP GPMG M!O 7 J!NM !G PGN
#"' !MNJ P LMJGP' M!O 9 GNP!' N ' NHP KHM!QP [
X HP P G I T P!N ' IT M JG '
7 ' "P P ' IT 9 PQP+
' X HT ' 2' HM P' !P G NHMN 99 PKM99 NHT T JNH8
" M[O OGN NH J HPM %N \S 'O O NH% !GL !Q Q OG
X H GLP 'N ' I P M9 LP \S 19O /PM 'GHM99 AP
#'U !Q MQM !+
7 ' HP L !KP ' NHMN 9 UP M Q O HMG L % ' HMG GM O N+
' OP9 M NHP!' GHM99 AP]JPP!' ' !OG ' KMNKH NHP G J!O
OP9 M GHM99 AP]JPP!' ' !OG ' KMNKH NHP G J!O
#!O APM ' N !' T J ' GT !QG N ' HPM %!
OP9 M G M]JPP!+
'" ' / U ' G ' HP P L JG 3OQM ' K I PG+
/PMO !Q H G PTP9PGG 7MNHP +' 1' I T 9 PQP
" G !O% JG GN T P99 OPGP PG T J '9P GJ P8
X HMN HP HMG O !P M!O GJ77P %O' 7 'T J 'GMUP+
X HMN 7 'NHP 7M ' OP9 M%G+

! ' ' '8 $' '

5' % ' X HP P%G I T 9 PQP 1 !OJKN I P N 'H G U!PPG 'N 'HM G
" G GPK O A NH 7'P I L P' ' T OPM '3OQM '
" MG ' NH H I GP97 ' P PM9%O NHP U !Q%G A9PGN PGN MN !+
' T L 'OM U : 9 GNP +
5' % ' '9PN I P U GG NHMN !KP I P GKPLNP %O HM!O [
' " 9O 'NH J I GNMU%GN NHP I MEPGNT8 U!PP HP P8
OP9 M HMG J 'L % ' OP9 M%G]JPP!+
LPMU ' G ! N NHMN NHP ! A9P ' GJ77% !Q 3OQM '1
5' % ' T L JG G !' I P OPM 'NHM!' I T 9 GN PTPG+
' 2' !Q%O H I 'N 8 AJN HP P%G NHP 7M 'M I P!OG+
' ' ' m'
' 5 !P OP9 M ' M99 NHP Q OG KM!' N!PGG
" ' I JKH NHT 9 P N ' P I L P 2' L P7P +
HT A QHN PWM I L9P GHM99 K ! !KP NHP 9O+
X HMNP P 'GN I G 7 7 NJ!P M P OPK PPO+
HMN N JNH M!O NJP GHM99 MN 9MGN GJKKPPO+
VF' %$' ' %' ' - % +

^ "# -3&3+'

0S73 * 8 $' ' ' '$ %' %;' ' '177 KP ' ' $ %

' " 9 ' H 9 ' H 9[S1 'T J M P I P!' 7 GN !PG8
" MO 2' T J 'N !QJPG M!O PTP ' 2%O JGP NHP I 'G
HMN HPM P!%G MJ9N GH J9O K MKU S HP%G Q !P 7 ' P P [S
2' U! ' HP!' !P G OPMO ' M!O HP!' !P 9 PG8
HP%G OPMO MG PM NH S/P!O I P M 9 U !Q Q9MGG8
27' NHMN HP ' A PMNH 99 I GN ' GNM !' NHP GN !P+
X HT ' NHP!' GHP 9 PG+
7 ' 2G' NH G NHP L I G%O P!O #
' 1 ' I MQP 7' NHMN H '
'"# OM99 ' M!O KPMGP [
' H G 7PMNHP ' GN G 8 GHP 9 PG[7 N AP G +
2N G M KHM!KP H KH 'O PG POPP I ' M99 G G
HMN P P ' 2' HM P 7P9N+
7 ' 1' IT Q O I MGNP ' [7 '
' - NHPP ' M MT+
' % G ! A9P P!N ' T J '7 P!O+
' #' L9MQJP JL !' T J' MJ NHP P G ' N M N G M99 [
2' I QHN HM P GM %O HP 8 ! 'GHP%G Q !P 7 'P P [S
OP9 M ' OP9 M ' GNMT M 9 NN9P +' " M [
X HMN G %N NH J GMT%GN \S " P ' KP MG P P 'G 7N+
: P!N9P ' M!O 9 8 M!' PWKP99P!N NH !Q !' I M!' S
2' 9J99%O NHP G9M P NHMN MG M HM!Q !Q NHPP+
' % G N JP ' IT 9 OG ' HP O O+
' 5 O 2' ! N ' 7P99 '
2' HM P GPP!' NHP OMT ' NH IT Q O A N !Q 7MJ9KH !'
2' J9O HM P I MOP NHP I ' GU L' 8 2' M I ' 9O ! +
#!O NHPGP GM I P K GGPG GL 9 I P+SX H 'M P T J \
!P PTPG M P ! N %NHP APGN SD% 'NP99 T J GN M QHN+
7 ' 27' 7 NJ!P A MQ 7' N 'GHP 9 %O M!O HMNPO
1!P 7' NHP I ' P APH 9O+

' H G G ?OJ99 G QHN +' # P T J ! N P!N W
7 ' HP GM I P8
4 J 'GP M!N P!N ' X HP P G T J 'GP M!N M JG \
' " P%G M Q O 7P99 ' 2' KM!' NP99 T J NH MN8
" P%9 GN UP ' M!O]J KU9T N ' " P%G OPMO M!O NNP!+
7 ' ' IT Q O 9 O8 2' M I 'NHP P T I M!' 8S
' 2%99 GPP NHMN GN M QHN+
7 ' HMN ' 7 I ' T J ' 7 GN 7 O 77P P!KP M!O OPKMT+
" M P 7 99 %O T J 'GMO GNPLG+
' 4 J M P P9K I P H NHP +
7 ' ' ! ' I M!' P9GP8 M99%G KHPP 9PGG ' OM U ' M!O OPMO9T+S
4 J 'P9OPGN OMJQHNP G HM P 7 P O !P NHP I GP9 PG+
#!O OPGLP MNP9T M P OPMO+
#T ' G '2' NH !U+
'" ' " P U! G ! N HMN HP GMTG8 M!O M !' N G
HMN P L PGP!N JG N 'H I +
P T A N9PGG+

' '177 KP +
'30 I J!O G OPMO ' IT 9 O+
'" ' HMN%G AJN M N 79P HP P+S
4 J 9 OG ' M!O ! A9P 7 P!OG 'U! ' J ' !NP!N+
X HMN K I 7 N N 'NH G Q PMN OPKMT I MT K I P
HM99 AP MLL9 PO ' O 'JG ' P 99 PG Q!
5J !Q NHP 9 7P 7' NH G 9O I MEPGNT+
'H I ' J 'MAG 9JNP L P S4 J 'N 'T J ' QHNG
' ' ' '7
X NH 'A N ' M!O GJKH MOO N !' MG T J 'H ! J G
" M P I P NHM!' I P NPO+S#99 7 P!OG GHM99 NMGNP
HP MQPG 7' NHP ' NJP ' M!O M99 7 PG
HP KJL 7' NHP 'OPGP !QG+SD1' GPP GPP [
' #!O I T L '7 9 G HM!Q%O [' ! ' ! '9 7P
X HT GH J9O M O Q ' M H GP ' M MN ' HM P 9 7P+
#!O NH J ! 'A PMNH MN M99 \ H J%N K I P ! ' I P+
P P '!P P '!P P '!P P '!P P [S
- MT T J J!O 'NH G AJNN !' ' HM!U T J 'G +S
5 'T J GPP NH G 1 / U !' HP S9 U S HP '9 LG S
/ U NHP P '9 U NHP P S' '
' "P 7M !NG [S T 9 O ' I T 9 O S
7 ' PMU ' HPM N8 2' L NHPP ' A PMU [
' $' / U JL ' I T 9 O+
7 ' PW ! N H G QH GN ' 1 '9PN H I ' LMGG [HP HMNPG H I '
HMN J9O JL !' NHP MKU 7' NH G N JQH 9O
N PNKH H I ' JN 9 !QP +
' c ' c

J '8 $' ' ' ($

HN' JFE' NA' JG' ? (' ?HE' AHG' A>' ABD' DG?NGD ' CA' OA@K?DG' JF?C' O?H-
HAC' LG' OA@K?DGN' W FE' NA' JG' KBC' AHG' A>' CFG' @A C' N□P□HG' OAHOGK-
C□AH ' A>' KAGCDE' □NG' LE' □NG' J□CF' CFG' @G?HG C' □HCGDKDGC?C□AH' A>' CFG'
@A C' BH□@? □H?C□PG' >GGM□H R GQB?MME' DG@ACG' >DA@' CFG' PGD□ □@*□CBNG'
A>' OA@@AH' M□>G '? ' >DA@' CFG' CDBCF' A>' □NG?M' LG?BCE' W C' □ ' ? ' JG' F?PG'
?□N' LG>ADG ' LGO?B G' JG' >GGM' BH?LMG' CA' □@K?DC' CA' ACFGD ' ABD' AJH' OAH-
OGKC□AH ' A>' CFG' @?DPGMMAB ' KAJGD' A>' CFG' $G?D' A>' F?(KGDG ' J□CFABC'
G@KMAE□H ' A@G' ? GHOE' CF?C' @?E' □PG' N□ C□HOCHG ' CA' □NG? ' JF□OF'
@B C' LG' ACFGDJ□ G' P? BG ' #FGDG' □ ' AHME' AHG' @ANG' □H' JF□OF'
B0F' ?' KDANBOC□AH' ? ' CFG' $G?D' A>' F?(KGDG' O?H' LG' BHNGD CAAN R LE'
CBNE ' ?HN' LE' DGPGDGHC□?M' DG>MGOC□AH ' #FG' ? G' JF□OF' KDANBOGN' CFG'
@□ GD?LMG' K?DANE' A>' $G?D' CF?C' C□MM' DGOGHCME' F? ' L?H□ FGN' CFG' $G?D' A>'
F?(KGDG' >DA@' CFG' C? G' J? ' ? ' >?D' ? ' DG ?DN ' CFG' (HAJMGN G' A>'
CFG' F□ FG C' G>>ADC ' A>' □HCGMMGOC ' ?' KDG B@KCBAB ' ?DC□>□O□?M ' ?HN' CFGDG-
>ADG' G@KCE' ? G ' #?CG' J? ' CAMGD?CGN' LGO?B G' F?(KGDG' J? ' HAC'
DG?N ' G' F?PG' ?DD□PGN ' □H' A@G' NG DGG ' CA' ?' LGCCGD' SBN @GHC '
LGO?B G' JG' F?PG' MG?@C' CA' SBN G' @ADG' FB@LME ' G' F?PG' MG?DHC' CA'
OA@K?DG' CFG' F□ FG C' JAD(' A>' CFG' F□ FG C' @? CGD ' A>' KAGCDE ' HAC' LE'
CFG' KGN?HC□O' KD□HO□KMG' A>' OAH □NGD□H ' ?' @ANG@' DG?C' AHME' CA' CFG'
G CGHC' □H' JF□OF' FG' □ ' ?H' □@□C?CAD' A>' ?H' ?HO□GHC ' LBC' LE' GHNG?PABD□H '
CA' OA@KDGFGHN' CFG' □NG?' □H' JF□OF' CFG' @ANGDH' ?HN' CFG' ?HO□GHC' G?OF'
JAD(GN ' #FG' ADNGM□?' A>' F?(KGDG' ?HN' CFG' HC□ AHG' A>' AKFAOMG '
F?PG' @?HE' KA□HC ' A>' □@□M?D□CE ' LBC' CFGE' G?OF' LGMAH ' CA' ?' N□>>GDGHC'
E CG@' A>' ?DC ' C' □ ' >AD' CFG' F□ FG C' @□HN ' AHME' CA' O?DDE' CFG□D' GPGD?M '
E CG@ ' CA' ?H' ?KKDA?OF' CA' CFG' KGD>GOC□AH' CA' JF□OF' F?(KGDG' ?HN'
AKFAOMG ' F?PG' O?DD□GN' CFG@ ' C' J? ' >AD' CFG' >GGLMG C' A>' □@□C?CAD '
□H' ?' >GGLMG' ? G ' CA' KDANBOG' B0F' K?DAN□G ' ? ' JG' F?PG' G F□L□CGN '
BHNGD' CFG' KDGCGHOG' A>' BL C□CBC□H ' ADNGD' >AD' □DDG BM?D□CE ' LBC' □H' BCCGD'
□ HAD?HOG' A>' CFG' KD□HO□KMG' A>' ADNGD' JF□OF' J? ' CAA' (□M>BMME' >D?@GN' CA'
LG' P□ □LMG' CA' CFG' DA HG ' A>' CFG□D' C? CG

MNKH M!'NH NHP 'MG'NH JQH'HP'HMO'H! !'! NH !Q 7'NHP' I MNNP 'M!O'A PMU !Q' !N 'NHP'KHM I AP 'M!O'7 !O !Q'KMUPG' 7'X O'O!'NHP'APO'M!O' !'NHP'79 'MA JN'NHP' G OPG' 7'N 'HP'7 NH NH'G9P 'NHP'KHM I AP 9M !G'MG'QJ 9NT' 7'NHMN'HP ! JG' I J OP +' + + + + ' 'NHP'GLMKP' 7'G W' I !NHG'N QPNHP 'M7NP 'NH G' HP ! JG' I J OP 'NHJG'K I_ I NNPO 'NHP P' MLLPM PO' ! ' GJ!' AT'OMT' ! ' I !' AT' ! QHN' !' M!T' LM N' 7'NHP' PM9 I 'AJN' GN 9G' MG'NHP' GUT'K P PO' NH' K !N !JMG' K9 JOG'M!O' G I PN I PG'GJKH' JN MQP JG' !OG' M GP' NH' 9 QHN! !QG' M!O' NP I LPGNG 'NHMN' NHP' LP L9P' P P' !' Q PMN' 7PM ' 7'L PGP!N'OPGN JKN !+R

C' J? 'AD' □H?MME' CFG' AK□H□AH' A>' CGGPGH ' ?HN' & ?MAHG' CF?C' ?' KM?E' LE' #FA@? ' & □NNMGCAH ' GHC□CMGN' =' # F G' □COF I' F?N' KDGOGNGN' & ?0LGCF ' ?HN' CF?C' F?(KGDG' J? ' OAH GQBGHCME' □HNGLCGN' CA' & □NNMGCAH' >AD' CFG' GHGD?M' □NG?' A>' CFG' J □COF' □HO?HC?C□AH ' & ?MAHG' BL GQBGHCME' OF?H GN' F□ ' AK□H□AH' ' >AD ' □H' ?' KA CFB@AB ' GN□C□AH' A>' F□ '=' ! ?E' AH' CFG' FDA-HAMA □O?M' DNGD I' FG' F? ' @?□HC?□HGN' CF?C' ,' # F G' □COF' I' J? ' ?' M?CGD' KDANBOC□AH' CF?H' & ?0LGCF

AD' CFG' $AO?M' MMB CD?C□AH ' A>' G?OF' ?OC' JG' F?PG' CFG' D?C□>□O?C□AH' A>' ?O(HAJMGN □H ' ABD' ALM□ ?C□AH' CA' & □ ' & ?DC□HG?B ' JFA' □H' 636' P□ □CGN' ?MM' CFG' MAO?M□C□G ' CA' JF□OF' CF□ ' CD? GNE' DG>GD

(

BD' AJH' AK□H□AH ' >AD@GN' MAH ' ? A ' DG KGOC□H ' CFG' NDG ' ?HN' ?D@ ' A>' CFG' OAC0F' □ FM?HNGD ' □H' CFG' GMGPGHCF' OGHCBDE ' F? ' LGGH' ! OAH->□D@GN' LE' CF?C' A>' ?' @A C' □HCGMM□ GHC' @ANGDH' F□ CAD□?H U' JFA' ?E ' ,' C' JABMN' LG' CAA' @BOF' KGDF?K ' CA' ?>>□D@' CF?C' CFG' NDG ' ? ' ?C' KDG GHC' JADH' □H' ?MM' □C ' @□HBCG' NGC?□M ' □ ' ?HO□GHC ' LBC' □C' □ ' PGDE' OGDC?□H' CF?C' □C' □ ' OA@KABHNGN' A>' CFDGG' P?D□GC□G ' □H' CFG' >AD@' A>' NDG ' JF□OF' JGDG' GK?D?CGME' JADH' LE' CFG' □ FM?HNGD ' □H' CFG' GPGH-CGGHCF' OGHCBDE ' ?HN' CF?C' G?OF' A>' CFG G' @?E ' LG' CD?OGN' L?O(' CA' CFG' DG@ACG C' ?HC□QB□CE I' #FG G' ?DG R C ' CFG' LGMCGN' KM?□N ' 2HN ' CFG' FADC' OA?C' AD' S?O(GC ' 3DN ' CFG' CDB□ ' □CF' G?OF' A>' CFG G' AD' ?C' ?HE' D?CG' J □CF' CFG' >□D C' CJA' J? ' JADH ' >DA@' CFG' G?DM□G C' KGD□AN ' CA' CFG' GPGHCGGHCF' OGHCBDE ' CFG' MAH MGGPGN ' ?>>DAH C?□HGN' F□DC ' A>' D□ F' AD□ □H ' O?MMGN' CFG' $GH□ ODA□OF >' □C OACC□G ' □H' 5 3 ' ?E ' ,' # FGE' VCFG' OAC0F' □ FM?HNGD ' LG' OMA?CFGN' J □CF' ?HG' @?HCMG ' J □CF' ?HG' OF□DC ' ?>>DAHGN' ?>CGD' CFG' D□ F' @?D□HGD ' A□H ' L?DG MG GN' CA' CFG' (HGG I' HN' □OAM?E' N8 D>GP□MMG ' OA @A D?KFGD' CA' CFG' □H ' A>' D?HOG ' JFA' KBLM□ FGN' ?C' ?D□ ' □H' 5 3 ' ?' PAMB@G' GHC□CMGN' , ' $?' ?P□ ?C□AH' NB' " AE' N8 ! OA G' 0?OQBG ' O□HQB□G @G' NB' HA@ ?BCABD' NG' AH' " AE?B@G' GC' MG ' GLD□NG ' GC' DOF?NG ' ABCT' M?' OAHNB□CG' N8 MG ?HNDG' $□HN ?E ' G OGMMGHC' □MACG' ! OA A□ I' ?E ' =' # FGE' JG?D' M□(G' CFG' D□ F' ?' M?D G' >BMM' F□DC ' OAMABDGN' J □CF' ?>>DAH ' ?HN' APGD' CF□ ' ?' ?D@GHC' F?H □H ' CA' CFG' (HGG ' A>' CF□O(' JAAM ' ?>CGD' CFG' @?HHGD' A>' ?' O? AO(' V ABC?HG ' # FGE' A' J □CF' L?DG' FG?N ' ?HN' ?MMA J' CFG□D' F?□D' CA' DA J' PGDE' MAH ' ?HN' CFGE' JG?D' HG□CFGD' CAO(□H ' HAD' FAG 'G OGKC' A@G' JFA' F?PG' LB (□H ' VLAC□HG ' @?NG' □H' ?' PGDE' AMN' >? F□AH ' JF□OF' 0A@G' ? ' F□ F' ? ' CFG' (HGG I' $G MGE ' □H' 5 6 ' ?E ' ,' MM ' LACF' HALMG ' ?HN' OA@@AH' KGAKMG ' JADG' @?HCMG ' A>' AHG' ADC' VG OGKC' CF?C' CFG' HALMG ' KDG>GDDGN' CFA G' A>' N□>>GDGHC' OAMABD ' CFG G' JGDG' MAH ' ?HN' >MAJ□H ' LBC' O?K?LMG' A>' LG□H ' ?CFGDGN' BK' ?C' KMG? BDG' □HCA' >AMN ' ' # FGE' F?N' ?M A' F? E DB ' B0F' ? ' CFG' D□ F' B G' ?C' CFG' KDG GHC' N?E # FG' DG C' A> CFG□D' ?D@GHC ' OAH □ CGN' A>' ' $ '0 'K D .' J □CF<CFG' MGGPG ' AKGH' LGMAJ ' >AD' CFG' OAHPGH□GHOG' A>' CFDAJ □H ' CFG□D' N?DC ' ?HN' ?' OAPGD□H '>AD' CFG' CF□ F ' A>' CFG' □@KMG C' (□HN ' @ADG' >AD' NGOGHOE' CF?H' >AD' FAJ' AD' NG>GHOG' ? ?□H C' OAMN ' # FGE' @?NG' ?M A' A>' M□HGH' PGDE' M?D G' F□DC ' J □CF' HB@GDAB ' >AMN ' ?HN' PGDE' M?D G' MGGPG ' JF□OF' >MAJGN' ?LDA?N' MAA GME' AH' CFG□D' (HGG ' # FG G' CFG' D□OF' OAMABDGN' J □CF' ?>>DAH ' ?HN' ACFGD ' @G?DGN' J □CF' A@G' DG? G' CA' KDG GDPG' CFG@' MAH GD' OMG?H' ?@AH ' CFG' CA□M ' ?HN' G GDO□ G ' A>' ?' O?@K ' YO I 0' GDG' JG' F?PG' CFG' GOAHN' P?D□GCE R CF?C' A>' CFG' FADC' JAAMMGH' S?O(GC' J □CF' CFG' AKGH' MGGPG ' ?HN' CF□ ' OAH>□D@ ' @A C' OBD□AB ME' CFG' □NGHC□CE' A>' CFG' ?HO□GHC' OACC□ F' J □CF' CFG' ?HO□GHC' D□ F' NDG ' ? ' CFG' D□ F' OF□G>C?□H ' JFA' ?KKG?DGN' ?C' OABDC' □H' CFG' DG□ H' A>' ! M□T?LGCM□' JGDG' OM?N' □H' CFG G' MAH ' F□DC ' FADC' AKGH-MGGPGN' S?O(GC ' ?HN' MAH ' F? E' @?HCMG ' # FG' CF□DN' P?D□GCE' □ ' CFG' CDB□ ' AD' CDAJ G' =' CFG' LDGGOFG ' ?HN' CAO(□H ' A>' AHG' K□GOG I' A>

' HP' " QH9M!OP G' 7' K N9M!O' AT' # ' O+' UP!P+O+ +#+' K N+' ' 9G+' I +' / !O !' J MT' +' +' UP!P' !' NH G' PWKP99P!N' U' HMG' M9G ' NH !' Q PMN' 9 QHN' JL !' NHP' PMG' H GN T' 7' MKAPNH '7 I 'M'KM P7J9' ! PGN QMN !' M!O' K I LM G !' 7'NHP'2 GH' M!!M9G' M!O' NHP' GP' MQMG+
N' 6 0 I 'NHP'2 GH' OG' 6 *'%$ *' M!O' (,0 ($'% . S #& 9 %G O7E7P ' %' %' '4('

CFG' D□ F' □H' CFG' C□@G' A>' +□>?MNB ' ?@LDGH □ ' ?HN' CFG' LD?OOF@' 7 ' CFG' . GM □O' +?BM ' ?HN' ABCFGDH' . D□CAH ' □H' CF?C' A>' AG ?D' #FG' CDB□ ' F? ' F□CFGDCA' LGGH' CD?OGN' □H' OACM?HN' AHME' ? ' >?D' L?O(' ? ' CFG' EG?D' 53 ' ?HN' CFGDG' ?DG' @?HE' JFA' NGHE' □C ' F?P□H ' >AD@GN' ?' KADC□AH' A>' CFG' @ADG' ?HO□GHC' OACC□ F' NDG ' LBC' CFG' □HOAHCDAPGDC□LMG' >?OC' A>' ?' □@M?D' ?DC□OMG' A>' ?KK?DGM' F?P□H ' LGGH' JADH' LE' ?MM' CFG' OF□G> ' A>' CFG' ACFGD' CD□LG ' A>' CFG' DG?C' GMC□O' AD' + ?GM□O' >?@□ME' □ ' B>>□O□GHC ' □H' ABD' @□HN ' CA' □PG' KDAL?L□M□CE' CA' CFG' LGM□G>' CF?C' □C' J? ' ?M A' JADH' LE' CFA G' A>' CFG' ?HO□GHC' OACOF' □ FM?HNGD ' □CF' DG ?DN' CA' ?HACFGD' FACME' N□ KBCGN' KA□HC' A>' OACC□ F' OA CB@G ' CFG' OAMABD ' A>' CFG' OFGQBGDGN' OMACF ' OA@@AHME' O?MMGN' ' ?HN' ' VHG□CFGD' A>' JF□OF' H?@G ' FAJGPGD ' AD□ □H?MME' □ H□>□GN' □C ' P?D□G ?CGN' ?KKG?D?HOG ' CFG' >AD@GD' LG□H ' @GDGME' CFG' H?@G' A>' CFG' JAAMMGH' CB>>' A>' JF□OF' □C' J? ' @?NG ' ?HN' CFG' M?CCGD' CF?C' A>' CFG' ?D@GHC' □HCA' JF□OF' □C' J? ' F?KGN ' CFG' @A C' GHGD?M' LGM□G>' □ ' CF?C' CFG' N□ C□HOC□AH' A>' CFG' OM?H ' LE' ?' KGOBM□?D' K?CCGDH' □ ' A>' OA@K?D?C□PGME' ?' DGOGHC' N?CG ' LBC' CFA G' JFA' NGHE' =' ?' OA?C' A>' @?HE' OAMABD ' I' CA' CFG' ?HO□GHC' OACC□ F' □ FM?HNGD ' ?MCA GCFGD' @B C' ? ' BHOGDG@AH□AB ME' CD□K' CFG' GMC□O' . D□CAH' AD' . GM □O' +?BM' A>' F□ ' CBH□O ' =' >MAJGDGN' J □CF' P?D□AB ' OAMABD ' □H' N□P□ □AH I' □H' JF□OF' FG' F? ' LGGH' KGO□>□O?MME' ?DD?EGN' LE' %□ANADB ' □OBMB ' # FG' OFGQBGDGN' OMACF' J? ' CGD@GN' □H' GMC□O' " .' ?HN' CFG' □ FM?HNGD ' JG' ?DG' □H>AD@GN' LE' &D ' $A ?H '^ □PG' □C' ?M A' CFG' KAGC□O?M' ?KKGMM?C□AH' A>' $J .' □ H□>E□H ' =' CFG' CD□>G' I' AD' =' J?D' A>' OAMABD I' H' & ?SAD8 ' C□@G' V 5 2 ' CFG' KM?□N ' AD' OMA?(' A>' CFG' F□ FGD' OM? G ' ?MAHG' JGDG' P?D□G ?CGN ' # FG' OA@@AH' KGAKMG' ?KKG?D' CA' F?PG' JADH' CFG@' GHGD?MME' A>' ?' LDAJH' OAMABD ' =' @A C' HG?D I' ?E ' & AH□GKGHH□G ' =' CA' CFG' OAMABD' A>' CFG' F?NNGD' I' VFG?CFGD ' # FG' KM?□H' LM?O(' ?HN' JF□CG' CB>>' HAJ' GHGD?MME' (HAJH' □H' $AHNAH' LE' CFG' H?@G' A>' =' FGKFGDN8 ' KM?□N I' □ ' GP□NGHCME' >DA@' □C ' □@KM□O□CE ' A>' DG?C' ?HC□QB□CE ' ?HN' OABMN' F?PG' LGGH' @A C' G? □ME' @?HB>?OCBDGN ' ? ' □C DGQB□DGN' HA' KDAOG ' A>' NEG□H ' LG□H ' OA@KA GN' A>' CFG' CJA' H?CBD?M' OAMABD ' A>' CFG' >MGGOG ' %G>AG ' □H' F□ ' = & G@A□D ' A>' ?' ?P?M□GD I' NG OD□LG ' CFG' KM?□N' JADH' □H' 431' ? ' =' CD□KGN' ?ODA ' DGN' ?HN' EGMMAJ ' I' ?HN' CFG' KADCD?□C' A>' $?OE' CFG' ?OCAD ' K?□HCGN' □H' F?DMG ' 8 ' C□@G '

DGKDG GHC' F□@' NDG GN' >AD' ? JHGE' CFG' OAC' □H' ?' DGN ' EGMMAJ ' ?HN' LM?O(' CDB□ ' ?HN' LGMCGN' KM?□N ' AD' ?C' ?HE' D?CG ' □H' CB>>' A>' CFG' H?CBD?M' EGMMAJ □ F' C□HC' A>' CFG' JAAM ' CD□KGN' ?ODA ' J □CF' LM?O(' ?HN' DGN

AD' CFG ?D@ABD' ?HN' JG?KAH ' A>' CFG' OAC0F' A>' CFG' GMGPGHCF' OGHCBDE' JG' F?PG' D?CFGD' @ADG' N□ C□HOC' ?BCFAD□CE ' # FG' APGDG□ H' ?HN' F□ ' $AJ-M?HN' OF□G> ' ?KKG?D' G?DME' CA' F?PG' ? B@GN' CFG' F□DC' A>' D□H ' @?□M A>' CFG' ? AH ' AD' KGDF?K ' CFG' QB□MCGN' 9 ' A>' CFG□D' ADJG □?H' ?HN' %?H□ F' □HP?NGD ' LBC' CF?C' A@G' A>' CFG' □ FM?HN' OF□G>C?□H ' N□ N?□HGN' B0F' NG>GHOG' @B C' LG' ?N@□CCGN' >DA@' CFG' JGMM (HAJH' LA? C' A>' CFG' ! ?DM' CD?CFG?@G ' ? ' M?CG' ? ' 36 ' ?C' CFG' . ?CCMG' A>' CFG' C?HN?DN R = ' JG?D' HA' ?D@ABD I' G OM?□@GN' CFG' FGDA□O' +?GM ' = EGC' CFA G' JFA' NA' JMM' HAC' ?NP?HOG' LGEAHN' @G' CF□ ' N?E I' C' J? ' □HNGGN' CFG' AMN' GMC□O' >? F□AH' >AD' AMN□GD ' CA' N□PG C' CFG@ GMPG ' A>' ?M@A C' GPGDE' KADC□AH' A>' OAPGD□H ' AH' CFG' GPG' A>' OA@L?C ' ?HN' CA' DB F' □HCA' L?CCMG' HG?DME ' □>' HAC' GHC□DGME ' H?(GN

#FG' ?HO□GHC' OACC□ F' JG?KAH ' JGDG' CFG' LAJ ' CFG' KG?D ' CFG' OM?E@ADG' Q $ $J .' CFG' L?CCMG ? G ' ?HN' CFG' N□D(' AD' L□N? ' J □CF' DABHN' C?D GC ' OAPGDGN' J □CF' LBMM8 ' F□NG ' ?HN' CBNNGN' J □CF' H?□M ' ?HN' LA G ' A>' LD? ' AD' □DAH ' AD' CFG' NDG ' ?HN' ?D@ ' A>' CFG' H MA ? AH' ?B □M□?D□G ' A>' & ?MOAM@' CFG' . ?EGB ' C?KG CDE' >BDH□ FG ' KGDF?K ' CFG' HG?DG C' ?BCFAD□CE

#FG' OACC□ F' >G@?MG' F?L□C' GG@ ' CA' F?PG' OAH □ CGN ' M□(G' CF?C' A>' CFG' ? AH ' AD@?H ' ?HN' %?H□ F' JA@GH R H?E ' JG' @?E' GPGH' ?NN' CFG' ?HO□GHC' . D□C□ F R A>' ?' MAH ' DALG ' □DNMGN' DABHN' CFG' J?□ C ' ?HN' ?' >BMM' ?HN' >MAJ□H ' @?HCMG '>? CGHGN' AH' CFG' LDG? C' LE' ?' M?D G' LBO(MG' AD' LDAAOF' A>' LD? ' □MPGD' AD' AMN ' ?HN' GC' J □CF' OA@@AH' ODE C?M ' AD' KDGO□AB ' G@ ' ?OOADN□H ' CA' CFG' D?H(' A>' CFG' JG?DGD' %□A' NG OD□LG ' . A?N□OG?' ? ' JG?D□H ' ?' P?D□G ?CGN' DALG ' ?HN' CFG' ?HO□GHC' @?HCMG' JADH' LE' OAC0FJA@GH ' NGHA@□H?CGN' CFG' ?D□ ?N ' □ ' NG OD□LGN' LE' & ?DC□H' ? ' 0FGQBGDGN

?' ?PM!' OP' PMJQ!P' H ' MKK I LM! PO' NHP' O P!KH' M W 9 M PG' N ' K N9M!O' I') ' !' 9 9KP' I M!!P' OPGK APG' 6' 9PG' GMJ MQPG R' MG' HP' KM99G' NHP' " QH9M!OP G' !MUPO' PWKPLN' NHP 'GNM !PO' GH NG' ($ % %' %0+' M!O' M' KP NM !' 9 QHN' K P !O' I MOP' 7' g' 7' M JG' K 9 J G' KM T !Q' 9M QP' A G' M!O' G I 9M ' G OG' M!O' AJK9OP G' N ' NHP' NHP G' ' NHP' / 9M!OP G+
ï " GN T' 7'NHP' : MP9+' ' 9G+' +' / !O !+
1 /+' 22+' 4' & ')

99ƒ HPƒ O GAJ GPO’ MN’ M !N’ 9 I PG% !KH+
P!’ NH JGM !O’ O 99M G’ N ’ J ’ QP ! P M9ƒ JGP+
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& ’ ’ I P’ NHMN’ NHM !P’ 7’ M O ’ GHM99ƒ OPKP P’
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!O’ I J!KH%O’ M !O’ I J!KH%O’ M !O’ I J!KH%O’ S6’ : P’
I P R’] J NH’ 2
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JN’ ! ’ M’ G P P’ 2%99’ NH NHP ’ GM 9 $%
!O ’ 9 UP’ M’ M N’ NH JN’ M’ NM 9+
2%99’ O ’ 2%99’ O ’ M ! O’ 2 %99’ O +
%$ 8 ’ 2%99’ Q P’ NHPP’ M’ !O+
2 8 ’ H% M N’ U !O+
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2 8 ’ 2’ I TGP97 HM P’ M99’ NHP’ NHP 8
!O’ NHP’ P T’ L NG’ NHPT’ A9 +
#99’ ? ’ H) 1 ’ ? 1 ’ ? "’ U !
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2%99’ O M ! ’ ! H I ’ O T’ MG’ HMT’ ’ F
9PPL’ GHM99’ ! P NHP ’ ! QHN’ ! ’ OMT’
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" P’ GHM99’ 9 P’ M’ I M ! ’ 7 A O’
X PM T’ GP %! ! QHNG’ ! ! P’ N I PG’ ! !P+
HM99’ HP’ O !O9P ’ LPMU ’ M ! O’ L ! P
H JQH’ H G’ AM U’ KM ! ! N’ AP’ 9 GN+
4 PN’ N’ GHM99’ AP’ NP I LPGN N GG%O+
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X MKU%O’ MG’ H I P M O’ HP’ O O’ K I P’ = & ’ 2
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MKAPNH’ O NH’ K I P+
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- GNP G’ 7’ NHP’ GPM’ M ! O’ 9M ! O
HJG’ O ’ Q ’ MA JN’ MA J N8
H KP’ N ’ NH ! P ’ M ! O’ NH KP’ N ’ I !P+
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G’ M’ IP ! GT99MA9PF 9 ! P ’ HT I !Q’ NH’ HP’ 7 99 !Q’ KN GT99MA K’ 9 ! P ’ ! ’ HP’
GM I P ’ I M ! ! P
6’ 2’ %+ :’ % ’ : B - ,’ (’ @ -2O 2%99’ O M ! ’ H I ’ O T’ MG’ HMT R
G’ M’ IP ! GT99MA9PF 9 ! P ’ HT I !Q’ NH’ HP’ 7 99 !Q’ ! P’ 7’ GP P ! ’ GT99MA9PG’ IP’
PO’ N ’ G’ HM P’ OPGN TPO’ NH G’ ! PN KM9’ M M ! QP ! P ! N’ AT’ KHM ! Q !Q’ 6’ $6 ’ U ! O’ R’
! N ’ 6’ $ ’ ’U ! O8 R’ M ! O’ 6’ G’’ O M ! ’ H ’ I ’ O T’ MG’ HMT’ R’ ! N ’ 6’ ’ 8 ’’ O M’ H’ H I ’
O T’ MG’ HMT+R’ MLP99%G $ G ’ G’ M ! ’ I L P ! P ! N+
’ & ’ HP P’ KM ! ’ AP’ ! ’ O JAN’ NHMN’ NH G’ NP I ’ G’ OP PO’ 7 I ’ NHP’ # ! Q9 ’
MW ’ ! ’ 82 # O’ GL UP ! 8 M ! O’ ! ’ NHP’ GN ! P MT’ NHN’ NHP’ O’ ’ G’ M ! TNH ! Q’
GL UP ! ’ 8 ’ M ! O’ ’ M P’ GT ! _ ! T I _ JG’ M ! O’ P ! JM99T’ MLL9 KMA9P’ N ’ GJKH’ I TGNP JG’
AP ! QG’ MG’ MKAPNHG MKHPG2 " X P’ KN ! ! N ’ NHP P7 P ’ MQ PP’ NH’ ! ’ NHP’ PKU’ NHMN’ NHP
O’ G’ 8 28 SD 97J9F " P GMTG’ NHMN’ N’ G’ NNP ! ’ 8 28 ! ’ NHP’ Q ! M98
AJN’ NH G’ G ! N’ G ’ ’ N’ G’ NNP ! ’ 8 28 # H KH’ NPP P ! G’ GMTG’ G M’ A9J ! OP ’ 7’ NHP
N M ! GK AP ’ ’ L ! NP ’ X P’ O JAN’ NH G8 7 ’ NHP’ O’ G’ NHJG’ NNP ! ’ 8 28 # N ’ ’
I M U’ NHMN’ N’ K ! G GNG’ 7’ 8 ’ GT99MA9PG2 O ’ PWM I L9P ’ ! ’ NHP’ GPK ! O’ MKN’ M !] J ’
GMTG S
6’ 2’ O PM I N’ 9NGN ! QHN’ 7’ NHP’ NH PP’ 8 28 ’ G GNP G+R
JN’ N’ G’ M9G ’ NNP ! ’ 8 2 C S
6’ # G’ NHP ’ 8 2 ’ I P ! ’ L I GNO’ M ! O’ 2’ 7PM +R
G’ M 9 ! P’ 7A9M ! U’ P GP / ’ GNP ’ HP P’ NH J’ \ R 99 ! Q’ G !P8 R
" P P’ NHP’ O’ G’ ’ GT99MA9P’ AT P9 G ! ’ + X 9 P ! ’ NHP’ L PN’ JGPG’ NHP’ O’ 8 28 ’
! ’ NHP’ GP ! GP 7’ 97J9 ’ NHP’ PO N G’ 7’ NHP’ Q ! M9’ O ’ ! N’ K ! 7 J ! O’ NHP’ OG+’
HJG’ ! ’ NHP ’ N O’ MKN ’ PKNNP’ GMTG’ S HO+ H ! % M N’ U ! O+
6’ # ! O’ H KH’ G’ GP ’ M9ƒ T J HM P O !P’
! O’ 2’ M ! NHP R

$ "& J (0 "

E 7 JM!O7M MOMT2HM P! NGPP!+
% " 7M GMKM99O N O PG\SXHMM PNHPGP
NHP %O M!OG 9O !NHP MNN P8
HMN9 U! N9UPNHP !HMA NM!NG %NHP PM NH
#!OTPNMP !%N\ / PTJ\ MPTJMJQHN
HMN I M! IMT]JPGN !\ 4 JGPP I N J!OP GNM!O IP+
TPMKHMN !KPHP KH LLT7 !QP9MT !Q
L !HP GU!!T9 LG S4 JGH J9OAP IP!+
#!OTPNT J APM OG7 AO IPN !NP L PN
HMNT JMPG +
E LPMU 7TJKM!8SXHMNMPTJ\
8 #99HM9 MKAPNH[+HM9 N NHPP NHM!P 7
:9M I G[$;
% 8 #99HM9 MKAPNH[HM9 N NHPP NHM!P 7
M O [
) 8 #99HM9 MKAPNH[NHMN GHM9NAPU !QHP PM7NP +
% : OG HTO T JGNM N8 M!OGPP I N 7PM
H !QGNHMNO G J!OG 7M \S2%NHP !M I P 7N JNH+
PTP7M!NMGN KM9$ NHMN !OPPO
XH KH JN M O9TTPGH \ T! A9PLM N!P
4 JQ PPN NHL PGP!NQ MKP M!OQ PMNL PO KN !
17! A9PHM !Q M!O 7 TM9H LP
HMNHPGPP I G MLN NHM98 N I PT JGLPMU ! N
27T JKM!9 U !N NHPGPPOG 7N I P
#!OGMT H KHQ M ! 99Q M!O H KH 99 ! N+
LPMUNHP!N I P H !P NHP APQ ! 7PM +
4 J7M JG! T J HMNP+
2 8 " M 9[
, % 8 " M 9[
) 8 " M 9[
8 /PGGP NHM! MKAPNH M!OQ PMNP +
% 8 NG HMLLT TPN I JKH HMLL P +
) 8 H JGHM9NQPNU !QG NH JQHNH JAP ! !P
M99HM9 MKAPNH M!O M!]J [
2 8 M!]J M!O MKAPNH M99HM9[
E NMT T J I LP 7PKNGLPMUP G NP99 I P I P
T !P9%G OPMNH2U! 2M I NHM!P 7 :9M I G8
JNH 7 M O \NHPNHM!P 7 M O 9 PG
#L GLP JG QP!N9P I M!8 M!O N +APU !Q+
NM!OG ! N NH !NHPL GLPKN 7AP9 P7+
I P NHM!N APM O = MT7 I HP!KP
4 J P NH G GN M!QP !NP99 QP!KP\ HT
L !NH G A9MGNPO HPMNHT J GN L J MT
X NH GJKHL LHPN K Q PPN !Q\S LPMU 2KHM QP T J+
^X NKHPG1 -
% HP PM NH HMNH AJAA9PG MG NHP MNP HMG+
#!ONHPGPM P 7NHP I X H NHP M P NHPT M! GH%O\
E 2!N NHP M M!O HMN GPP I %O K L M9 I P9NPO
#G A PMNH !N NHP !O+S%X J9ONHPT HMO GNMT%O [
% XP PGJKHNH !QG HP P MG PO GLPMU MA JN\
1HM P PPMNP!' !DNHP !GM!P NF
HMNNMUPG NHP PMG !L G !P\
E 4 JKH9O P!GHM99APU !QG+
% 4 JGHM99APU !Q+
E #!ONHM!P 7 M O N 8 P!N N! NG \
% 2$ NHP GP97 GM I P NJ!P M!O OG= XH %G HP P\

F % ('SDAP9 !Q !QN 7M!NMGT I MQ !M T+
HP I OP I PO N GGJAGN NJNP ;AJN HTGH J9O P PEPKN M!M!K P!N
O I ! J MQP7 I OP ! G !Q\
F9 " G KM99PO % !M! 9O A N 7 I PO K !P H KH HMUGLP P I QHN
HM P K !GJ9NPO+
D HP LMGGMQP GNM!OG NHJG ! NHP Q !M9 S

6 "P7 !OG NHPP !NHP GN JN PTM!M!UG+
NH !Q M7 M O 7 HMN NHTGP97O O I MUP
N M!QP I MQPG 7OPMNH MG NH KU MG M9P
M! L GN NH L GN+R

XP P!NJ P N MO LN NHP PMO !Q 7& P L !K LM99TAPKMJGP NHP PWL PGG !
6MG NH KU MG HM9 R MG P!OP PO7M I 9 M AT L PN KM9 JGP LP!GP HMG S $

6#G NH KU MGDHM9 7 NH L J PO7 I NHP GUT+R
#!O 5 MTN !
6 1JN 7NHP N !K IP]JM PG NH KU MG HM 9+R

O " P7 !OG NHPP !NHP GN JN PTM!M!UG+
NH !Q M7PM O 7 HMN NHTGP97O OG I MUP
N M!QP I MQPG 7OPMNH MG NH KU MG M9P
M! L GN NH L GN M!O P P T !P O O APM
HT L M GPG !HGU!QO I %G Q PMN OP7P!KP
#!OL J %O NHP I O !AP7 P H I+
3B XP M P GP!N+
Q P NHPP 7 I J TM9 I MGNP NHM!UG8
1!9T N HP M9O NHPP !N HG G QHN ! N LMT NHPP+
!-- #!O7 M!PM !PGN 7M Q PMNP H ! J +
"P AMOP I P7 I H I KM99 NHPP NHM!P 7 M O
2! H KH MOO N ! HM9 I GN NHT NHM!P [
0 N G NH !P+
% XHMN KM!NHP OP 9GLPMU N JP
E HP NHM!P 7 M O 9 LG XHTO T JO PGG I P
2 A %O APG \
3 XH MG NHP NHM!P 9 PG TPN
JN J!OP HPM TEJOQ I P!N APM G NHMN 9 7P
XH KH HP OPGP PG N 9 GP+
XHPNHP HP MG K I A !%O NH NH GP 7 MT8
1 O O9 !P NHP PAP9 NH H OOP!HP9L
#!O M!NMQP8 NHMN NH A NH HP 9MA J %O
2! H G K J!N T%G MKU 2U! ! N8F
JN N PMG !G KML NM9 K !7PGG%O M!OL T%O+
"M P P NH !H I+
E : 9M I G M!O NHM!P 7 M O
HP Q PMNPGN G APH !O+S HM!UG7 T J LM !G+S
5 T J ! N H LP T J KH 9O P!GHM99APU !QG+
XHP!NH GP NHMN QM P NHP NHM!P 7 M O N I P+
- I G%O ! 9PGG N NHP I \
% HMN N JGNPO H I P
QHN TPN P!U !O9P T J J!N NHP K !+
PG OPG NHP NHM!P 7 M O + JN %N G GN M!QP
#!O 7NP!N I PG N ! JG N J HM I+
HP !GN J I P!NG 7OM U!PGG NP99 JG N JNHG8
X !JG NH H !PGN N 79PG N APN MT JG
2! OPPLPGN K !GP]JP!KP+S
JG !G M O 2L MT T J+
E N JNHG M P N 9O+
#G HMLLTL 9 QJPG N NHP G P99 !Q MKN
17NHP I LP M9 NHP I P+S2NHM!U T J QP!N9P I P!+S
H G GJLP !MNJ M9 G 9 K N !Q
M!! NAP 998 KM!! NAP Q O S27 99+
XHT HMNH N Q P!' I P PM !PGN 7GJKKPGG+
I I P!K !Q !'MN JNH\ 2M I NHM!P 7 M O 8
27Q O HT O 2T P9O N NHMN GJQQPGN !'
XH GP H O I MQP O NH J!7 W I T HM +
#!O I MUP I T GPMNPO HPM N U! KU MN I T AG+
#QM !GN NHP JGP 7!MNJ P\ - PGP!N7PM G
P9PGG NHM!'H A9P I MQ ! !QG
T NH JQHN H GP I J NHP TPN G AJN 7M!NMGN KM9+
HMUPG G I T G !Q9P GNMNP 7 I M! NHMN 7J!KN !'
2G G I NHP %O !'GJ I GP8 M!O ! NH !Q G
JN HMN G ! N+
% / U H J LM N!P %G MLN+
E 27 KHM!KP 99 HM P I P U !Q HT KHM!KP I MT
K !' IP+
X NH JN I T GN +
% P H ! J G K I P JL !'H I
/ UP J GN M!QP QM I P!NG8 K9PM P ! N N NHP I J9O+
JN NH NHP M O 7JGP+

F XP7 99 NHP I PN KM9 M M!QP I P!N 7 NHP Q !M9S! N M LP 7PKN !P KP _
NM !9T+

E %

HP' L !KP' 7 J I AP 9M!O' H KH' H ! J ' I JGN'
N ' J!MKK I LM! PO' ! PGN' H I ' !9T+
JN' G Q!G' 7 ! A9P!PGG ' 9 UP' GNM G ' GHM99' GH !P'
1 !' M99' OPGP P G+ SO I ' HP!KP' N ' 2! P !PGG
!O' A !O' JG' 7J NHP ' N ' T J+
E ' HP' PGN' G 9MA J ' H KH' G ' ! N' JGPO' 7 ' T J8
2%99' AP' I TGP97 NHP' HM A !QP ' M!O' I MUP' E T7J9
HP' HPM !Q' 7 I T 7P' NH' T J ' MLL MKH' 8
' HJ I A9T NMUP' I T 9PM P+
& ' T' NHT' M O [
E ' HP' L !KP' 7 J I AP 9M!O[S HMN' G' M' GNPL
1 !' H KH' 2' I JGN' 7M99 O ! ' P9GP' %P 9PML+ 9 - "
O ' !' I T' MT' N' 9 PG' NM G ' H OP' T J ' 7 PG[
/ PN' ! N' 9 QHN' GPP' I T' A9MKU' M!O' OPPL' OPG PG
HP' PTP' !U' MN' NHP' HM!O' [TPN' 9PN' NHMN' AP+
X H KH' NHP' PTP' 7PM G ' HP!' N' G O !P ' N ' GPP+ 9: 4
& ' JP ' NHT' M!] J & HP' G' 7J99' G ' M9 M!N8
# !O' !' H G' K I I P!OMN !G' 2' M I ' 7PO' 8
2N' G' M' AM!] JPN' N ' I P' / P N%' M7NP ' H I+
X H GP' KM P' G' Q !P' AP7 P' N ' A O' JG' P9K I P'
2N' G' M' LPP 9PGG ' U !G I M!' +> !& - ' 4 &

3 3' +S2! P !PGG' ' !! ' ' MKAPNH%' -
' ' < ! 1 ' " 3' '
2' ' 6' HPT' I PN' I P' !' NHP' ONT' 7 GJKKPGG8 M!O' 2' HM P' 9PM !PO' AT' NHP'
LP 7PKNPGN' PL N' NHPT' HM P ' P' !' NHP I' NHM!' ! NM' U! 9POQP+' X 9 P!' 2 AJ !PO'
!' OPG P' N '] JPGN !' NHP I ' 7J NHP ' ' NHPT' I MOP' NHP I GP9 PG' M ' !N ' H KH' NHPT
M! GHPO+' X H 9PG' 2' GN O' ML' N' !' NHP' !OP ' 7 ' N ' KM I P' I GG PG' 7 I ' NHP' U !Q '
H ' M99 HM 9PO' I P ' Y HM!P' 7 M O 8 %AT' H KH' N N9P ' AP7 P ' NHPGP P O'G GNP G'
GM9JNPO' I P ' M!O' P?P PO' I P' N ' NHP' K I !Q ' !' 7'N I P ' !H' Y " M 9 ' U !Q' NHN' GHM9N'
AP [% H G' HM P' 2' NH JQHN' Q O' N ' OP9 P ' NHPP ' I T OPM PGN' LM N !P ' 7' Q PMN !PGG8
NHN' NH J' I QHNPGN' ! N' 9 GP' NHP' OJPG ' 7 PE K !Q ' AT' AP !Q ' Q! M !N' 7 HMN' Q PMN_
!PGG G' L I GPO' NHPP+' / MT' N' N ' NHT' HPM N' M!O' 7M P P99+R

: 9M I G' NH J' M N ' M!O' M O 8 M!O' GHM9N' AP'
X HMN' NH J' M N' L I G%O SD4P' O ' 2' 7PM ' NHT' ! MNJ P' 8
2N' G' N ' 7J99' % NHP' I 9U' 7HJ I M!' U !O!PGG' $
' KMNKH' NHP' !PM PGN' MT+' H J' J9OGN' AP' Q PMN8
N' ! N' NH JN' M I A N !8 AJN' NH JN
HP' 99!PGG' GH J9O' MNNP!O' N+' X HMN' NH J' J9OGN' H QH9T+
HMN' J9OGN' NH J' H 9 9T8 J9OGN' ! N' L9MT' 7M9GP+
!O' TPN' J9OGN' !Q9T' !8 NH J%OGN' HM P ' Q PMN' : 9M I G '
HMN' H KH' K PG ' 6' HJG' NH J' I JGN' @7 ' 7' NH J' HM P' N '
!O' NHMN' H KH' MNHP ' NH J' O GN' 7PM ' N ' O +
HM !' GHPGN' GH J9O' AP' J !O !P+R' " P' NHPP' H NHP +
HMN' 2' I MT' L J ' I T' GL NG' !' NH !P' PM 8
!O' KHMGN' GP' NH' NHP' M9 J ' 7 I T' N !QJP
9%' NHMN' I LPOPG' NHPP' 7 I ' NHP' Q 9OP !' J!O '
X H KH' 7MNP' M!O' I PNMLHTG KM9D' M O' O NH' GPP I
' HM P' NHPP' K !%O' NHM9+ S X HMN' G' T J ' N O !QG' \

V
' #NNP!OM!N+
' HP' U !Q' K I PG' HP P' N ! QHN+
? "5' E ' H J%' N' I MO' N ' GMT' N
2G' ! N' NHT' I MGNP ' NH' H I A H ' P P%' G +
X J9O' HM P' !7 I %O' 7 ' L PLM MN !+
' L9PMGP' T J ' N' G' N JP8 J ' NHM!P' G' K I !Q '
1 !P' 7 I T' 7P99 G' HMO' NHP' GLPPO' 7H I ' 8
X H ' M9 I GN' OPMO' 7 ' A PMNH ' HMO' GKM KP9T' I P'
HM !' J9O' I MUP' JL' H G' I PGGMQP+
? "5' E ' : P' H I ' NP!O !Q+
" P' A !QG' Q PMN' !P G+' HP' M P!' H I GP97' G' H M GP
+ 4 ' #NNP!OM!N+
HMN' K MUG' NHP' 7MNM9' P!N M!KP' 7 5J!KM!

' HP' O !P N ' M' GJAEPKN' 7 ' 9M!OG' 9 9OP!' 7' H I ' ' MG' N9 MTG' NH' M' % ' 7' NHP'
M99PQ M!KP @HP' ' M!O' $ ' OJP ' N ' HP' G P P Q!+' Y MJ7 9M' 7 T] JP'EP ' O T'
N' ! GN' P' GP Q!' 9P' T %' MG' N' G' !' / N!9P!! +R+ #KK' O !Q' N ' NH G' !NP L PMN ! '
NHP!' MKAP!H 19T' L 7PGGPG' M'] JN9 7 PO' H I MQP' N ' HP' U !QG NH !P' M!O' GNMP '
MG' 7' NHP' U !QG' 9 P' M!O' H ! J ' P P' G I PIH !Q' H QHP ' NHM!' H G' L P ' M!O'
O Q!' NT+' X P' KM!!] N J!OP GNM!O' NH G+' J P9T' N' G' PMG P ' N ' PKP P' NHP' OG' !'
NHP ' L9M ! SMKKPLMN ! S ' J ' OJN' PG' M P' KN99PO' JL ' !' N ' O ' P P TIH !Q' H KH' NHPT
KM!' O ' % "2' MG' PQM OG' HP' 9 P' M!O' H ! J ' P APM ' T J+ ' ' '
D -$2% (' S GJLP ! MNJ N9+ ' ' '

! OP ' I T' AMNN9P I P ! NG+' I P ' T J' GL NG'
HM N' NP ! O' !' I NM9' NH JQHNG ' J ! GPW' I P' HP P' 8
! O' 7 99' I P ' 7 I ' NHP' K !' N ' NHP' N P ' N L 7J99'
1 7' O PG N' K JP9NT [I MUP' NH KU' I T' A9 O+
N L' JL' NHP' MKKPGG' M ! O' LMGGMQP' N ' P I GP' 8
HM N' ! ' K I LJ ! KN JG' G N ! QG' 7' ! MNJ P'
HMUP' I T' 7P99' LJ L GP ' ! ' UPPL' LPMKP' APN PP !'
HP' P77PKN' M ! O' N [I P' N ' I T' I M ! %G' A PMGNG+
! O' NMUP' I T' I 9U' 7 ' QM99 ' T J' I J NHP ! Q' I ! GNP G
X HP P P ' !' T J ' G QHN9PGG' GJAGNM ! KPG
4 J' M N' !' ! MNJ P%G' I GKH P7 [I P ' NH KU' ! QHN
! O' LM99' NHPP' !' NHP' OJ ! ! PGN' G I UP' 7' HP99+
HM N' I T' UPP !' U ! 7P' GPP' ! N' NHP' J ! O' N' I MUPG8
' HPM P !' LPPL' NH JQH' NHP' A9M ! UPN' 7' NHP' OM U D
' K T ' 6' " 9O ' H 9O' [R' 6 : PMN' : 9M I G ' NHT' M O [

' < ! 1

: PMNP ' NHM !' A NH ' AT' NHP' M99 HM 9' HP PM7NP [
HT' 9PNNP G' HM P' N M ! GL NPO' I P' APT ! O'
H G' Q ! M ! N' L PGP ! N ' M ! O' 2' 7PP9' ! '
HP' 7JNJ P' !' NHP' ! GNM ! N+
E ' T' OPM PGN' 9 P
5 J ! KM !' K I PG' HP P' N ! QHN+
? "5' E ' #! O' HP !' Q PG' HP ! KP' \
E ' I SMG' HP' LJ L GPG+
? "5' E ' 1 ' ! P P
HM99' GJ !' NHMN' I ' GPP' [
4 J ' 7MKP ' I T' NHM ! P ' G' MG' M' A U' HP P' I P !'
MT' PMO' GN M ! QP' I MNNP G' ' APQJ 9P' NHP' N I P+
/ U' 9 UP' NHP' N I P8 APM ' P9K I P' !' T J ' PTP+
4 J ' HM ! O ' T J ' N ! QJP ' 9 U' 9 UP' NHP' ! ! KP ! N' 79 P +
JN' AP' NHP' GP LP ! N' J ! OP ' N+' " P' NHMN%G' K I !Q'
JGN' AP' L OPO' 7 ' M ! O' T J' GHM99' LJN'
H G' ! QHN%G' Q PMN' AJG ! PGG' !N ' I T' OPGLMNKH8
X H KH' GHM99' N ' M99' J ' ! QHNG' M ! O' OMTG' N ' K I P'
: P' G 9P9T' G P P Q ! ' G MT' M ! O' I MGNP O I +' ;
E ' X P' 99' GLPMU' 7J NHP +
? "5' E ' 1 ! 9T' 9 U' JL' K9PM 8
' M9NP ' 7M J ' P P ' G' N ' 7PM '
/ PM P' M99' NHP' PGN' N ' I P+' = 4 &

3 3' 2+ S ' - ' % .! ' ' -

& (!5-' P M ! NG' MKAPNH' " 3

' 5 ! ' < ! ' 5 ' E ' $ '
< ! %% ' 0 ' ' "' CCGHN?HC

& ' H G' KMGN9P' HMNH' M' L9PMGM ! N' GPMN8 NHP' M '
I A9T' M ! O' G PPN9T' PK I I P ! OG' NGP97'
! N ' J ' QP ! N9P' GP ! GPG+
% ' H G' QJPGN' 7' GJ I I P +
HP' NP I L9P HMJ ! N ! Q' I M N9PN ' O PG' MLL P+
T' H G' 9 %O' I M ! G ! T ' NHMN' NHP' HPM P ! %G' A PMNH'
I P99G' !Q9T' HP P' ' ! ' EJNNT ' 7 PCP+
JNN PGG ' ! ' K Q ! P' 7' M ! NMQP ' AJN' NH G' A O

" MNH' I MOP' H G' LP ! OP ! N' APO' M ! O' L K PM ! N' K MO9P' '
X HP P' NHPT' I GN' A PPO' M ! O' HMJ ! N ' 2' HM P' AGP %O+'
HP' M ' G' OP9 KMNP+D

' ' < ! 1

& ' PP ' GPP' ' J ' H ! J %O' H GNPGG' [
HP' 9 P' NHMN' 7 99 G' JG' G I PN I P' G' J ' N JA9P+
X H KH' GN 99' P' NHM ! U' MG' 9 P+' " P7P !' 2' NPMKH' T J+
" ' T J' GHM99' A O' : O PT9O' JG' 7 ' T J ' LM ! G
! O' NHM ! U' JG' 7 ' T J ' N JA9P+D
? "5' E ' # 99' J ' GP KP
2 !' P P T' L !N' N KP' O ! P ' M ! O' NHP !' O ! P' O JA9P+
X P P' L ' M ! O' G ! Q9P' AJG ! PGG ' N ' K ! NP ! O'
QM ! GN' NH GP' H ! J G' OPPL' M ! O' A MO ' HP P NH'
4 J ' I MEPGNT' 9 MOG' J ' H JGP ' O ' NH GP' 7' 9O+
! O' NHP' 9MNP' O Q ! N PG' HPML%O' JL' N ' NHP I +
X P' PGN' T J ' HP I NG+D
& ' X HP P%G' NHP' NHM ! P' 7' M O ' \
X P' K J G%O' H I ' MN' NHP' HPP9G ' M ! O' HMO' M' LJ L GP'
' AP' H G' LJ PT ' AJN' HP' OPG' P998
! O' H G' Q PMN' 9 P ' GHM L' MG' H G' GLJ ' HMNH' H 9L' H I '
' H G' H I P' AP7 P' JG' ' OM ' M ! O' ! A9P' H GNPGG+
X P' M P' T J ' QJPGN' N ! QHN+
? "5' E ' 4 J ' GP M ! NG' P P
" M P' NHP G ' NHP I GP9 PG ' M ! O' HMN' G' NHP G ' ! ' K I LN+
' I MUP' NHP ' MJO N' MN' T J ' H QH ! PGG% L9PMGJ P+
N 99' N ' PNJ !' T J ' !+
& ' : P' I P' T J ' HM ! O8
! OJKN' I P' N ' I ! P ' H GN8 P' 9 P' H I ' H QH9T+
! O' GHM99' K ! N ! JP' J ' Q MKPG' N M OG' H I +
T' T J ' 9PM P ' H GNPGG+' = 4 &

3 3' 22+ S ' - ' ' !! ' ' ' -

& (!5-' "' ! -' $' "' , --' !1 ' ' - 3 $ '
P P ' "' " 1 -' P %M ! NG' 2 ' " - -' "' - 1 '
' ' < ! 1

E ' 27' N' P P' O ! P ' HP ! ' %N G' O ! P ' NHP ! ' %N P P' P99'
2N' P P' O ! P'] J KU9T' ' 27' NHP' MGGMGG ! MN !'
J9O' N M I I P9' JL' NHP' K ! GP] JP ! KP ' M ! O' KMNKH+
X NH' H G' GJ KPMGP ' GJKKPGG' 8 NHMN' AJN' NH G' A9 '
QHN' AP' NHP' AP M99' M ! O' NHP' P ! O M99' HP P+
JN' HP P ' JL !' NH G' AM ! U' M ! O' GH MG' F 7' N I P+
X P%O' EJ I L' NHP' 9 7P' N ' K I P+ S JN' !' NHPGP' KMGPG+
X P' GN 99' HM P' EJOQ I P ! N' HP P8 NHMN' P' AJN' NPMKH'
9 OT' ! GN JKN ! G ' H KH ' AP ! Q' NMJQHN ' PNJ !'
' L9MQJP' NHP' ! P ! N ' ' H G' P P ! HM ! OPO' EJGN KP'
I I P ! OG' NHP' ! Q PO P ! NG' 7' J ' L G ! %O' KHM9 KP'
' J ' !' 9 LG+F " P%G' HP P' !' O JA9P' N JGN
O GN ' MG' 2' M I ' H G' U ! G I M ! ' M ! O' H G' GJAEPKN+
N ! Q' A NH' MQM ! GN' NHP' OPPO8 NHP ! ' MG' H G' H GN
X H ' GH J9O' MQM ! GN' H G' I J NHP P ' GHJN' NHP' O +
N' APM ' NHP' U ! 7P' I TGP97+' PG OPG ' NH G' 5 J ! KM !'
" MNH' A ! P' H G' 7MKJ9N PG' G ' I PPU ' HMNH' APP !

$' HP' 6' "') ' 7' NHP' OM U' R' HMG' APK I P' M' 7M I 9 M ' LH MGP ' M ! O' P' M P' ! ' N '
KHM ! QP' N ' J ! OP ' NHP' MJNH NT' 7' + 99 P %G' K PKNPO' 7 9 ' N ' / "' () %% 7'
NHP' OM U+R' HP' LH MGP' !' T I AP9 ! P ' 6' 27' GGM ' K J9O' A OP' NHP' GJ !' 7 I' JG'
NH' ' "') *B' Q PG' NHP' UPT' N ' / MOT' MKAPNH%G' I PNMLH + HP' 9 QHN' 7'
6' HPM P ! R' MG' N ' AP' GHJN' JN' AT' NHP' 6' A9M ! UPN' 7' NHP' OM U+R' ' 5 MTN !' 8 S

6' HP' GJ99P !' ! QHN' !' I GNT' ' G' MLN+R

F X P' P] JPGN' J ' PMOP G' N ' PLPMN' NHPGP' KP9PA MNPO' 9 ! PG' MG' P' HM P' L ! NPO'
NHP I + 1J ' NPWN' G' M' 9 NP MG' K LT' 7' NHP' Q ! M9+' 2G' ! N' NHP' HM I !T' LP 7PKN' \
X J9O' NHPT' P ! N I P' N ' O GL9MKP' M' GT99MA9P' \ # ! O' TPN' N' MG' NHJG' P I OP99PO' AT'
NHP' I MGNP HM ! O' 7' NPP P ! G' NH JN' NHP' G9 QHNPGN' PWL9M ! MN !' ' ML 9 QT S

6' H G' QJPGN' 7' GJ I I P +
HP' NP I L9P' HMJ ! N ! Q' I M N9PN ' O PG' MLL P
T' H G' 9 %O' I M ! G ! T ' NHMN' NHP' HPM P ! %G' A PMNH'
I P99G' !Q9T' HP P' ' ! ' EJNNT ' 7 PCP ' AJNN PGG+
' K Q ! P' 7' M ! NMQP ' AJN' NH G' A O' HMNH' I MOP'
" G' LP ! OP ! N' APO ' M ! O' L K PM ! N' K MO9P' ' HP P' NHPT'
GN' A PPO' M ! O' HMJ ! N ' 2' HM P' AGP %O ' NHP' M '
2G' OP9 KMNP+R

F X P' HM P' PGN PO' NHP' 9O' 7M I 9 M ' PWL PGG !' 5 ! 2' # MG' GJ N ! Q' APNP '
NH' NHP' L9MT7J9 ! PGG' 7' 5J ! KM ! %G' GLPPKH' NHM !' NHP' 5 ' 2 ' ' %' 7' ? H ! G ! %G' NPWN+
) ' $

M9 ! P' M ! O' NPP P ! G' PMKH' Q P' M' P T' 9 ! Q' LM MLH MGP' 7' NHP' LMGGMQP+' HP P' G'
Q PMN' P7 ! P I P ! N' !' NHP' GP ! N I P ! N ' AJN' NHP' I PM ! !Q' G' N 9P MA9T' K9PM +' HP' 9 P'
, HKH 7 99 G' JG' G' G I PN I PG' N JA9PG I P' 8 G ' P' Q P' T J' N JA9P ' AJN' 9 U' T J'
! 9T' MN' NHP' 9 P' P' APM ' N ' T J ' M ! O' G ' A9PGG' JG' M ! O' NHM ! U' JG+
' 9 % S APMOG I P ! ' A J ! O' N ' L MT' 7 ' M' AP ! P7MKN +
F 4$ ' ' 2 ! ' NHP' Q ! M9 ' %($ '%' HP AM9O' K PKNPO' NHP' ; O' N ' %$ '
F HP' P ! N P' LMGGMQP' 7 I ' NHP' APQ ! ! !Q' 7' NHP' GLPPKH' N ' NH G' L ! N ' G' AGKJ P+'
. X NH JN' P ! NJ !Q' N ' M9NP ' NHP' K I I !' LJ ! KNJMN !+' XP J9O' PK I I P ! O' M !'
MNNP ! N P' K ! G OP MN !' 7' NHP' PMO ! Q' 7' NHP' 7 GN' 9 ! P ' MG' Q P ! ' AT' + MK PMOT'
M ! O' NHP ! ' KM T' ! ' NHP' G 9 9] JT' MG' GJQQPGNPO' AT' NHMN' M9NP MN ! S

6' 27' N' P P' O ! P' HP ! ' %N G' O ! P ' NHP ! ' %N P P' P99+
2N' P P' O ! P'] J KU9T' ' 7' NHP' MGGMGG ! MN !'
J9O' N M I I P9' JL' NHP' K ! GP] JP ! KP ' M ! O' KMNKH+
X NH' H G' GJ KPMG+P ' GJKKPGG ' NHMN' AJN' G A9 '
QHN' AP' NHP' AP M99' M ! O' NHP' P ! O M99+' " P P S
JN' HP P ' JL !' NH G' AM ! U' M ! O' GH MG' 7' N I P+
X P%O' EJ I L' NHP' 9 7P' N ' K I P ' AJN' !' NHPGP' KMGPG'
X P' GN 99' HM P' EJOQ I P ! N' HP P ' NHMN' P' AJN' NPMKH'
9 OT' ! GN JKN ! G ' H KH ' AP ! Q' NMJQHN ' PNJ !'
' L9MQJP' NHP' ! P ! N ' H G' P P ! HM ! OPO' EJGN KP'
I I P ! OG' NHP' ! Q PO P ! NG' 7' J ' L G ! %O' KHM9 KP'
' J ' !' 9 LG+R

HP ' O P!KHPO' !MNJ PG' 9 P ' MG' I ' M' OPMNH+
X HMM' KM!! N' T J' M!O' 2' LP 7 I ' JL I'
HP' J!QJM OPO' 5J!KM!' \ HMM' ! N' LJN' JL I'
" G' GL !QT' 77 KP G' 8 H ' GHM99 APM ' NHP' QJ 9N'
17' J ' Q PMM']JP99' %%
E (' !Q'7 NA' I P ! KH 9O P !' !9T
O ' NHT' J!OMJ!NPO' I PNN9P' GH J9O' K I L GP'
NH !Q'AJN' I M9PG' X 99' N' ! N' AP' PKP %O+
XHP!' P' HM P' I M U%O' NH' A9 O' NH GP' G9PPLT' N '
17H G' I ' KHM I AP ' M!O' JGPO' NHP ' P T' OMQQP G+
HMN' NHPT' HM P' O I P%N' \
? "5' E ' XH ' OM PG' PKP P' N' NHP +
#G' P' GHM99 I MUP J ' Q P7G' M!O' K9M I J ' M '
L I ' H G' OPMNH' \
E ' 2' M I ' GPNN9PO ' M!O' AP!O' JL
3MKH' K L M9 MQP!N' N ' NH G' NP A9P' 7PMN+
MT ' M!O' I KU' NHP' N I P' NH' 7M PG N' GH '
OM9GP' 7MKP' I JGN' H OP' HMN' NHP' 7M9GP' HPM N' O NH' U! +
9 4 &

3 3' 2 F ' - ' !& ' 2 ' ' -
' E ' " / ' 2 ' ' !
% ' " ' Q PG' NHP' ! QHN ' A T' \
> ' HP' I !' G' O !' 8 2' HM P' ! N' HPM O' NHP' K9 KU'
% ' # !O' GHP' Q PG' O !' MN' N P9 P+
' 2' NMUPG $ %N G' 9MNP ' G +
% ' " 9O ' NMUP' I T G O+ S HP P%G' HJGAM!O TF' !'
HPM P!+
HP ' KM!O9PG' M P' M99 JN+ S MUP' NHPP' NHMN' N +
#' HPM T' GJ I I !G' 9 PG' 9 UP' 9PMO' JL !' I P+
!O' TPN' 2' J9O' ! N' G9PPL' ' P K 7J9' L P G'
&PGN M !' !' I P' NHP' KJ GPO' NH JQHNG' NHM9' ! MNJ P'
: PG' MT' N ' !' PL GP' [S : P' I P' I T' G O' 8 S
HPM P' NHP' P'
< ! 1 ' ' P M!N 2 ' ' !
XH %G' NHP P' \
E (' #'7 P!O+
% ' X HMN ' G ' ! N' TPN' M9' PGN' ' HP' U !Q%G M APO'
" P' HMNH' APP!' !' J!JGJM9' L9PMGJ P ' M!O'
P!N' 7 NH' Q PM9' 9M QPGG' N ' T J ' 77 KPG ' F
H G' O M I !O' HP' Q PPNG' T J ' 7P' NHM9+
T' NHP' !M I P' 7' I GN' U !O' H GNPGG' # M!O' GHJN' JL'
2!' I PMGJ P9PGG' K !NP!N+
E (' P !Q' J!L PLM %O+
1J ' 99' APKM I P' NHP' GP M!N' N ' OP7PKN8
XH KH' P9GP' GH J9O' 7 PP' HM P' JQH!+
%
2' O PM I N' 9MGN' ! QHN' 7' NHP' NH PP' P O' G GNP G'
' T J' NHPT' HM P' GH %O' G I P' N JNH+
E (' 2' NH !U' ! N' 7' NHP I
4PN ' HP!' P' KM!' P!N PMN' M!' H J ' N ' GP P+
XP' J9O' GLP!O' N' !' G I P' OG' JL !' NHMN' AJG !PGG+
27' T J' J9O' Q M!N' NHP' N I P+
E (' 27' P' GH J9O' 7M 9 S
? "5' E ' X P' 7M 9HD
JN' GK P ' T J ' K J MQP' N ' NHP' GN KU !Q' L9MKP+
!O' P%9' ! N' 7M 9+ X HP!' 5J!KM!' G' MG9PPL
@X HP PN ' NHP' MNHP ' GHM99' H G' OMT%G HM O' E J !PT'
J!O9T' ! NP' H I ' H G' N ' KHM I AP 9M !G'
X 99' 2' NH' I P' M!O' MGGP9' G ' K ! !KP D
HMN' I P I T' NHP' M OP ' 7NHP' A M !
HM99' AP' M' 7J I P' M!O' NHP' PKP LN' 7' PMG !'
#' 9 I APKU' F !9T' X HP!' !' G ! GH' G9PPL

F2N' HMG' APP!' L L GPO' @AT' !Q9PN ! ' GMT' NHP' M I A OQP' PO N G ' N ' PMO'
I GNPMO' 7 % ' +' %' %"# NG' GMOO9P+' " P P ' K9P P ' I MT AP' NHP' ! N ! ' P' KM!'
GKM KP9T' MO I N' NHP' !PKPGG NT' 7 ' NHP' KHM!OP' 7' NHP' Q !M9+' #' LP G !' @M!O'
6 MJ9N ' I Q' M I A N ' !' R' G' LP G ! 7 PO ' I QHN' AP' GM O' N ' (-H I GP97' MG' P9P MG
P AN9M!KP H I GP97' P PMKH' H I GP97' P KHM QP' H I GP97' ' P 9MA J ' H I GP97' P I PMGJ P
2E I GP97' ' P PMKH' H I GP97' HP P' G' M' LM M99P9 JGP 7' NHP' O' [MG' GPN N
I I N' M!O' O9P!KHP 8S 6 - P' N' MQM ! ' G 8 N' I MTAP' T J ' GP!GP[MG' GPN N
H QH' M!O G ' ! 7 NHP' A M !' NH' HMN' LM N' 7' M' PGGP9' NH JQH' H KH' M' O GN 99PO'
GP!GP 7' ' ($ 8 $' % ' B' HP' O' ! M99' NHPGP' KMGPG' G JGPO' !' NHP'
' # 7NP ' $ ' " M I P ' !N OJKPO' % ' HP' MOO N ' !' G' HP9O' N ' AP' J!!PKPGGM T '
!MG I JKH' MG' NHP' L9J M9' ! J!' % %#' KKJ G EJGN' AP7 P#' J N' GJ P9T' NH G ! N ' !' G '
N ' L OJ7 P' M EJ I A9P' 7' NHP' I P!MLH ' MKAPIH' K I LM PG' H G' ' M' K J GP '
2' HM P' I ' GLJ ' N ' J OP H I ' I ' I' LL PLM PO' 2' M I ' MA J N' N ' MJ9N' I N ' I T' GPMN '
AJN' 2' P 9PML' I TGP97' M!O' 7M99#' N' MLLPM G' N ' JG' NHM' NHP GP!!P!KP' G' A UP!' AT'
NHP' P!N M!KP' 7 / MOT' MKAPIH8 NHM' N' G' ! N' K I L9PNP' !' NGP978 M!O' J9O' ! N'
HM P' APP!' K I L9PNPO' NH' %

A. JOHNSTON, PINX.ᵗ C. W. SHARPE, SCULP.ᵗ

MACBETH.

LONDON. VIRTUE & Cº LIMITED.

E "' !7JG !' ! 'HMNH' I MOP' H G' I MGNP L PKP' [
GN' GMK 9PQ JG' I J NHP 'HMNH' A UP' LP'
HP' / O%G' M ! !NPO' NP I L9P' M!O' GN 9P' NHP!KP'
HP' 9 7P' %NHP' AJ 9O !Q+
E "' X HMN' G%N' T J' GMT' 9 NHP' 9 7P' \
? ' PM!' T J' H G' I MEPGNT' \
E "' #LL MKH' NHP' KHM I AP$ ' M!O' OPGN T' T J ' G QHN'
X NH' M' !P ' : Q ! S5 ' ! N' A O' I P' GLPMU8
PP ' M!O' NHP!' GLPMU' T J GP9 PG+ S# MUP' [M MUP' [S
+ 4 & ' $ ' "' 6 '
& !Q' NHP' M9M J I AP99 S J NHP ' [M!O' N PMG !' [
M!]J 'M!O' 5 !M9AM ![M9K 9I' [M MUP' [
HMUP' 77NH G' O !T' G9PPL ' OPMNH%G' K J!NP 7P N
#!O' 9 U' !' OPMNH' NGP97[S JL ' JL ' M!O' GPP
HP' Q PMN' O I%G I MQP M9K 9I' [M!]J [
#G' 7 I' T J ' Q M PG' GP' JL ' M!O' M9U' 9 UP' GL NPG +
'K J!NP!M!KP' NH G' H [& !Q' NHP' AP99+D
+% ' 3-
' ' $

? "5' E ' X HMN%G' NHP' AJG !PGG+
HMN' GJKH' M' H OP JG' N J I LPN' KM99G' N ' LM 9PT'
HP' G9PPLP G' 7' NHP' H JGP' \ GLPMU ' GLPMU[
E " 1 ' QP!N9P' 9MOT+
G' ! N' 7 'T J' N ' HPM ' HMN' 2' KM!' GLPMU' '
HP' PLPN N !' !' M' I M!%G' PM +
X J9O' I J NHP ' MG' N' 7P99+

' & J (

1' M!]J 'W M!]J '[J ' TM9' I MGNP %G' I J NHP %O' [
? ;' E ' X P' M9MG' 2 HMN ' !' J 'H JGP' \
% ' 'K JP9 ' M!T HP P+
5PM ' 5J77 ' 2' L NHPP' K !N MO KN' NHTGP97+
#!O' GMT' N' G' ! N' G +

B ' $ ' "' 6

E (' "MO' 2' AJN' O PO' M!' H J ' AP7 P' NH G' KHM!KP '
2' HMO' 9 %O' M' A9PGGPO' N I P8 7 ' 7 I ' NH G' !GNM!N+'
HP P%G' ! NH !Q' GP JG' !' I NM9 NT' 8
#99' G AJN' N TG8 P! ! ' M!O' Q MKP ' G' OPMO8
HP' !P' 7 9 7P' G' O M ! ' M!O' NHP' I P P' 9PPG'
2G' 9P7N' NH G' MJ9N' N ' A MQ' 7+

' ' "' $

%! ' X HMN' G' M I GG' \
E ' 4 J' M P ' M!O' O ' ! N' U! %N+
HP' GL !Q ' NHP' HPMO' ' NHP' 7 J!NM !' 7' T J ' A9 O'
2G' GN LL%O 8 NHP' P T' G J KP' 7' N' G' GN LL%O+
E "' 4 J ' TM9' 7MNHP %G' I J NHP %O+
E ' 1 ' AT' H I ' \
? ' H GP' 7' H G' KHM I AP ' MG' N' GPP I %O ' HMO' O !P%N '
HP ' HM!OG' M!O' 7MKPG' P P' M99' AMOQ%O' NH' A9 O+
' P P' NHP ' OMQQP G ' H KH ' J! L%O ' P' 7 J!O'
L !' NHP ' L 99 G' ' NHPT' GNM %O ' M!O' P P' O GN MKNPO8
' I M!%G' 9 7P' MG' N ' AP' N JGNPO' NH' NHP I +
E ' ' TPN' 2' O ' PLP!N' I P' 7' I T' 7J T+
HMN' 2' O O' U 99' NHP I +
E "' X HP P7 P' O O' T J' G ' \
E (' X H ' KM!' AP' GP' M I MC%O ' NP I LP MNP ' M!O' 7J JG '
/ TM9 ' M!O' !PJN M9 ' !' M' I I P!N' \ ' I M!'
HP' PWLPO N !' 7' I T' 9P!N' 9 P
1JN M!' NHP' LMJGP ' PMG !+S" P P' 9MT' 5J!KM!
" G' G 9 P ' GU !' 9MK%O' NH' H G' Q 9OP!' A9 O' 8
#!O' H G' QMGH%O' GNMAG' 9 U%O' 9 UP' M' A PMKH' !' !MNJ P

' #FG' JADN ' =' " H ' CFG' LGMMI ' >AD@' K?DC' A>' CFG' AD H?M' CG C ' ?HN' CFG' C? G'
NDGOCAH ' L ' .' @@GN?CGME' >A!AJ ' #FGAL?MN' ?HN' ACFGD' 0A@@GHC?CAD '
CD(G' ABC' = D H ' CFG' LGMM I ' OAHCGHN H ' CF?C' CFG G' JADN ' ?M A' J GDG' ?' C? G' NDGO-
CAH ' .BC' FAJ' H?CBD?M' ' DC' CF?C' & ?0NB>>' F?P H ' KDGP AB ME' ODGN ' =' " H ' CFG'
?M?DB@ LG* I ' FABMN' DGKG?C' CFG' ADNGD

0 ' J !%G' MGNP7J9' P!N M!KP' ' NHP P ' NHP' I J NHP P G+'
NPPL%O' !' NHP' K 9 J G' 7' NHP ' N MOP ' NHP ' OMQQP G'
! I M!!P 9T' A PPKH%O' NH' Q P' ' X H ' K J9O' P7 M !'
HMN' HMO' M' HPM N' N ' 9 P ' M!O' !' NHMN' HPM N'
J MQP ' N ' I MUP' H G' 9 P' U! !' \
? "5' E ' " P9L' I P' HP!KP ' H M[
E "' / U' N ' NHP' 9MOT+
E ' X HT' O ' P' H 9O' J ' N !QJPG+
HMN' I GN' I MT' K9M I ' NH G' M QJ I P!N' 7 ' J G' \
! ' X HMN' GH J9O' AP+' GL UP!' HP P
' X HP P' J ' 7MNP ' H O' !' M!' MJQP H 9P+
MT' JGH ' M!O' GP CP' JG' \ / PN%G' M MT8 J ' NPM G'
P' ! N' TPN' A P %O+
E ' ' J ' GN !Q' G
L !' NHP' 7 N' 7' I N !+
% ' / U' N ' NHP' 9MOT' S
; ' $ ' -' "' !& '
!O' HP!' P' HM P' J ' ! MUPO' 7 M 9N PG' H O+
HMN' GJ77P ' !' PWL GJ P ' 9PN' JG' I PPN+
!O']JPGN !' NH G' I GN' A9 OT' L PKP' 7' U+
'U! ' N' 7J NHP +' OPM G' M!O' GK JL9PG' GHMUP' JG'
2!' NHP' Q PMN' HM!O' 7' : O' 2' GNM!O8 M!O ' NHP!KP+
QM !GN' NHP' J!O J9Q%O' L PNP!KP' 2' 7 QHN'
17' N PMG ! JG' I M9 KP+
E "' # !O' G ' O ' 2+D
' ' M99+
E (' / PN%G' A P79T' LJN' !' I M!9T' PMO !PGG+
!O' I PPN' %NHP' HM99' N QPNHP +
' X P99' K !NP!NPO+
+ 4 & ' '(&' ' "' 51 +
E ' X HMN' 99' T J' O ' \ / PN%G' ! N' K !G N' NH' NHP I ' '
'GH ' M!' J!7P9N' G ' G' M!' 77 KP'
X H KH' NHP' 7M9GP' I M!' O PG' PMGT' ' 2%99' N ' 3!Q9M!O+
! ' ' 2 P9M!O' 2 8 J ' GPLM MNPO' 7 NJ!P'
HM99' UPPL' JG' A NH' NHP' GM7P ' ' HP P' P' M P+
HP P%G' OMQQP G' !' I P!%G' G I 9PG' ' NHP' !PM ' !' A9 O
HP' !PM P ' A9 OT+
E ' H G' I J NHP JG' GHM7N' NHMN%G' GH N
" MNH' ! N' TPN' 9 QHNPO8 M!O' J ' GM7PGN' MT'
2G' N ' M O' NHP' M I +' HP P7 P ' N '+H GP' 8
!O' 9PN' JG' ! N' AP' OM !NT' 7' 9PM P NMU !Q+
JN' GH 7N' M MT' ' HP P%G' M M!N' !' NHMN' NHP7N
X H KH' GNPM9G' NGP97 ' HP!' NHP P%G' ! ' I P KT' 9P7N+' + 4 &

3 3' F 8 !&' ' -
' # ' "' ' "' M!+

"' E ' H PPGK P' M!O' NP!' 2' KM!' P I P I AP ' P99'
X NH !' NHP' 9J I P' 7' H KH' N I P ' 2' HM P' GPP!'
" J G' O PMO7J9 ' M!O' NH !QG' GN M!QP' 8 AJN' NH G' G P' ! QHN'
" MNH' N 79PO' 7 I P ' U! !QG+
!-- ' #H ' Q O' 7MNHP +
H J' GPPGN ' NHP' HPM P!G ' MG' N JA9PO' NH' I M!%G' MKN+'
H PMNP!' H G' A9 OT' GNMQP' ' AT' NHP' K9 KU ' %N G' OMT
!O' TPN' OM U' ! QHN' GN M!Q9PG' NHP' N M P99 !Q' 9M I L
2G %N' ! QHN%G' L PO I !M!KP ' ' NHP' OMT%G' GHM I P
HMN' OM U!PGG' O PG' NHP' 7MKP' 7' PM NH' !N I A+
X HP!' 9 !Q' 9 QHN' GH J9O' U GG' N' \
"' E ' % G' J!!MNJ M9+
3 P!' 9 UP' NHP' OPPO' NHMN%G' O !P+' 1!' JPGOMT' 9MGN
#' 7M9K !' N % !Q' !' HP ' L OP' 7' L9MKP+
X MG' AT' M' I JG !Q' 9' HM U%O' MN' M!O' U 99%O+
!-- ' # !O' 5J!KM!%G' H GPG ' @M' NH !Q' I GN' GN M!QP' M!O'
KP NM !
PMJNP JG' M!O' G 7N ' NHP' I ! !G' 7' NHP ' MKP
J !%O' 9O' !' ! MNJ P ' A UP' NHP ' GNM99G ' 79J!Q' JN+'
!NP!O !Q' %QM !GN' APO P!KP ' MG' NHPT' J9O'
MUP' M ' NH' I M!U !O+

' Z #F ' KGGOF' H' CFG' AD H?M' LGMAH ' CA' 4' LBC ' J CFABC' ?HE' G KM?H?-
CAH ' C' ' PGH' LE' CFG' P?D ADB@' GN CAD ' CA' " $

E

222 9

" M P T J K+ !G OP %O 7 I T GLPPKHPG \ !
HMN N MG$HP ! N I PG LMGN H KH HP9O T J
J!OP 7 NJ!P8 H KH T J NH JQHN HMO APP!
1J ! !! KP!N GP97 NH G 2 I MOP Q O N T J
2!! J 9MGN K !7P P!KP8 LMGGHO !L AMN !" NH T J+
" T J P P A !P !" HM!O8Ð H K GGHO8 NHP !GN J_
I P!NG8
XH JQHN NH NHP I 8 M!O M99 NH !QG P9GP NHMN I QHN
$HM97M G J9 M!O N M ! N !K MC%O
MT HJG O O M!]J +
E& 4 J I MOP N U! !N JG+
E (2 O O G 8 M!O P!N7J NHP H KH G !
1J L !N 7GPK !O I PPN !Q 5 T J7 !O
4 J LMN P!KP G L PO I !M!N !T J !MNJ P+
HMN T J KM!9PN NH G Q \ # P T J G Q GLP99%O+
L MT7 NH G Q O I M! M!O7 H G GGJP+
XH GP HPM T HM!O HMNH A %O T J N NHP Q M P+
#!O APQQM %O T J G7 P P \
E& XP M P I P!! I T9 PQP+
E #T ! NHP KMN09 QJP TP Q 7 I P!8
#G H J!OG M!O Q PTH J!OG I !Q P9G GLM! P9G KJ G
H JQHG MNP JQG M!O OP I 9 PG K9PLPO
#99 AT NHP !M I P 7O QG NHP M9JPO7 9P
5 GN !QJ GHPG NHP G 7N NHP G9 NHP GJAN9P+
HP H JGPUPPLP NHP HJ!NP P P T !P
#KK O !Q N NHP Q 7N H KH A J!NP JG !MNJ P
" MNH !H I K9 G%O8 HP PAT HP O PG PKP P
-M N KJ9M MOO N !7 I NHP A 99
HMN NPG NHP I M99 M9 UP M!O G 7 I P!+
N !NHP GN M!UD 7 I M!H O GMT N8
#!O2 99 LJN NHMN AJG !PGG !T J P!P I T 778
XH GP PWPKJN !NMUPG T J P!P I T 778
: MLL9PG T J N NHP HPM N M!O 9 P 7JG+
XH PM J HPM9NH AJN G KU9T !H G9 7P+
XH KH !H G OPMNH P P LP 7PKN+
E& 2 M I NHP +
XH I NHP 9P A9 G M!O AJ77PNG 7NHP 9O
" M P G !KP!GMO NHMN2 M I PKU9PGG HMN
2O N GL NP NHP 9O+
E& #!O2 M! NHP +
PM T NH O GMGNP G NJQQMO NH7 NJ!P
7 MN 9 JOO GPN I T9 7P !M!T KHM!KP+
I P!O N AP O !%+
E NH 7T J
! M!]J MG T J P!P I T+ JP I T9 O+
& JP I T9 O+
E G HP I P8 M!O !GJKH A9 OT O GNM!KP+
HMN P P T I JNP 7H G AP !Q NH JGNG
#QM !GN I T P!PM %GN 79 7P #!O NH JQH2 K J9O
X NH AM P 7MK%O L P G PPL H I 7 I T G QHN+
#!O A O I T 99 M JKH N TPN 2 I JGN ! N+
O FKP NM !7 P!OG NHMN M P A NH H G M!O I !P ,
XH GP9 PG 2 I MT ! N O L AJN M 9 H G 7M99
XH I 2 I TGP97GN JKU O ! M!O NHP!KP N G
HMN 2 N T J MGG GNM!KP O I MUP9 P#
MGU !Q NHP AJG !PGG 7 I NHP K I I !PTP+
O GJ!O T P QHNT PMG !G+
E& XP GHM99 I T9 O+
-P 7 I HMN T J K I I M!O JG+

, 3 $ SP!K J MQPO AT 7MGGP H LPG+
2! NHP L PKPO !Q LM N 7 NH G GLPPKH M O GN !KN ! G O M ! APN PP ! NHP
M!O MG P P T !P H K I I NG M K I P GJKH MG NHMN 7 MKAPNH L L GPG N H I
GP97 ! NHP P!KP G L PO I !M!N ! T J !MNJ P+
MA P NHMN 7 NHP 6 GN M!U+R HP)* NHP! G NHP 8 NHP 7 9P R
MLM N7 ! NHP , 7 GJLP JM9 N PG 2G ! N NH G NHP I PM ! Q 7 NHP I 9 NM T
NP I ! M!U M!O7 9P H KH G GN 9P ! JGP
F S ! MKK J!N 7 APKNJGP
D X P J!OP GNM!O H G LMGGMOP M G 7 9 G MKAPNH HMG GM O S
6 2 9P MO GP T J HP P N L9M!N T J GP9 PG R
HP NHP! MOOG 6 #KJJM !N T J R S !7 ! T J GP9 PG S6 NH NHP LP 7PKN GLTR S
NH M I GN KM PJ9 !J TS6 % NHP N I PR S NHP PWLPKNPO N I P 7 M!J J %G
PNJ ! S 6 HP I P!N ! M8 7 M I JGN AP O !P N ! QHN+R
3/4

" ! I T 9 O \ HT O T J UPPL M9 !P+
17G PGN 7M!K PG T J K I LM! !G I MU !Q \
G !Q NH GP NH JQHNG H KH GH J9O !OPPO HM P O PO
X NH NHP I NHPT NH !U ! \ H !QG NH JN N9JF P I POT
H J9O AP NH JN PQM O HMN%G O !P G O !P+
E X P HM P GK NKH%O NHP G !MUP ! N U 99%O N8
HP%99 K9 GP M!O AP HP GP978 H 9GN J L I M9 KP
&P I M !G ! OM!QP 7HP 7 IP N NH+
JN 9PN NHP 7 M I P 7 NH !QG O GE !N A NH NHP 9O
3 P P 99 PMN J I PM9 I 7PM M!O G9PPL
21 NHP M779 KN ! 7NHPGP NP A9P O PM I G+
HMN GHMUP JG ! QHN9T PNNP AP NH NHP OPMO+
XH I P N QM ! J LPMKP F HM P GP!N N LPMKP+
HM! I NHP N NJ P 7NHP I !O N 9 P
21 PGN9PGG PKGNMGT+ 5J!KM! G I H G Q M P8
#7NP 9 7P%G 7 N7J9 7P P HP G9PPLG P998
PMG I HMG O !P H G GN8 ! GNPP9 ! L G I
M9 KP O I PGN K 7 P Q! 9P T ! NH !Q+
M! N JKH H I 7J NHP [
? "5 E I P 8 .
: P!N9P I T 9 O G9PPU %P T J JQQPO 9 UG8
P A QHN M!O E M9 M I !Q T J QJPGNG N ! QHN+
E GHM99 2 9 P8 M!O G 2 L MT AP T J 8
/ PN T J P I P I A M!KP MLL9T N M!] J 8
- PGP!N H I P I !P!KP A NH NH PTP M!O N !QJP

, F (O NH G O 7NHP Q !M9 NHP PO N 7NHP GPK !O7 9 GJAGN NJNPO
-, (HP PLPN N ! 7NHP O- (GPP I G P T I JKH ! HMUGLP PNG I M I P 8
M!O MG P P T !P H K I I NG M K I P GJKH M9 NHMN 7 MKAPNH L L GPG N H I
GP97 ! NHP P!KP G L PO I !M!N ! T J !MNJ P+
L I LN !QG N NHP K I P O GNJ A H G LPMKP S P NH !U HP P G G I PNH !Q I JKH
H QHP ! NHP GP!N I P!N K I PTPO AT NHP Q !M9 O NHM ! NHMN 7 - (21
NHP P T K !NP I L9MN ! 7NHP I J OP 7 M!]J MKAPNH G M !9T GPPU !Q 7
NP A9P O PM I G " G OPMNH NHP P7 P G OPNP I !PO8 M!O NHP! K I PG NHP 7PM 7J9
9PGG !S

, 3/4

!GM7P NHP H 9P NHMN P
JGN 9M P J H ! J G !NHPGP 79MNNP !Q GN PM I G8
#!O I MUP J 7MKPG CM OG N J HPM NG
5 GQJ G !Q HMN NHPT M P+
? "5 E + 4 J I JGN 9PM P NH G+
E 1 7J99 7GK L !G G I T I !O OPM 7P[
H J U! %GN NHMN M!]J M!O H G O9PM!KP 9 PG+
? "5 E JN !NHP I !MNJ P%G K LT%GD ! N PNP I P+
E HP P%G K I7 N TPN8 NHPT M P MGGM 9MA9P8
HP!AP NH J E KJ!O 3 P NHP AMN HMNH 79 !
" G K9 GNP %O 79 QHN8 P P N A9MKU " PKMNP%G GJ I I !G+
HP GHM O A !P APPN9P D NH H G O GT HJ I G+
"MNH J!Q ! QHN%G TM ! !Q LPM9+
HP P GHM99 AP O !P M OPPO 7O PMO7J9 ! NP+F
? "5 E X HMN%G N AP O !P \
E P !! KP!N 7NHP U! 9POQP OPM PGN KHJKU+
99 NH J MLL9MJO NHP OPPO+ I P GPP9 !QD ! QHN
UM 7JL NHP NP!OP PTP 7L N 7J9 OMT 8
#!O NH NHT A9 OT M!O ! G A9P HM!O+
M!KP9 M!O NPM N L PKPG NHMN Q PMN A !O
XH KH UPPLG I P LM9P[S / QHN NH KUP!G8 M!O NHP K
MUPG !Q N NHP UT O8 $;
: O NH !QG 7OMT APQ !N O L M!O O GP8
X9 9PG ! QHN%G A9MKU MQP!NG N NHP L PT O JGP+
H J I M P9[% N MN I T OG AJN H 9O NHPP GN 998
H !QG AMO APQJ!I MUP GN !Q NHP I GP9 PG AT 99
L NHPP Q NH I P+ 9 4 & $

3 3 222+S - ! ? 2 $ 2
" 3 !
J OP P G+
E& JN H O O A O NHPP E !NH JG \
)' E& MKAPNH+
%' E& " P !PPOG ! N J I GN JGN8 G !KP HP OP9 P G
1J 77 KPG M!O HMN P HM P N O +
NHP O PKN !EJGN+
E& HP!GNM!O NH JG+
HP PGN TPN Q9 I I P G NH G I P GN PMUG 7OMT
GLJ G NHP 9MNPO N M P99P MLMKP+
QM !NHP N I P9T ! !8 M!O !PM MLL MKHPG
HP GJAEPKN 7 J MNKH+
)' E& " M U[2 HPM H GPG+
% 98 9 : P JG M9 QHN NHP P H M[
%' E& HP!%N G HP# NHP PGN
HMN M P NH !NHP ! NP 7PWLPKNMN !+
#9 PMOT M P %NHP K J N+
E& " G H GPG Q MA JN+
)' E& #9 I GN M I 9P8 AJN HP O PG JGJM99T
M99 I P!O 7 I HP!KP N NHP LM9MKP QMNP
MUP N NHP M9U+

& J("4 2 !

%' E& #' 9 QHN M 9 QHN[
)' E& ; % G HP+
2' E& NM!O N %N+
% 2N 99 AP M !N ! QHN+
2' E& /PN N K I P O !+
+ -- & -& J(
% 1 N PMKHP T[O9T Q O O9PM!KP 79T 79T 79T 8
H J I MT%GN P P!QP+ S G9M P[+ -' 4 2 , ' - , -'
)' E& X H O O GN UP JN NHP 9 QHN \
2' E& X MG%N ! N NHP MT \
)' E& HP P%G AJN !P O !8 NHP G !' G 79PO+

D B : ' : ? H!G !' PWL9M !G NH G MG $ ' : NHP 9PMGP AT H KH NHPT H 9O NHP 9 PG 7 I' !MNJ P' M!O & NG !' GMTG N G NHP ' ' ' ' 2G ! N NH G P T 7 KPO \' #9NH JQH N P PWL PGG !' I MT AP G I P HMN AGKJ P O PG ! N P P T !P 7PP9 NHMN NHP ' I PM!G NHP !O OJM9 S NHP LM N KJ9M KMGN 7 I' !MNJ P%G I J9O SM LP GHMA9P K LT 7 NHP L N NTLP 7 I M!' \
($ J S NHP APPN9P A !P !' NG GHM OG ' GKM9T !Q KMGPG PP T I AP9 !P 299JGN MN !' 7#KN 222+ K 222+ +

%' E& " P HM P 9 GN APGN HM97 7 J M77M +
2' E& X P99 9P N%G M MT M!O GMT H + 4 &

3 3 2 +S ! !' .'7 % N& .
, , "
$ # 6
/ OG "' #NNP!OM!NG+
E 4 J U! T J !OPQ PPG G N O !' MN 7 GN
#!O 9MGN NHP HPM NT P9K I P+
?! "- HM!UG N T J I MEPGNT+
E 1J GP97 99 I !Q9P NH G K PNT+
#!O L9MT NHP HJ I A9P H GN+
1J H GNPGG UPPLG HP GNMNP8 AJN !APGN N I P
XP 99 P]J P HP P9K I P+
? "5 E - ! J!KP N7 I P G N M99 J 7 P!OG8
0 I T HPM N GLPMUG NHPT M P P9K I P+

> - J OP P ! "!!
E PP NHPT P!K J!NP NHPP NH NHP HPM NG%NHM!UG
NH G OPG M P P P!' " P P 2%99 G N % NHP I OGN
P 9M QP !' I NH 8 M! ! P%99 O !U M I PMGJ P
HP NMA9P J!O + , , ! 3 "!! HP P%G A9 O
JL !NHT 7MKP+
E& % G M!]J %G NHP!+
E % G APNNP NHPP NH JN NHM!' HP NH !+
2G HP OPGLMNKH%O \
E& T 9 O H G NH MN G KJN8 NHMN 2 O O 7 H I +
E H J M N NHP APGN % NHP KJN NH MNG 4PN HP%G
Q O+
HMN O O NHP 9 UP 7 O9PM!KP 7NH J O OGN N+
H J M N NHP ! !LM P 9+
E& GN TM9 G
O9PM!KP G %GKMLPO+
E HP!K I PG I T 7 N MQM !' 2 HMO P9GP APP!' LP 7PKN8
XH 9P MG NHP I M A9P 7 J!OPO MG NHP KU
#G A MO M!O QP!P M9 MG NHP KMG !Q M
JN ! 2 M I KMA !%O K AA%O K !7 !%O A J!O !'
GMJ]T O JANG M!O 7PM G+ JN M!]J %G GM7P \
E& #T I T Q O 9 O GM7P !' M-O NKH HP A OPG+
X NH N P!NT N P!KHPO QMGHPG !' H G HPMO8
HP 9PMGN M OPMNH N !MNJ P+
E HM!UG 7 NHMN X
$ HP P NHP Q !' GP LP!N 9 PG8 NHP I NHMN%G 79PO+
"MNH !MNJ P NHMN !N I P 99 P! I A PPO+
NPPNH 7 NHP L PGP!N+ S : PN NHPP Q !P 8 N I
XP%99 HPM J GP9 PG MQM !+ + 4 J OP P +
? "5 E T TM9 9 O+
4 J O ! N Q P NHP KHPP 8 NHP 7PMGN G G 9O
HMN G ! N 7NP!' JKH%O H 9P %N G M I MU !Q
% G Q P!' NH P9K I P F 7PPO P P APGN MN H I P8
0 I NHP!KP NHP GMJKP N I PMN G KP P I !T+
PPN !Q P P AM P NH JN N+
E PPN P I P I A M!KP [S
Q O O QPGN !' M N !' MLLPN NP+
#!O HPM9NH !A NH[
? MT N L9PMGP T J H QH!PGG G N \

: H GN !.'& J("- - $
, ;
E " P P HMO P ! J K J!N T%G H ! J 7%O+
XP P NHP Q MK%O LP G !' 7 J M!]J L PGP!N8

XP L !N NHPGP 9 !PG MG !' NHP Q !M8 21' !M OP I PO N !G NHPT M P 6 PQJ_
9MNPO R NHJG S
6 "MNH J!Q ! QHM%G TM ! !Q LPM9 NHP P GHM99 AP O !P
#OPPO 7O PMO7J9 ! NP+R
D (JH$ HP PWL PGG !' G NMUP!' 7 I NHP L MKN KP 7K9 G !Q N9 P
PTP9 OG 7HM UG+
D XP J!OP GM!O $ %N G Q P! , NH P9K IP+
1/ 22+

1 7 NHP I GN L JG 3O M O NH GJKH Q MKP
HMN NHP I M9P 9P!KP 7 7 NJ!P ! NH !Q
MUPG 7 I H G H QH PGLPKN H NHP MKOJ7
2G Q !P N L MT NHP H 9TU !Q JL !H G M O
MUP NHJ I AP 9M!O M!O @ NH " I MA P
HMN AT NHP HP9L 7 NHPGP @ NH " I MA P
L NP7J9 M!O MNH7J9 H MG NHP G O
/ PG 7 H G !P!OG ! 8 : PN T J Q !P
JN I MUP M I P!OG ! 8 : PN T J Q !P
#!O MN NHP L N 7 #KHP !
PPN I P %NHP I ! !Q 8 NH NHP HP
X 99 K IP N U! H G OPGN !T
4 J PGGP9G M!O T J GLP99G L OP
4 J KHM I G M!O P P TNH !Q APG OP
2 M I 7 NHP M 8 NH G ! QHN 2%99 GLP!O
!N M O G I M9 M!O M 7MNM9 P!O D
PMN AJG !PGG I JGN AP JQHN P P ! !8
L !NHP K !P 7NHP I !
HP P HM!QG M ML JG O L L 7 J!O8
2%99 KMNKH N P P N K IP N Q J!O
#!O GP H I N M KMJN ! N H 9O HMN O GNM!KP
" G GO I KM! L OP IP H 9T M!QP9
O9T N NHP K J N 7 3!Q9M!O M!O J!7 9O
" G I PGGMQP P P HP K IP 8 NHMN M G 7N A9PGG !Q
MT G ! PNJ !N NH G J GJ77P !Q K J!N T
!OP M HM!O MKKJ G%O [
?! " 2%99 GP!O I T L MTP G NH H I [
= 4 &

" M U 2 M I KM99%O 8 I T 9 NN9P GL N GPP
NG ! M 7 QQT K9 JO M!O GNMTG 7 I P 9: 4
8 IP 9P N%G I MUP HMGNP GHP%99 AMKU
= 4 &

3 3 2 SO PG ! ! * + * , BK
6 / O
? T7 IP GLPPKHPG HM P AJ H N T J NH JQHNG
XH KH KM! !NP L PN 7M NHP !9T 2 GMT
H !QG HM P APP! GN M!QP9T A !P HP Q MK JG 5J!KM!
X MG L N PO 7 MKAPNH S I M T HP MG OPMO S
#!O NHP QHN M9 M! J MU%O N 9MNP8
XH I T J I MT GMT 7 %N L9PMGP T J O9PM!KP U 99%O
O O9PM!KP 79PO P! I JGN ! M9U N 9MNP
XH KM! ! M! NHP NH JQHN H I !GN JG
2N MG 7 M9K 9 I M!O 7 75 !M9AM !
U 99 NHP Q MK JG 7MNHP \ OM I !PO 7MK N[
N O O Q P P MKAPNH [O O HP ! N GN M QHN
2! L JG MQP NHP N OP9 ! J JP!NG NPM
HMN P P NHP G9M PG 7O !U M!O NH M99G 7G9PPL \
X MG ! N NHMN ! A9T O !P \ #T M!O GP9T N 8
O %N J9O HM P M!QP %O M!T HPM N M9 P
HPM NHP I P! OP!T N NHMN 2 GMT
P HMG A !P M99 NH !QG P99 M!O 2 O NH !U
HMN HMO HP 5J!KM!%G G !G J!OP H G UPT
@#G M ! N L9PMGP HPM P! HP GHM99 ! N NHPT GH J9O 7 !O
X HMN SN P P N U 99 M 7MNHP 8 G GH J9O O9PM!KP
JN LPMKP!S7 7 I A MO OG M!O %MJGP HP 7M 9%O
G L PGP!KP MN NHP NT M! N%G 7PMGN 2 HPM
MKOJ77 9 PG ! O GQ MKP8 KM! T J NP99
XHP P HP APGN G H I GP97 \
3 O HP G ! 75J!KM!
O I H I NH G NT M! N H 9OG NHP OJP 7A NH
/ PG ! NHP 3!Q9 GH K J N8 M!O G PKP %O

(K 9O HP P G ! !MNJ M P NM OMN ! X P O ! ! N H P P M9N NHP
NPWN HP P I P!OMN ! 7 NPP P!G GS
6 MO NHMW J!OP (% GN !P+R
& P HMGS 6 MO NHMW J!OP $ (GN !P+R

% NHP Q!N9 H P G ! A9P9 !P AT H KH NHP I PN P G K APMJN 7J99T M PO
HMG APP! KHM!QPO N S 6 N M O G I M9 S7MM9 P!O+R

H G G NHP PMO !Q 7 HP Q !M9 S(NHP 9 !P G KP NM !9T OP7PK N P !
HTNH I 7 M LMJGP HP P KM!! N MUP NHP L9MKP 7 M GT99MA9P J!9PGG P L ! J!KP

0 ' NHP A9 O A 9NP %OD M!] J ' G I 9PG JL !' I P
! O' L !NG' MN' NHP I ' 7 ' H G+ S X HMN ' G' NH G' G ' \
2 8 ' #T ' G ' M99' NH G' G' G S JN' HT'
NM ! OG' MKAPNH' NHJG' M I MCPO9T' \
I P ' G GNP G ' KHPP ' P' JL ' H G' GL NPG+
! O' GH ' NHP' APGN' 7' J ' OP9 QHNG' 8
' KHM I ' NHP' M ' N ' Q P' M' G J ! O
X H 9P' T J' LP 7 I ' T J ' M ! N] JP' J ! O'
HMN' NH G' Q PMN' U ! Q+ I MT' U ! O9T' GMT+
1 J ' OJN PG' O O' H G' P9K I P' LMT+
+ &- ' ' X NKHPG' " $ "' 1 - '
E^. (' X HP P' M P' NHPT' \ : !P' \S / PN' NH G' LP ! K JG'
H J
NM ! O' MTP' MKKJ GPO' !' NHP' KM9P ! OM ' [S
I P' ! ' NH JN' NHP P' [

' # $

? ' X HMN%G' T J ' Q MKP%G \
E (' M ' T J' NHP' P O' G GNP G' \
? ' ' I T' 9 O+
E (' M I P' NHPT' ! N' AT' T J' \
? ' ' ! OPPO ' I T' 9 O+
E (' 2 ! 7PKNPO' AP' NHP' M ' HP P !' NHPT' OP8
! O' OM I ! %O' M99' NH GP' NHMN' N JGN' NHP I [S2' O O' HPM '
HP' QM99 L ! Q' 7' H GP' ' X H ' MG%N' KM I P' AT' \
? ' $ G' N ' ' NH PP ' I T' 9 O ' NHMN' A ! Q' T J' O '
MKOJ77' G' 79PO' N ' 3 ! Q9M ! O+
+ E (' O9PO' N ' 3 ! Q9M ! O' \
? ' #T ' I T' Q O' 9 O+
E ' I P ' NH J' M ! N K LMN%GN' I T' O PMO' PWL9 NG'
HP' 79 QHNT' LJ L GP' ! P P ' G' %P N U+
! 9PGG' NHP' OPPO' Q ' NH' N ' O I ' NH G' I I P ! N+
HP' P T' 7 GN9 ! QG' 7' I T' HPM N' GHM99' AP'
HP' 7 GN9 ! QG' 7' I T' HM ! O+' # ! O' P P !' ! +
' K ! ' I T' NH JQHNG' NH' MKNG ' AP' N' NH JQHN' M ! O' O ! P' '
HP' KMGN9P' 7' MKOJ77' 2' 99' GJ L GP8
P CP' JL !' O 7P' 8 Q P' N ' NHP' POQP' %NHP' G O'
" G' 7P ' H G' AMAPG ' M ! O' M99' J ! 7 NJ ! MNP' G J9G'
HMN' N MKP' H I ' ! D' H G' 9 ! P+' ' A MGN ! Q' 9 UP' M' 7 98
H G' OPPO' 2%99' O ' AP7 P' NH G' LJ L GP' K 9
JN' ! ' I P' G QHNG' [S X HP P' M P' NHPGP' QP ! N9P I P !' '
I P ' A ! Q' I P' HP P' NHPT' M P+' = 4 &

3 3' 22+ SO 7P+' ' !! ' ' MKOJ77%G -

' # %' " ' ' ! ' M ! O'

? "5' E "' X HMN' HMO' HP' O ! P' N ' I MUP' H I ' 79T' NHP' 9M ! O' \
!-- ' 4 J' I JGN' HM P' LMN P ! KP ' I MOM I +
? ' E "' " P' HMO' ! ! P8
" G' 79 QHN' MG' I MO ! PGG' ;' X HP !' J ' MKN ! G' O ' ! N
1 J ' 7PM G' O ' I MUP' JG' N M N G+
!-- ' 4 J' U ! ' ! N
X HPNHP ' N' MG' H G' GO I ' ' H G' 7PM +
? ' E "' X GO I ' [N ' 9PM P' H G' 7P ' N ' 9PM P' H G' AMAPG '
" G' I M ! G ! ' M ! O' H G' N N9PG ' !' M' L9MKP'
0 I ' HP ! KP' H I GP97' O PG' 79T' ' " P' 9 PG' JG' ! N8
" P' M ! NG' NHP' ! MNJ M9' N JKH' ' 7 ' NHP' L ' P ! +
HP' I GN' O I ! JN P' 7' A OG ' 99' 7 QHN+
" P ' T J ! Q' ! PG' !' HP ' ! PGN ' MQM ! GN' NHP' 9+
99' G' NHP' 7PM ' M ! O' ! NH ! Q' G' NHP' 9 P' 8
G' 9 NN9P' G' NHP' GO I ' HP P' NHP' 79 QHN'
' J ! G' MQM ! GN' M99' PMG !+
!-- ' T' OPM PGN' K C
2' L MT' T J ' GKH 9' T J GP97' JN ' 7 ' T J ' HJGAM ! O+
" P' G' ! A9P ' GP ' EJO K JG ' M ! O' APGN' U ! G
HP' 7 NG' %NHP' GPMG !+' 2' OM P' ! N' GLPMU' I JKH' 7J NHP

$' 3' !$ ' 0 ' 3 ' G ' G' M' O' 7' NHP' I O9M ! O' K J ! N PG ' I PM ! ! Q' " !
+' " %

JN' K JP9' M P' NHP' N I PG ' HP !' P' M P' N M N G+
! O' O ' ! N' U ! ' J GP9 PG' 8 HP !' P' H 9O' J I J '
0 I ' HMN' P' 7PM 8' TPN' U ! ' ! N' HMN' P' 7PM 8
JN' 79 MN' JL !' M' 9O' M ! O' 9P ! N' GPM
3MKH' MT ' M ! O' I P+ S2' NMUP' I T' 9PM P' 7' T J8
HM99' ! N' AP' 9 ! Q' AJN' 2%99' AP' HP P' MQM !'
H ! QG' MN' NHP' GN' 99' KPMGP ' ' P9GP' K9 I A' JL M O'
' HMN' NHPT' P P' AP7 P8 S T' L PNNT' K JG !+
9PGG ! Q' JL !' T J[
? ' E "' OMNHP %O' HP' G ' M ! O' TPN' HP%G' 7MNHP 9PGG+
!-- ' 2' M I ' G ' I JKH' M' 7 9' GH J9O' 2' GNMT' 9 ! QP +
2N' J9O' AP' I T' O GQ MKP ' M ! O' T J ' O GK I 7 N
2' NMUP' I T' 9PM P' MN' ! KP+' = 4 ' *(
? ' E "' MH ' T J ' 7MNHP %G' OPMO8
! O' HMN' 99' T J' O ' ! ' \ " ' 99 ' T J' 9 P' \
7! ' #G' A OG' O ' I NHP +
? ' E "' X HMN ' NH' I G' M ! O' 79 PG' \
7! ' X NH' HMN' 2' QPN ' 2' I PM ! 8 M ! O' G ' O ' NHPT+
? ' E "' - ' A O[NH J%OGN' ! P P ' 7PM ' NHP' ! PN ' ! ' 9 I P+'
HP' L N 7M99 ' ! ' NHP' Q ! +
7! ' X HT' GH J9O' 2 ' I NHP \' - ' A OG' NHPT' M P' ! N'
GPN' 7 +
T' 7MNHP ' G' ! N' OPMO ' 7 ' M99' T J ' GMT ! Q+
? ' E "' 4PG ' HP' G' OPMO8 H ' 9N' NH J' O ' 7 ' M' 7MNHP \+'
7! ' MT ' H ' 99' T J' O ' 7 ' M' HJGAM ! O\
? ' E "' X HT ' 2' KM ! ' AJT' I P' N P ! NT' MN' M ! T' I M UPN+
7! ' HP !' T J%99' AJT' %P I ' N ' GP99' MQM !+
? ' E "' H J' GLPMU%GN' NH' M99' NHT' N8 M ! O' TPN ' %
7M NH+
X NH' N' P ! JQH' 7 ' NHPP+
7! ' X MG' I T' 7MNHP ' M' N M N ' I NHP ' \
? ' E "' #T ' NHMN' HP' MG+
7!0 ' X HMN' G' M' N M N ' \
? ' E "' X HT ' !P' NHMN' G PM G' M ! O' 9 PG+
7! ' # ! O' AP' M99' N M N G' NHMN' O ' G ' \
? ' E "' 3 P T' !P' NHMN' O PG' G ' G' M' N M N ' M ! O' I JGN'
AP' HM ! QPO+
7!. ' # ! O' I JGN' NHPT' M99' AP' HM ! QPO' NHMN' G PM ' M ! O' 9 P' \
? ' E "' 3 P T' !P+
7! ' X H ' I JGN' HM ! Q' NHP I ' \
? ' E "' X HT ' NHP' H ! PGN' I P ! +
7! ' HP !' NHP' 9 M G' M ! O' G PM P G' M P' 7 9G ' 7 ' NHP P' M P'
9 M G' M ! O' G PM P G' P ! ' N ' APMN' NHP' DE ! PGN' I P ! ' M ! O' HM ! Q'
JL' NHP I +
? ' E "' ' : O' HP9L' NHPP ' L ' I ! UPT[JN' H '
9N' NH J' O ' 7 ' M' 7MNHP ' \
7! ' 27' HP' P P' OPMO ' T J%O' PPL' 7 ' H I ' 7' T J' J9O'
! N' N' P P' M' Q O' G Q ! ' NHMN' 2' GH J9O'] J KU9T' HM P' M' ! P '
7MNHP +
? ' E "' - ' L MNN9P [H ' NH J' NM9UPGN+

' ' PGGP ! QP +

E --$ 9PGG' T J ' 7M ' OM I P[2' M I ' ! N' N ' T J' U ! !+'
H JQH' !' T J ' GNMNP' 7' H ! J ' 2' M I ' LP 7PKN+
2' O JAN ' G I P' OM ! QP ' O PG' MLL MKH' T J' ! PM 9T' 8
27' T J' 99' NMUP' M' H I P9T' I M ! %G' MO KP+
P' ! N' 7 J ! O' HP P8 HP ! KP ' NH' T J ' 9 NN9P' ! PG+
' 7 QHN' T J' NHJG ' I PNH ! UG ' 2' M I ' N ' GM MQP8
' O ' GP' N ' T J' P P' 7P99' K JP9NT+
X H KH' G' N ' ! QH' T J ' LP G !+' " PM P ! ' L PGP P' T J' '
2' OM P' MA OP' ! ' 9 ! QP +' = 4 ' PGGP ! QP +
? ' E "' X H NHP ' GH J9O' 2' 79T' \
2' HM P' O ! P' ! ' HM I +' JN' 2' P I P I AP ' ! '
2' M I ' !' NH G' PM NH9T' 9O8 HP P ' N ' O ' HM I +
2G' 7NP ! ' 9MJOMA9P8 N ' O ' Q O ' G I PN I P+
#KK J ! NPO' OM ! QP JG' 7 99T' ' X HT ' NHP ! ' M9MG[
5 ' 2' LJN' JL' NHMN' I M ! 9T' OP7P ! KP+
' GMT ' 2' HM P' O ! P' ! ' HM I ' \ X HMN' M P' NHPGP' 7MKPG' \

D NPP P ! G' I NG' $ ' '
1 / +' 22+ V 2

J OP P G+

E& . XHP P G T J HJGAM!O\
? E "2 H LP ! ! L9MKP G J!GM!KN 7 PO+
X HP P GJKH MG NH J IM$%GN 7 !O H I+
E& "P$G M N M N +
7! H J9 PGN NH JGHMQ PM %O D 99M !+
E XHMN T J PQQ[=;7 ((3
4 J!Q 7 T 7N PMKHP T[
7! "P HMG U 99%O I P I NHP
&J! M MT 2 L MT T J 9: -
9: 4 (55 5 3S J OP R . "
,& -& "(5 + J OP P G+

3 3 222+ S3!Q9M!O+ !! !Q%G

(55

E /PN JG GPPU JN G I P OPG 9MNP GHMOP M!O NHP P
X PPL J GMO A G I G P I LNT+
E " /PN JG MNHP
" 9O 7MGN NHP I NM9 G O8 M!O 9 UP Q O I P!+
PGN OP J O ! 7M99%! A NHO I 3MKH !P I !
P O G H 98 !P LHM!G K T8 !D G G
N UP HPM P! ! NHP 7MKP NHMN N PG J!OG
#G 7 N 7P9N NH K N9M!O M!O TP %O JN
/ UP GT99MA9P 7O 9 J +
E X HMN 2 AP9 P P 2%99 M 98
X HMN U! AP9 P P8 M!O HMN 2 KM! PO PGG+
#G 2 GHM99 7 !O NHP N I P N 7 P!O 2 99+
X HMN T J HM P GL UP N I MT AP G LP KHM!KP+
H G NT M!N H GP G 9P !M I P A9 GNP G J N !QJPG+
X MG !KP NH JQHN H !PGN8 T J HM P 9 %O H I P998
" P HMNH ! N N JKH%O T J TPN+ 2 M I T J!Q AJN G I PNH !Q
4 J I MT OPGP P% 7H I NH JQH I P8 M!O GO I
77P JL M PMU L ! ! KP!N 9M I A+
MLLPMGP M!M!Q T : O+
E " 2 M I ! N N PMKHP JG+
E JN MKAPNH G+
#Q O M!O NJ JG !MNJ P I MT PK 9+
2!M! I LP M9 KHM QP+ JN 2 GHM99 FK M P T J LM O !8
HMN H KH T J M P I T NH JQHNG KM!! N N M!GL GP
#!QP9G M P A QHN GN 99 NH JQH NHP A QHNPGN 7P9"
H JQH M99 NH !QG 7 J9 J9O PM NHP A G 7Q MKP
4PN Q MKP I JGN GN 99 9 U G +
E " 2 HM P 9 GN I T H LPG+
E -P KHM!KP P P!NHP P HP P 2 O O 7 !O I T O JANG+
X HT !NHMN M !PGG 9P7N T J 7P M!O KH 9O
@ H GP L PK JG I N PG NH GP GN !Q U! NG 79 P
$X NH JN 9PM P NMU !Q\S2 L MT T J+
/PN ! N I T EPM9 JG PG AP T J O GH ! J G+
JN I !P !GM7PN PG S4 J I MT AP QHN9T EJGN+
X HMNP P 2 GHM99 NH !U+
E " 9PPO A9PPO L K J!N T
: PMN NT M!!T 9MT NH J NHT AMG G GJ P+
0 Q O!PGG OM P ! N KHPKU NHPP[PM NH J NHT !QG+
HP N N9P G M77PP %O+DSOM P NHPP P99 9 O
2 J9O ! N AP NHP 99M !NHMN NH J NH !U%GN

4$! G H G GH J9O AP L AMA9T %$!$ 0 M 7 I 7 MAJGP 7 J!O !
9O L9MTG M!O P P!! 9M PL NG+
% HP Q !M9 PMOG %(
R %$ '' NPP P!G I NG NHPGP 8 %* NHP 9O PMG !+
N HP Q !M9 PMOG 6 NHP N9P G M77PM O+R #I OP I PMO !Q GS6 NHT N9P
G M77PP %O+R XP HM P 7 GN N K !G OP H HMUGLP P JGPG NHP O '6' 2!M
GJAGP]JP!N LMGGMQP 7NH G L9MT #!QJG GLPMU !Q 7 MKAPNH GMTG S

6 O PG HP 7PP9 H G '''' '
"M!Q9 GP MA JN H I 9 UP M Q M!N%G AP
L !M O M7 GH NH P7+R

2!PMKH 7 NHPGP LMGGMQPG ' G L !NPO NH M KML NM9 5 PG MKOJ77 NHP!
I PM!N GMT HJ N M!O !O Q!M!N MN NHP O JANG 7 M9K 9 I NHP ' @LP G ! 7T !Q
NHP PQM9 N N9P G S7 QHNPO8 M!O NHP P7 P 6 L K J!N T R 6 PM NH J
NHT !QG R K !N !J !Q N ML GN LH GP 6 Q PMN NT M!!T R 6 PM NH J NHT
!QG R SP!E T NAT JGJ LMN !8 8 %*$ HP P LL GPO N $%*C NHP N N9P
G !(SMO I NNPO SMG M77PP G OPK OP JL !M K9M I M!O NP I !MNP
M O GLJNP \ XP H 9O N NHP 9MNNP !NP L PNMN !+
)+%

0 NHP H 9P GLMKP NHMN%G !NHP NT M!N%G Q MGL
#!O NHP KH 3MGN N A N
E P! N 77P!OPO8
2 GLPMU ! N MG !MAG 9JNP 7PM 7T J+
2 NH !U J K J!N T G !UG AP!PMNH NHP T UP8
2N PPLG N A9PPOG M!O PMKH !P OMT M QMGH
2G MOOPO N HP J!OG 2 NH !U NHM9
HP P J9O AP HM!OG JL9 7NPO !I T QHN 8
#!O HP P 7 I Q MK JG 3!Q9M!O HM P 2 77P
17Q O9T NH JGM!OG JN 7 M99 NH G+
X HP! 2 GHM99 N PMO JL !NHP NT M!N%G HPMO+
1 PM N !I T G O TPN I T L K J!N T
HM99 HM P I P KPG NHM! N HMO AP7 P 8
P GJ77P M!O I P GJ!O T MTG NHM! P P +
T H I NHMN GHM99 GJKKPPO+
E " . XHMN GH J9O HP AP \
E 2N G I TGP97 2 I PM! ! H I 2 U! #99 NHP LM N KJ9M G 7 KP G Q M7NPO
HMN HP! NHPT GHM99 AP LP!%O A9MKU MKAPNH
X 99 GPP I MG LJ P MG G! 8 M!O NHP L GNMNP
3GNPP I H I MG M 9M I A AP !Q K I LM PO
X NH I T K !7 !P9PGG HM I G+
E " N !NHP 9PQ !G
17H O HP99 KM! K I P M OP 9 I P OM I !%O
2!P 9G N N L MKAPNH+
E 2 Q M!N H I A9 OT+
/JWJ JG M M K JG 7M9GP OPKP N7J9+
JOOP! I M9 K JG G I MKU !Q 7P P T G !
HMN HMG M !M I P JN NHP P%G ! A NN I ! !P+
2!I T 9JLNJ JG!PGG T J PG T J OMJQHNP G+
4 J I MN !G M!O T J I M OG K J9O ! N 7 99 JL
HP K GNP !7 I T 9JGN8 M!O I T OPG P
#99 K !N !P!N I LPO I P!NG J9O %P APM +
HMN O O LL GP I T 99 PNNP MKAPNH
HM! GJKH M !P N P Q!+
E " J!O9PGG !NP I LP M!KP
2!!MNJ P G M NT M!!T8 N HMNH APP!
HP J!N I P9T P I LNT !Q 7NHP HMLLT NH !P+
#!O7M99 7 I M!T U !QG+ JN 7PM ! N TPN
NMUP JL !T J HMN G T J G T J I MT+
! PT T J L9PMGJ PG !M GLMK JG L9P!NT+
#!O TPN GPP I K 9O NHP N I P T J I MT G H O !U+
XP HM P 99 !Q OM I PG P! JQH8 NHP P KM!! N AP
HMN J9NJ P !T J N OP J G I M!T
#G 99 N Q PMN!PGG OPO KMNP NHP I GP9 PG+
0 !O !Q N G !K9 !%O+
E X NH NH G NHP P Q G+
2!I T I GN 99 K I L G%O M77PKN !GJKH
#GNM!KH9PGG M M KP NHMN P P 2 U !Q
2 GH J9O KJN 77NHP ! A9PG 7 NHP 9M!OG8
5PG P H G EP P9G M!O NH G NHP %G H JGP
#!O I T I P HM !Q J9O AP MG M GMJKP
I MUP I P HJ!QP I P8 NHMN 2 GH J9O 7 QP
>JM P9G J!EJGN MQM !GN NHP Q O M!O 9 TM9+
5PGN T !Q NHP I 7 PM9NH+
E " H G M M KP
N KUG OPPLP 8 Q G NH I P LP ! K JG N
HM! GJ I I P GPP I !Q 9JGN8 M!O N HMNH APP!
HP G O 7 J G9M !U ! QG 4PN O ! N 7PM 8
K N9M!O HMNH 7 TG !G FN 7 99 JL T J 99
17T J I P P ! #99 NHPGP M P L NMA9P F
X NH NHP Q MKPG P QH%O+
E JN 2 HM P ! !P8 HP U !Q APK I !Q Q MKPG
#G EJGN KP P NT NP I LP M!KP GNMA9P!PGG
J!NT LP GP P M!KP I P KT 9 9 !PGG+
5P N ! LMN P!KP K J MQP 7 N NJOP
2 HM P ! P9 GH 7NHP I 8 AJN MA J!O
2!NHP O G ! 7PMKH GP P M9 K I P+

FF 2% %SMAJ!OM!N L G !+
FF "' HP O G JGPO !NHP GM I P GP!GP !/PM
" 9 QHN M!O - "' I T LM !GPP I G! +%

#KN iQ' N' I MIT' MTG+ MT'HMO'2'L p'2'GH J9O' +- J'NH'G ppN' I 9U' 7K ik O' iN 'HP99+
L M'NH'JI p GM9'LPMKP'K i7 JiO' #99'JI NT' i'PM NH+
E "' 1' K N9MiO[K N9MiO[
E 'Z7'GJKH'M' ip'HP'7N'N 'Q p i'GLPMU8
2'MI'MG'2'HM P'GL UPi+
E "' O N'N'Q p i[
'i N'N '9 p+S1'iMN i'I GP MA9P+
X NH'Mi'JiN N9PO'NT MiN'A9 OT GKPLN PO+
X HPi'GHM9'NH J'GPP'NHT' H 9PG I P'OMTG'MQM i'\
iKP'NHMN'NHP'N JPGN' GGJP' 7NHT'NH ip'
T'H G' i'iNP O KN i'GNMiOG'MKKJ G%O
#iO'O PG A9MGLHPIP'H G'A PPO'\S HT' TM9'7MNHP'
XMG'M'I GN'GM iNPO'U iQ'NHP']JPPi'NHMN'A P'NHPP'
17N%ip'JL i'HP'UIPPG'NHMi' i'HP'7PPN+
5 PO'P P T'OMT'GHP'9 PO+' OM P'NHPP' P99[
HPGP'P 9G'NH J' PLPMN%GN'JL i'NHTGP97
"M P'AMi GH%O' IP'7 I' K N9Mio+S1'I'T'A PMGN+
HT'H LP'PiOG'HP P[
E ' MKOJ77'NH G i A9P'LMGG i+
H 9O' 7 iNPQ NT'HMNH'7 I'IT'G J9
X L%O'NHP'A9MKU'GK JL9PG' PK ik 9%O' I T'NH JQHNG
'NHT'Q O'N JNH'MiO'H i J+' 5P 9 GH' MKAPNH'
T IMiT' 7NHPGP'N M iG'HMNH'G JQHN'N ' i'IP
2IN'H G'L P 8 MiO' I OPGN' GO I'L9JKUG' IP
O I' P K POJ9 JG'HMGNP8 JN': O'MA P'
5PM9'APN PPi'NHPP'MiO' IP[' 7 'P pi'i '
'L JN' I TGP97N 'NHT'O PKN i'MiO'
i GLPMU' I ip' i'OPN MKN i8 HP P'MAEJ P'
HP'NM iNG'MiO'A9M I PG2'9M O'JL i' I TGP97+
O 'GN MiQP G'N ' I T'iMNJ p+' 2'MI'TPN'
9iUI i'N ' IMi'8 ip p' MG'7 G i'8
KM KP97'HM P'K PNPO' HMN' MG' I ip' i'8
#N'i 'N I P'A UP' I T'7M NH'8 J9O'i N'APN MT'

'NHP'GJKKPPO iQ' TM9NT'HP'9PM PG
HP'HPM9 iQ'APiPO KN i+' X NH'NH G'GN MiQP' NJP
"P'HMNH'M'HPM piQT'Q 7N' 7'L LHPKT8
#iO'GJiO T'A9PGG iQG'HMiQ'MA JN'H G'NH ip+
HMN'GLPMU'H I'7J99' 7Q MKP+

i-- ' 8 NHPT' p p' p99'MN'LPMKP' HPi?'O O'9PM P'NHPI+
E "' P'i N'M'i QQM O' 7T J'GLPPKH' " 'Q PG N'\
i-- ' XHPi'?'KMIP'H NHP'N 'N MiGL N'NHP'N O iQG+'
XH KH'?'HM P'HPM 9T'A ip'NHP P' Mi'M' JI J'
17'IMiT' NHT'7P99 G'NHMN' p p' JN8
XH KH' MG'N 'I T'AP9 P7' NIpGG%'NHP' MNHP +
O 'NHMN'?'GM '7HP'NT MiN%GL p'M 7 N
'G NHP'N IP' 7HP9L8 T J'PTP' i' K N9Mi0'
X J9O'K PMNP'G 9O P G'IMUP' J' IPi'7 QHN'
'O 77'NHP 'O P'O GN PGGPG+
E ' P%'NHP 'K I7 N'+
XP'M P'K I iQ'NH NHP 'Q MK JG'3iQ9Mi0'HMNH'
/piN'JG'Q O M O'Mi0'Npi'NH JGMi0' Ipi8
#i' 9OP 'Mi0'M'APNNP'G 9O P 'i ip'
HMN' H GNPiO I'Q PG' JN+
i-- ' %X J9O'?'K J9O'MiG p'$
H G'K I7 N' NH'NHP'9 UP[JN'?'HM P' OG'
HMN' J9O'AP'H 9%O' JN' i'NHP'OPGP N'M +
XHP P'HPM iQ'GH J9O'i N'9MNK'NHPI+D
E "' X HMN'K ikP i'NHPT'\
HP'QPip M9'KMJGP'\ 'G N'M'7PP Q P7+
5JP'N 'G IP'G iQ9P'A PMGN'\
i-- ' ' I iO'NHMN%G H ipGN
JN' i' N'GHM PG'G IP' P8 NH JQH'NHP' I M i'LM N'
-P NM iG'N 'T J'M9 ip+'
E "' 2?' N'AP' I ip+
PPL' N'i N'7 I'IP']J KU9T'9PN'IP'HM P' N+
i-- ' /PN'i N'T J'PM G'OPGL GP'IT'N iQJP'7 'P P '
XH KH'GHM99'L GGPGG'NHPI' NH'NHP'HPM PGN'G JiO+
HMN'P P'TPN'NHPT'HPM O+
E "' "JILH[?'QJPGG'MN' N+'$
i-- ' 4 J'KMGN9P' G'GJ L G%O8' T J' 7P'MiO'AMAPG+
M MQP9T'G9MJQHNP %O ' N ' P9MNP'NHP' IMiip
6 NPi'NH JGMiO' M 9 UP' IPiR' P P' M9 PMOT'MGGPIA9PO' 6 MN'M'L iNRSMN'M'LM_
N KJ9M'GL N' HP P'NHPT'HMO'K 99PKNPO SM'L iN' 7'GLMKP'\
/' ($'$ S9MT'H 9O' 7'NHPI+

)

T I !O G9 P HMG I MNPO $M!O M I MC%O 2!T GDQHN
2 NH ![\ AJN OM P ! N GLPMU+
Đ $: O ! QHN Q O O KN +
9 4 &

3 3 22+S ! !& 5 0 5J!G !M!P+

$ 2 " & " ! !& -$ " & !
! # $ " .

E HP 3!Q9 GH L P G !PM 9PO !AT M9K 9 I
" G J!K9P M O M!O NHP Q O MKOJ77+
&P P!QPG AJ ! !NHP I 7 NHP OPM KMJGPG
.X J9O N NHP A9PPO !Q M!O NHP Q I M9M I
3WK NP NHP I N 7 PO I M!+Đ
3$ PM ! M I O
HM99 P P99 I PPN NHP I 8 NHMN MT M P NHPT K I !Q+ +
XH U! G 7 5 !M9AM !AP NH H G A NHP \
? 0 KP NM ! G HP G ! N 2 HM P M 7 9P
17 M99 NHP QP!N T NHP P G M O%G G !
#!O I M!T J! JQH T JNHG NHMN P P!! !
- NPGN NHP 7 GN 7 I M!H O+
E X HMN O PG NHP NT M!N \ +
: PMN 5J!G !M!P HP GN !Q9T 7 N 7 PG
I P GMT HP%G LMO 8 NHP G NHMN 9PGGP HMNP H I +
5 KM99 N M9 M!N 7J T AJN 7 KP NM !
"P M!! N AJKU9P H G O GNP I LP %O KMJGP
X NH !NHP AP9N 7 J9P+
3 O PG HP 7PP9
" G GPK PN I J NHO G GN KU !Q !H G HM!OG 8
0 .+ . 01 2 8
H GP HP K I !M!OG I P !9T !K I I M!O+
NH !Q !9 P ! O PG HP 7PP9 H G N N9P
" M!Q 9 GP MA JN H I 9 UP M Q M!N%G AP
L !M O M 7 GH NH P7+
E X H NHP!GHM99 A9M I P
" G LPGNP %O GP!GPG N PK 9 M!O GNM N+
X HP!M99 NHMN G NH !H I O PG K !OP I !
2NGP97 7 AP !Q NHP P \
X P99 I M KH P !+
Q P APO P!KP HP P%N G N J9T %O 8
PPN P NHP I PO K !P 7 NHP G KU9T PM98
O NH H I L J P ! J K J!N T%G LJ QP+
3MKH O L 7 JG+
? 1 G I JKH MG N !PPOG+
OP NHP G P P Q!79 P M!O O !NHP PPOG+
MUP P LJ I M KH N M OG !M I +
= 4 I $ 3

3 3 222+S "J!G !M!P+ ! ! ! -

" 5 KN "#NNP!OM!NG+

E !Q I P ! I P PL NG 8 9PN NHP I 79T M99
99 !M I O P I P N 5J!G !M!P
2 KM!! N NM !N NH 7PM + X HMN%G NHP A T M9K 9 I \
X MG HP ! N A ! 7N I M!\ HP GL NG NHMN U!
#99 I NM9 K !GP]JP!KPG HM P L ! J!K%O I P NHJG
6 OPM ! N MKAPNH8 ! I M!NHMN%G A ! 7 I M!
HM99 P%P HM P L P JL !NHPP+R HP!79T 7M9GP NHM!PG+
#!O I !Q9P NH NHP 3!Q9 GH PL KJ PG

HP I !O 2 G MT AT M!O NHP HPM N 2 APM
HM99 !P P GMQQ F NH O JAN ! GHMUP NH 7PM +

P M!N+

HP OP 9 OM I !NHPP A9MKU NH J K PM I 7MK%O 9 !8
X HP P Q NN%GN NH J NHMN Q GP 9 U \
7 1 HP P G NP!NH JGM!O S
E : PPGP 99M !\
7 1 9O P G G +
E : L KU NHT 7MKP M!O P PO NHT 7PM +
H J 9 9T 9 P %O A T X HMN G 9O P G LMNKH \
5PMNH 7 NHT G J9[NH GP 9 !P!KHPPUG 7 NH !P
P K J!GP99 G N 7PM + X HMN G 9O P G HPT 7MKP \
7 1 HP 3!Q9 GH 7 KP G L9PMGP T J+
E MUP NHT 7MKP HP!KP+S PTN ![S 2 M I G KU MN HPM N+
X HP! 2 APH 9O S PTN ! 2 GMT[S H G LJGH
X 99 KHPP ĐI P P P O G GPMN I P ! +
2 HM P 9 %O 9 !Q P! JQH I T MT 7 9 7PF
2G 7M99P! !N NHP GPM NHP TP99 9PM7
#!O NHMN H KH GH J9O MKK I LM!T 9O MQP+
#G H ! J 9 P APO P!KP N LG 7 7 P!OG
2 I JGN ! N 9 U N HM P8 AJN ! NHP GNPMO+
J GPG ! N 9 JO AJN OPPL I JNH H ! J A PMNH+
X H KH NHP L HPM N J9O 7M ! OP!T M!O OM P ! N+
PTN ![S

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7 5 X HMN%G T J Q MK JG L9PMGJ P
E X HMN !P G I P \
7 5 #99 G K !7 I%O I T 9 O H KH MG PL NPO+
E 2%99 7 QHN N 99 7 I I T A !PG I T 79PGH AP HMKU%O
: P I P I T M I J +
7 5 % G ! N !PPOPO TPN+
E 2%99 LJN N !+
P!O JN I P H GPG GU FNHP K J!N T J!O
"M!Q NH GP NHMN NM9U 7 7PM +S : P I P I !P M I J S
" O PG T J LMN P!N O KN \
! N G G KU I T 9 O
#G GHP G N JA9PO NH NH KU K I !Q 7M!K PG+
HMN UPPL HP 7 I HP PGN+
E J P HP 7 NHMN \
M!GN NH J ! N I ! GNP N M I !O O GPMG%O
L9JKU 7 I NHP I P I T M NPO G 8
&MCP JN NHP NNP!N JA9PG 7 NHP A M !8
#!O NH G I P G PPN A9 JG M!N O NP+
9PM!GP NHP GNJ77%O A G I 7 NHMN LP 9 JG GNJ77+
X H KH P QHG JL !NHP HPM N \
! HP P !NHP LMN P!N
JGN I ! GNP N H I GP97+
E H LHTG K N NHP O QG+ 2%99 ! !P 7 N+S
I P LJN I !P M I J !8 Q P I P I T GNM77 S
PTN !GP!O JN+S5 KN NHP NHM!PG 79T 7 I I P S
I P G OPGLMNKH S27 NH J K J9OGN O KN KMGN
HP MNP 7 I T 9M!O 7 !O HP O GPMGP+
#!O LJ QP N N M G J!O M!O L GN !P HPM9NH
2 J9O MLL9MJO NHPP N NHP P T PKH +
HMN GH J9O MLL9MJO MQM !+S$-J99%N 77 2 GMT+S
X HMN HJAM A GP!!M % HMN LJ QMN P O JQ+
X J9O GK J NHPGP 3!Q9 GH HP!KP \S "PM PGN NH J 7 NHP I \
! #T I T Q O 9 O 8 T J TM9 L PLM MN !
MUPG JG HPM G I PNH !Q+ ,

E "2M I MNPO O G I MTPO+
Đ E! . " X P NH !U NH XM AJ N ! NHMN NHP L PN HP P I PM!G M
HP I N P9 Q JG MGKPN K S !P !O 77P PHN N NHP K !KP !G 7 NHP 9O AJN H
J9O AP PWK NPO N 7 QHN AT GJKH 6 KMJGPG R 7 P P!QP MG MKOJ77 K I PG NH+
Đ 7 33 G N " !!, - '"!2 # L AMA9T 7 I - 3 $ NHP 7 GN LP G !L PGP!N
7 NHP PQJ9M #!Q9 MW !! P A - 3 $ N 7M99 G !U O !8 N 7M 9+
Đ G NHP O 7 NHP Q !M9 7 9 AJN -P KT GJQQPGNPO $ H KH G
M9G NHP PMO !Q 7 99 P %G PKN +
5 ? H!G !L L GPO N PMO 6 E 5 79 7P+R 27 NHP L PN !NP!OPO N PL P_
GP!N MKAPNH MG M T J!Q I M! S !P !NHP
S E 5 7 T JNH M!O A9 I 79JGNTH O R S
H HMO AT H G K I PG M!O NHP K !GP]JP!N M!W PN PG
6 OM99P! !N NHP GPM NHP TP99 9PM7 R S

HP I !O 2 G MT AT M!O NHP HPM N 2 APM
HM99 !P P GMQQ F NH O JAN ! GHMUP NH 7PM +

P M!N+

HP OP 9 OM I !NHPP A9MKU NH J K PM I 7MK%O 9 !8
X HP P Q NN%GN NH J NHMN Q GP 9 U \
7 1 HP P G NP!NH JGM!O S
E : PPGP 99M !\
7 1 9O P G G +
E : L KU NHT 7MKP M!O P PO NHT 7PM +
H J 9 9T 9 P %O A T X HMN G 9O P G LMNKH \
5PMNH 7 NHT G J9[NH GP 9 !P!KHPPUG 7 NH !P
P K J!GP99 G N 7PM + X HMN G 9O P G HPT 7MKP \
7 1 HP 3!Q9 GH 7 KP G L9PMGP T J+
E MUP NHT 7MKP HP!KP+S PTN ![S 2 M I G KU MN HPM N+
X HP! 2 APH 9O S PTN ! 2 GMT[S H G LJGH
X 99 KHPP ĐI P P P O G GPMN I P ! +
2 HM P 9 %O 9 !Q P! JQH I T MT 7 9 7PF
2G 7M99P! !N NHP GPM NHP TP99 9PM7
#!O NHMN H KH GH J9O MKK I LM!T 9O MQP+
#G H ! J 9 P APO P!KP N LG 7 7 P!OG
2 I JGN ! N 9 U N HM P8 AJN ! NHP GNPMO+
J GPG ! N 9 JO AJN OPPL I JNH H ! J A PMNH+
X H KH NHP L HPM N J9O 7M ! OP!T M!O OM P ! N+
PTN ![S

1

7 5 X HMN%G T J Q MK JG L9PMGJ P
E X HMN !P G I P \
7 5 #99 G K !7 I%O I T 9 O H KH MG PL NPO+
E 2%99 7 QHN N 99 7 I I T A !PG I T 79PGH AP HMKU%O
: P I P I T M I J +
7 5 % G ! N !PPOPO TPN+
E 2%99 LJN N !+
P!O JN I P H GPG GU FNHP K J!N T J!O
"M!Q NH GP NHMN NM9U 7 7PM +S : P I P I !P M I J S
" O PG T J LMN P!N O KN \
! N G G KU I T 9 O
#G GHP G N JA9PO NH NH KU K I !Q 7M!K PG+
HMN UPPL HP 7 I HP PGN+
E J P HP 7 NHMN \
M!GN NH J ! N I ! GNP N M I !O O GPMG%O
L9JKU 7 I NHP I P I T M NPO G 8
&MCP JN NHP NNP!N JA9PG 7 NHP A M !8
#!O NH G I P G PPN A9 JG M!N O NP+
9PM!GP NHP GNJ77%O A G I 7 NHMN LP 9 JG GNJ77+
X H KH P QHG JL !NHP HPM N \
! HP P !NHP LMN P!N
JGN I ! GNP N H I GP97+
E H LHTG K N NHP O QG+ 2%99 ! !P 7 N+S
I P LJN I !P M I J !8 Q P I P I T GNM77 S
PTN !GP!O JN+S5 KN NHP NHM!PG 79T 7 I I P S
I P G OPGLMNKH S27 NH J K J9OGN O KN KMGN
HP MNP 7 I T 9M!O 7 !O HP O GPMGP+
#!O LJ QP N N M G J!O M!O L GN !P HPM9NH
2 J9O MLL9MJO NHPP N NHP P T PKH +
HMN GH J9O MLL9MJO MQM !+S$-J99%N 77 2 GMT+S
X HMN HJAM A GP!!M % HMN LJ QMN P O JQ+
X J9O GK J NHPGP 3!Q9 GH HP!KP \S "PM PGN NH J 7 NHP I \
! #T I T Q O 9 O 8 T J TM9 L PLM MN !
MUPG JG HPM G I PNH !Q+ ,

NHP P I P!OMN ! J9O AP EJGN M!O APMJN 7J9+ JN P O JAN 7 NHP L PN HMO M!T
GJKH !NP!N !+ HP PWL PGG !6 MT 7 9 7PR MLLPM G N G P]J M9P!N NH
6 N I P 7TPM R !NHP P P!NT NH O !!PN S

6 HMN N I P 7TPM NH J I MT%GN !I P APH 9O
.XHP!TP99 9PM PG ! !P 7P O HM!Q
L !NH GP A JQHG H KH GHMUP MQM !GN NHP K 9O
M P J !%O KH G HP P 9MNP NHP G PPN A OG GM!Q+R

: 77 O GMTG 6 8 5 ! . G !P NHP I P ! 9PGG NHM! M G I L9P LP LH MG G 7]
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H G G NHP PMO !Q 7 NHP 7 J NH 7 9 + HP Q !M9 PMOG 5
1/ 22+ ,))

HP P J9O H P APP ! M N I P 7 GJKH M O+ S
I M ! O N I M ! O N I +
PPLG ! NH G LP N T LMKP 7 I OMT N OMT
NHP 9MGN GT99MA9P 7 PK OPO N I P8
! O M99 J TPGN OMTG HM P 9 QHNPO 7 9G
HP MT N OJGNTD OPMNH 1J N JN A P7 KM ! O9P[
/ 7P%G AJN M M9U ! Q GHMO 8 M L L9MTP
HMN GN JNG M ! O 7 P%G H G H J JL ! NHP GNMQP
! O NHP ! G HPM O ! I P M G M NM9P
9O AT M ! O N 7J99 7 G J ! O M ! O 7J T+
Q ! 7T ! Q ! NH ! Q+ S

3 3 2 +S !& 5 5JIG !M!P 8 ! ! 1 2
$ 2 " & " ! !& -$ $X#&5
(55 # 9O P G 3
JG IG 2 H LP NHP OMTG M P ! PM MN HM ! O+
KHM I AP G 9 AP GM7P+
XP O JAN N ! NH ! Q+
7 2 X HMN O G NH G AP7 P JG \
HP O 7 ! M I +
/ P P T G 9O P HP H I O ! M A JQH+
! O APM %N AP7 P H I 8 NHP PAT GHM99 P GHMO
HP ! J I AP G 7 J H GN M ! O I MUP O GK P T
3 ! PL N 7 JG+
7 ! "
2N GHM99 AP O ! P+
7 2 X P 9PM ! ! NHP AJN NHP K ! 7 OP ! N T M ! N
PPLG GN 99 ! 5JIG ! M ! P M ! O 99 P ! OJ P
1J GPNN ! Q O ! AP7 P%
HP P % G H G I M ! H LP
O HP P NHP P G MO M ! NMQP N AP Q P ! +
NH I P M ! O 9PGGD HM P Q P ! H I NHP P 9N8
! O ! ! P GP P NH H I AJN K ! GN M ! PO NH ! QG+
X H GP HPM NG M P MAGP ! N + /P N J EJGN KP ! GJ PG
"
NNP ! O NHP N JP P P ! N M ! O LJN P !
2 ! OJGN JG G 9O P GH L+
7 2
HP N I P MLL MKHPG+
HMN 99 NH OJP OPK G ! I MUP JG U !
X HMN P GHM99 GMT HM P M ! O HMN P P+
H JQHNG GLPKJ9MN P NHP J ! GJ P H LPG P9MNP 8
JN KP NM ! GGJP GN UPG I JGN M A N MNP
M OG H KH MO M ! KP NHP M = 4 & $ 3

E %
! Q N M7NP I P+ S
+
E (! ! M ! O N I +
PPLG ! NH G LP NT LMKP 7 I OMT N OMT
! NHP 9MGN GT99MA9P 7 PK OPO N I P8
! O M99 J TPGNP OMTG HM P 9 QHNPO 7 9G
HP MT N OJGNTD OPMNH 1JN JN A P7 KM ! O9P[
/ 7P%G AJN M M9U ! Q GHMO 8 M L L9MTP
HMN GN JNG M ! O 7 P%G H G H J JL ! NHP GNMQP
! O NHP ! G HPM O ! I P M G M NM9P
9O AT M ! O N 7J99 7 G J ! O M ! O 7J T+
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3 3 2 +S !& 5 5JIG !M!P 8 ! ! 1 2
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(55 # 9O P G 3
JG IG 2 H LP NHP OMTG M P ! PM MN HM ! O+
KHM I AP G 9 AP GM7P+
XP O JAN N ! NH ! Q+
7 2 X HMN O G NH G AP7 P JG \
HP O 7 ! M I +
/ P P T G 9O P HP H I O ! M A JQH+
! O APM %N AP7 P H I 8 NHP PAT GHM99 P GHMO
HP ! J I AP G 7 J H GN M ! O I MUP O GK P T
3 ! PL N 7 JG+
7 ! "
2N GHM99 AP O ! P+
7 2 X P 9PM ! ! NHP AJN NHP K ! 7 OP ! N T M ! N
PPLG GN 99 ! 5JIG ! M ! P M ! O 99 P ! OJ P
1J GPNN ! Q O ! AP7 P%
HP P % G H G I M ! H LP
O HP P NHP P G MO M ! NMQP N AP Q P ! +
NH I P M ! O 9PGGD HM P Q P ! H I NHP P 9N8
! O ! ! P GP P NH H I AJN K ! GN M ! PO NH ! QG+
X H GP HPM NG M P MAGP ! N + /P N J EJGN KP ! GJ PG
"
NNP ! O NHP N JP P P ! N M ! O LJN P !
2 ! OJGN JG G 9O P GH L+
7 2
HP N I P MLL MKHPG+
HMN 99 NH OJP OPK G ! I MUP JG U !
X HMN P GHM99 GMT HM P M ! O HMN P P+
H JQHNG GLPKJ9MN P NHP J ! GJ P H LPG P9MNP 8
JN KP NM ! GGJP GN UPG I JGN M A N MNP
M OG H KH MO M ! KP NHP M = 4 & $ 3

E (! ! M ! O N I +
PPLG ! NH G LP NT LMKP 7 I OMT N OMT
! NHP 9MGN GT99MA9P 7 PK OPO N I P8
! O M99 J TPGNP OMTG HM P 9 QHNPO 7 9G
HP MT N OJGNTD OPMNH 1JN JN A P7 KM ! O9P[
/ 7P%G AJN M M9U ! Q GHMO 8 M L L9MTP
HMN GN JNG M ! O 7 P%G H G H J JL ! NHP GNMQP
! O NHP ! G HPM O ! I P M G M NM9P
9O AT M ! O N 7J99 7 G J ! O M ! O 7J T+
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3 3 2 +S !& 5 5JIG !M!P 8 ! ! 1 2
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(55 # 9O P G 3
JG IG 2 H LP NHP OMTG M P ! PM MN HM ! O+
KHM I AP G 9 AP GM7P+
XP O JAN N ! NH ! Q+
7 2 X HMN O G NH G AP7 P JG \
HP O 7 ! M I +
/ P P T G 9O P HP H I O ! M A JQH+
! O APM %N AP7 P H I 8 NHP PAT GHM99 P GHMO
HP ! J I AP G 7 J H GN M ! O I MUP O GK P T
3 ! PL N 7 JG+
7 ! "
2N GHM99 AP O ! P+
7 2 X P 9PM ! ! NHP AJN NHP K ! 7 OP ! N T M ! N
PPLG GN 99 ! 5JIG ! M ! P M ! O 99 P ! OJ P
1J GPNN ! Q O ! AP7 P%
HP P % G H G I M ! H LP
O HP P NHP P G MO M ! NMQP N AP Q P ! +
NH I P M ! O 9PGGD HM P Q P ! H I NHP P 9N8
! O ! ! P GP P NH H I AJN K ! GN M ! PO NH ! QG+
X H GP HPM NG M P MAGP ! N + /P N J EJGN KP ! GJ PG
"
NNP ! O NHP N JP P P ! N M ! O LJN P !
2 ! OJGN JG G 9O P GH L+
7 2
HP N I P MLL MKHPG+
HMN 99 NH OJP OPK G ! I MUP JG U !
X HMN P GHM99 GMT HM P M ! O HMN P P+
H JQHNG GLPKJ9MN P NHP J ! GJ P H LPG P9MNP 8
JN KP NM ! GGJP GN UPG I JGN M A N MNP
M OG H KH MO M ! KP NHP M = 4 & $ 3

E (! ! M ! O N I +
PPLG ! NH G LP NT LMKP 7 I OMT N OMT
! NHP 9MGN GT99MA9P 7 PK OPO N I P8
! O M99 J TPGNP OMTG HM P 9 QHNPO 7 9G
HP MT N OJGNTD OPMNH 1JN JN A P7 KM ! O9P[
/ 7P%G AJN M M9U ! Q GHMO 8 M L L9MTP
HMN GN JNG M ! O 7 P%G H G H J JL ! NHP GNMQP
! O NHP ! G HPM O ! I P M G M NM9P
9O AT M ! O N 7J99 7 G J ! O M ! O 7J T+
Q ! 7T ! Q ! NH ! Q+ S

3 3 2 +S !& 5 5JIG !M!P 8 ! ! 1 2
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(55 # 9O P G 3
JG IG 2 H LP NHP OMTG M P ! PM MN HM ! O+
KHM I AP G 9 AP GM7P+
XP O JAN N ! NH ! Q+
7 2 X HMN O G NH G AP7 P JG \
HP O 7 ! M I +
/ P P T G 9O P HP H I O ! M A JQH+
! O APM %N AP7 P H I 8 NHP PAT GHM99 P GHMO
HP ! J I AP G 7 J H GN M ! O I MUP O GK P T
3 ! PL N 7 JG+
7 ! "
2N GHM99 AP O ! P+
7 2 X P 9PM ! ! NHP AJN NHP K ! 7 OP ! N T M ! N
PPLG GN 99 ! 5JIG ! M ! P M ! O 99 P ! OJ P
1J GPNN ! Q O ! AP7 P%
HP P % G H G I M ! H LP
O HP P NHP P G MO M ! NMQP N AP Q P ! +
NH I P M ! O 9PGGD HM P Q P ! H I NHP P 9N8
! O ! ! P GP P NH H I AJN K ! GN M ! PO NH ! QG+
X H GP HPM NG M P MAGP ! N + /P N J EJGN KP ! GJ PG
"
NNP ! O NHP N JP P P ! N M ! O LJN P !
2 ! OJGN JG G 9O P GH L+
7 2
HP N I P MLL MKHPG+
HMN 99 NH OJP OPK G ! I MUP JG U !
X HMN P GHM99 GMT HM P M ! O HMN P P+
H JQHNG GLPKJ9MN P NHP J ! GJ P H LPG P9MNP 8
JN KP NM ! GGJP GN UPG I JGN M A N MNP
M OG H KH MO M ! KP NHP M = 4 & $ 3

HMN MG ! N A ! 7 I M!\ JKH M !P
I 2 N 7PM ! !P+D

! & 3 X#&5

!7 2 X HMN G NHT !M I P\
E " H J%9N AP M7 M O N HPM N+
!7 2 !8 NH JQH NH J KM99%GN NHTGP97 M H NNP !M I P
HM!M!T G !HP99+
E T !M I P%G MKAPNH+
!7 2 HP OP 9H I GP97K J9O! N L ! J!KP M N N9P
P HMNP7J9 N I !P PM +
E ! I P 7PM 7J9+
+ !7 2 H J 9 PGN MAH PO NT M!N+8 NH I T G O
2%99 L P NHP 9 P NH J GLPMU%GN+
; 5. 3 $ " !& 3 X#&5 -
E H J MGN A ! 7 I M!+S
JN G OG 2 G I 9P MN PML !G 9MJQH N GK !+
M!O GH%O AT I M!NHMN%G 7M I M!A !+ 9: 4

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E " HMN MT NHP ! GP G8SD T M!N GH NHT 7MKP
27 NH J AP%GN G9M ! M!O NH ! GN UP 7 I !P+
T 7P M!O KH 9O P!%G QH GNG 99 HMJ!N I P GN 99+
2 KM!! N GN UP MN PNKHPO UP !PG H GP M I G
P H %O N APM NHP GNM PG8 P NHP NH J MKAPNH
1 P9GP I T G O NH M!J!AMNNP %O POQP
2 GHPMNHP MQM !J!OPPOPO+ HP P NH J GH J9OGN AP 8
T NH G Q PMN K9MNNP ! P 7Q PMNPGN ! NP
PP I G A J NPO+ /PN I P 7 !O H I 7 NJ!P[
#!O I P 2 APQ ! N+ 9 4 & (

" " X#&5+
7 2 H G MT I T 9 O 8SNHP KMGN9P%G QP!N9T P!OP %O G$
HP NT M!N%G LP L9P !A NH G OPG O 7 QHN8
HP ! A9P NHM!PG O A M P9T !NHP M 8
HP OMT M9 I GN NGP97L 7PGGPG T J G
#!O 9 NN9P G N O +
E X P HM P I PN NH 7 PG
HMN GN UP APG OP JG+
7 2 U 3!NP G NHP KMGN9P+
9 4 & &

B $

E X HT GH J9O 2 L9MT NHP & I M!7 9 M!O O P
1!I !P !G O\ H 9PG 2 GPP 9 PG NHP QMGHPG
5 APNNP JL !NHP I +

B (55

E " J ! HP99 H J!O NJ !+
E 17M99 I P!P9GP 2 HM P M OPO NHPP
JN QPN NHPP AMKU I T G J9 G N I JKH KHM Q%O
X NH A9 O 7NH !P M9 PMOT+
E " 2 HM P ! OG+
T KP G ! I T G O 8 NH J A9 O P 99M !
HM!NP I G KM!Q P NHPP JN[9 5. 3
E H J 9 GPGN 9MA J
#G PMGT I MT%GN NH J NHP !N P!KHM!N M
X NH NHT UPP!G O I L PGG MG I MUP I P A9PPO
/PN 7M99 NHT A9MOP !, J9!P MA9P K PGNG 8
2 APM %M KHM I PO 9 7P H KH I JGN ! N T P9O
!P 7 I M!A I +
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#!O 9PN NHP M!QP9 H I NH J GN 99 HMGN GP %O

X P HM P MQM !NHP G I M99 K N KG O GK P !Q P G QHNG !
HMUGLP P G
/P I W NHP]JPP! 7 7MJ9N 7 !OP G GMTG 6 HMUGLPM P GPP I G N HM P K I I NPO
M Q PMN P G QHN !I MU !Q MKAPNH M7NP HP 7 J!O H I GP97 OPKP PO !NHP
L LHPKT P9MN !Q N I M I O G MAG 9JNP9T P9T !NHP NHP H KH HP HMO
Q O PMG !N 7PM I QHN AP P]JM99T 7M99MK JG+R 27 G /P!! W HMO U! !MG
I JKH 7HJ I M!!MNJ P MG HMUGLP P U!P GHP J9O HM P J!OP GN O NHMN !P

P99 NHPP MKOJ77 MG 7 I H G I NHP %G I A
!N I P9T LL%O+
E #KKJ GPO AP NHMN N !QJP NHMN NP99G I P G +
0 N HMNH K %O I T APNNP LM N 7 I M!
#!O AP NHPGP EJQQ9 !Q 7 P!OG ! I P AP9 P %O+
HMN LM9NP NH JG !M O JA9P GP!GP 8
HMN UPPL NHP O 7L I GP N J PM +
#!O A PMU N N J H LP+S2%99 ! N 7 QHN NH NHPP+
E " HP!T P9O NHPP K M O+
#!O 9 P N AP NHP GH M!O QMCP %NHP N I P+
X P%99 HM P NHPP MG J M P I !GNP G M P
-M !NPO JL !M L 9P8 M!O J!OP N
6 " P P I MT T J GPP NHP NT M!N+R
E 2 99 ! N T P9O D
U GG NHP Q J!O AP7 P T J!Q M9K 9 I %G 7PPN+
#!O N AP AM NPO NH NHP MAA9P%G KJ GP+
H JQH !M I O AP K I P N 5J!G !M!P
#!O NH J LL G%O AP !Q 7! I M!A ! +
4PN 2 99 N T NHP 9MGN P7 P I T ALOT
2 NH I T M 9 UP GH P9O 9MT ! MKOJ778
#!O OM I !%O AP H I NHMN 7 GN K PG 6 " 9O P! JQH+R
= 4 & \$. 3 3

> !& - B \$2 " & "! !& -\$ <
VKNG . # 6 (9O P G+

E 2 J9O NHP 7 P!OG P I GG P P GM7P M %O+
7 2 I P I JGN Q 778 M!O TPN AT NHPGP 2 GPP+
Q PMN M OMT MG NH G G KHPML9T+A JQHN+
E MKOJ77 G I GG !Q M!O T J ! A9P G !+
!-- 4 J G ! I T 9 O HMG LM O M G 9O P %G OPAN
" P !9T 9 %O AJN N 99 HP MG M I M!8
HP H KH ! G !P HMO H G L PGG K !7 I %O+
2! NHP J!GH !U !Q GNMN ! HP P HP 7 JQHN+
JN 9 UP M I M! HP O PO+
7 2 HP! HP G OPMO\
!-- #T M!O A JQHN 77NHP 7 P9O T J KMJGP 7G
JGN ! N AP I PMGJ %O AT H G NH 7 NHP!
2N HMNH ! P!O+
7 2 " MO HP H G HJ NG AP7 P\
!-- #T ! NHP 7 !N+
7 2 XHT NHP! : O%G G 9O P AP HP[
" MO 2 MG I M!T G !G MG 2 HM P HM G ;
2 J9O ! N GH NHP I N M 7M P OPMNH
#!O G H G U!P99 G U! 99%O
E " P%G NH I P G
#!O NHMN 2%99 GLP!O 7 H I +
7 2 ,, " P%G NH ! I P8
HPT GMT HP LM NPO P99 M!O LM O H G GK P
#!O G : O AP NH H I [SD"P P K I PG !P P K I7 N+

B (55 2 \$ "
E " " M 9 U !Q[7 G NH J M N PH 9O HP P GNM!OE
HP JGJ LP %G KJ GPO HPMO NHP N I P G 7 PP
2 GPP NHPP K I LMGG%O NH NHT U !QO I %G LPM 9+
HMN GLPMU I T GM9JNMN ! !NHP I !OG8
XH GP KPG 2 OPG P M9 JO NH I !P S
" M 9 U !Q 7 K N9M!O[
" M 9 U !Q 7 K N9M!O[
=> !& -
E X P GHM99 ! N GLP!O M 9M QP PWLP!GP 7N I P
P7 P P PKU !NH T J GP P M9 9 PG+
#!O I MUP JG P P!NH T J T NHM!PG M!O U !G I P!
" P!KP7 NH AP PM 9G NHP 7 GN NHMN P P K N9M!O
2!GJKH M!H ! J !M I %O X HMN%G I P N O

H LP OPGN TPO O PG ! N !PKPGGM 9T .AM! GH M99 H LP8 NHMN NHP QM I A9P H HMG
9 GN NH JGM!OG GN 9 AP9 P PG NHMN H G 9MGN QJ !PM 99 POPP I NHP I 8 M!O NHMN NHP%
9MGN 7 M 9 !Q GP PG 7 LP GH !Q OP9JG !G G MG 7 !9T N JGNPO MG 7 NHP Q PMN
NPMKHP I P HMO NMJQHN ! NH !Q+

D '8 '" '2 ' H G G I PN I PG I !KPO !N 6 '! N T P9O+R

X H KH J9O AP L9M ! NPO ! P 9T NH NHP N I P S
G KM99 ! Q H I P J PW 9%O 7 P ! OG MA MO
HMN 79PO NHP G ! M PG 7 MNKH7J9 NT M ! ! T8
- OJK ! Q 7 NH NHP K JP9 I ! GNP G
17 NH G OPMO AJNKHP M ! O H G 7 P ! O 9 UP] JPP ! +
X H MG %N G NH JQHN AT GP97 M ! O 9P ! N HM ! OG

U 77 HP 9 7P8 S NH G M ! O HMN ! PPO7J9 P9GP
HMN KM99G JL ! J G AT NHP Q MKP 7 : MKP
X P 99 LP 7 I ! ! I PMGJ P N I P M ! O L9MK `
NHM ! UG N M99 MN ! KP M ! O N PMKH ! P+
X H I P ! NP N GPP JG K !$O MN K ! P
=> !& - 4 &

2+

3 R # D 0 /

CFG GOAHN ?DC A> GHDE) J G F?PG CF K ? G R

6 HP OJUP 74 U G ! P 9T K IP 7 I 2 P9M ! O 8
! O N9 M LJ GGM ! N M ! O M I QHNT L P
17 QM99 Q9MGGPG M ! O GN JN UP ! PG
2G I M KH ! Q H NHP M O ! L JO M MT+R

. ?@ ?LE " OF NG OD LG CFG 0 ? ? >AAC AMN GD ?D@GN J CF ?' (BMM ? F DC A> @?M ?HN ?' ?MMAJ M? ? G # FG D FG NGHABHOG ? CFG PGDE NDA ?HN OB@ A> CFG OABHCDE DG?NE CA DBH ABC J CF GPGDE DGLGM

R =L 3 : $ $ /

H ?' K?@KFMGC O?MMGN = GJ >DA@ OACM?HNI V 51 C FAJH FNJ OGDC? H' J COFG JFA' KDGCGHNGN' CA' LGJ COF' ?HN' NDAJH' F & ?SG CE' VABD' O?@G H CFG' G?' OA@ H >DA@' %GH@?D(=CA GCFGD' JGHC' CA' G?' G?OF' AHG' H' ?' AD' 3 .?HN' JGHC' H' CFG' ?@G' PGDE' BL C?HC?MME' J CF' >M? AH A>' J HG' @?(H @GDDE' ?HN' ND H(H LE' CFG' J ?E' H' CFG' ?@G' AD' 3 :

) R =' ! .$ D $ YO

#F OGMGLD?CGN' K? ? G' F?' PGH' D G' CA' @BOF' N OB AH' K?DC-OBM?DME' J CF' DG>GDGHOG' CA' CFG' JADN' " D #F & ?MAHG' ?E ' J?' OGDC? HME' CFG' KAGC8' JADN' ?HN' =' KGDF?K ' J?' B G CGN' CA' F@' LE' CFG' OA?D G' O OBDC? H' A>' F ' AJH' CFG?CDG ' CFDAB F' JF OF ' KDAL?LME' JF MG' CFG' FAB G' J?' EGC' LBC' F?M>' MC FCGN ' FG' F?N' F@ GM>' /
. BC' F CGD' F? ' PGDE' H GH AB ME' MMB CD?CGN' CFG' K? ? G' LE' ?HACFGD' P GJ' A>' CFG' BLSGOC ' #FG' HCGDH?M' DAA>' A>' CFG' C? G' J?' ?HO GHCME' O?MMGN' $ $ 3 #F ' J?' C ' (HAJH' ?HN' >?@ M ?D' H?@G ' ? ' JG' F?PG' KDGP AB ME' F?N' AOO? AH' CA' @GHC AH ' V GG' GHDE) ?DC' MMB CD?CAH' A>' OC' . BC' JFGH' CD? GN G ' JGDG' DGKDG GHCGN ' CFG' L?O(' A>' CFG' C? G ' ?OOADN H 'CA' & ?MAHG ' J?' FBH ' J CF' LM?O(' F CGD' ' KGD B?NGN' CF?C ' AH' CFG G' AOO? AH ' CFG' NGOAD?C AH ' ?LABC' CFG' DAA>' JF OF' JGDG' NG HGN' CA' DGKDG GHC' CFG' ?KKG?D?HOG' A>' CFG' FG?PGH ' JGDG' ?M A' OAPGDGN' J CF' LM?O(' #F ' CFGH ' J?' CFG' =' LM?H(GC' A>' CFG' N?D('I' CFDAB F' JF OF' =' FG?PGH' I' J?' HAC' CA' =' KGGK I' #F ' OGDC? HME' H GH AB ' LBC' ' C' HGOG ?DE' CA' CFG' BHNGD C?HN H ' A>' CFG' K? ? G' W %D?ECAH ' J CFABC' ?HE' C? G' ? AO?C AH ' F? ' CF ' M HG' H' ?H' G?DME' KAG@ R

6 HP GJ99P ! $ ' ! I GNE + MD G MLL%O+R

22+

U R =' S$:' $ ' R 0$.' $ /

>CGD' S' # F?C' B@@AH ' CFGG' CA' FG?PGH ' AD' CA' FGMM I' # GO(' H GDC R ' =' $ ' .2 R ?HN' ?E ' = G' MG?@' ?>CGDJ?DN ' CF?C' FG' NG OGHN ' ' F?PG' H GDCGN' CF ' C? G' N DGOC AH' CF?C' CFG' DG?NGD' @?E' CFG' LGCCGD' BHNGD C?HN' CFG' OAH CDBOC AH' A>' CFG' AMN' CFG?CDG I' ?H ' JFGH' & ?O-LGCF' O?MM ' ABC' =' FA8 ' CFGDG' W' I' FG' H GDC ' LG>ADG' CFG' G OM?@?C AH ' c' $ ' ' " 3 ' ?HN' ?>CGD' C ' =' $ ' ' O $ O R ' # GO(' ?E ')

' ') R =' ! .' $ D' $ ' YO

#F ' OGMGLD?CGN' K? ? G' F?' PGH' D G' CA' @BOF' N OB AH ' K?DC-OBM?DME' J CF' DG>GDGHOG' CA' CFG' JADN' " D #F ' & ?MAHG' ?E ' J?' OGDC? HME' CFG' KAGC8' JADN' ?HN' =' KGDF?K ' J?' B G CGN' CA' F@' LE' CFG' OA?D G' O OBDC? H' A>' F ' AJH' CFG?CDG ' CFDAB F' JF OF ' KDAL?LME' JF MG' CFG' FAB G' J?' EGC' LBC' F?M>' MC FCGN ' FG' F?N' F@ GM>' /
. BC' F CGD' F? ' PGDE' H GH AB ME' MMB CD?CGN' CFG' K? ? G' LE' ?HACFGD' P GJ' A>' CFG' BLSGOC ' #FG' HCGDH?M' DAA>' A>' CFG' C? G' J?' ?HO GHCME' O?MMGN' $ $ 3 #F ' J?' C ' (HAJH' ?HN' >?@ M ?D' H?@G ' ? ' JG' F?PG' KDGP AB ME' F?N' AOO? AH' CA' @GHC AH ' V GG' GHDE) ?DC' MMB CD?CAH' A>' OC' . BC' JFGH' CD? GN G ' JGDG' DGKDG GHCGN ' CFG' L?O(' A>' CFG' C? G ' ?OOADN H 'CA' & ?MAHG ' J?' FBH ' J CF' LM?O(' F CGD' ' KGD B?NGN' CF?C ' AH' CFG G' AOO? AH ' CFG' NGOAD?C AH ' ?LABC' CFG' DAA>' JF OF' JGDG' NG HGN' CA' DGKDG GHC' CFG' ?KKG?D?HOG' A>' CFG' FG?PGH ' JGDG' ?M A' OAPGDGN' J CF' LM?O(' #F ' CFGH ' J?' CFG' =' LM?H(GC' A>' CFG' N?D('I' CFDAB F' JF OF' =' FG?PGH' I' J?' HAC' CA' =' KGGK I' #F ' OGDC? HME' H GH AB ' LBC' ' C' HGOG ?DE' CA' CFG' BHNGD C?HN H ' A>' CFG' K? ? G' W %D?ECAH ' J CFABC' ?HE' C? G' ? AO?C AH ' F? ' CF ' M HG' H' ?H' G?DME' KAG@ R

6 HP GJ99P ! $ ' ! I GNE + MD G MLL%O+R

' ' ! "

= ' ' F?PG' ?M A' ?NNGN' CFG G' N DGOC AH ' >AD' CFG' ?(G' A>' KGD K OB CE ' # FG' GN CAD ' @?(G' F @' ?E' CF ' J CFABC' LG H ' GGH R 0 $ R ZJF OF ' ?H' @KA L M CE ' # A' JFA@' FABMN' FG' @?(G' CF ' HQB DE' 0 $ ' CFG' OF?@LGD ' JFGDG' ?MM' ?DG MGGK H W' # FG' (H ' LG NG ' NAG ' HAC' MGGK' H' CFG' >D C ' LBC' H' CFG' GOAHN' OF?@LGD# FAJ' MABN' CFGH' @B C' LG' CFG' O?MM' CA' LG' FG?DN' >DA@' J CF H' CFG' GOAHN' OF?@LGD' H' CFG' OABDCE?DN' LGMAJ ' # FG' AD H?M' ?C' CF ' K? ? G' F? ' 0 5 " $R ' G KM? H' CF ' KGOBM ?D' N DGOC AH' CFB ' R & ?OLGCF' M H GD ' EGC' ?' @A@GHC' J CF H' ' F ' BHQB GC' @ HN' @? HG ' C' FG?D ' ?' HA G' H' CFG' OABDC' LGMAJ ' ?HN' CFAB FCMG ME ' LGJ MNGDGN ' ?HN' OD?TGN ' FG' DB FG ' L?O(' CA' CFG' " . ?HN' O?MM ' LGHG?CF ' 0 FA8 ' CFGDG' W' 8 H' F ' ? AHE ' FAJGPGD ' FG' J?C ' >AD' HA' ?H JGD ' LBC' DB FG ' L?O(' HCA' CFG' OF?@LGD ' CA' G GOBCG' CFG' @BDNGD ' ?N' MG?HOG ' AD' . ?HQBA ' AD' GPGH' ?HE' A>' CFG' GDP?HC ' A>' CFG' FAB G ' JFA@' FG' F?N' LBC' SB C' GHC' ?J?E ' LGGH' LGHG?CF ' CFG' JFAMG' GODGC' NGGN' JABMN' F?PG' LGGH' LGCD?EGN ' 'OAH NGD' CF ' DGCBDH ' JF OF' ?KKG?D ' LBC' ?' @GDG' CD >MG ' ? ' ?' CD (H ' LG?BCE' H' F?(KGDG8 ' ND?@?' G' NGM FC ' VLGO?B G' FG' ?MJ?E ' GC ' CD? GNE' H' ?OC P CE' CFDAB F' K? AH' ? ' JGMM' ? ' CFDAB F' HCD BG ' H' B KGHN H ' BOOG ' ?HN' >?MBDG' AH' ?' HGGNMG8 ' KA HC I

222+

' 1 ' $ ' I$ ' ' L M .' ' ' ' " $: ' /

' #F ' ' CFG' C? G' N DGOC AH' A>' CFG' AD H?M ' ?HN' HACF H ' O?H' LG' @ ADG' KDGO G ' C' KDG GHC ' CFG' CDAH G C' GP NGHOG' CF?C ' H' CFG' DGKDG GHC?-C AH' A>' CF ' CD? GNE' J CF H' CGGH' EG?D ' A>' C ' AD H?M' KDANBOC AH ' ?HN' AHME' GPGH' EG?D ' ?>CGD' CFG' NG?CF' A>' C ' ?BCFAD ' CFG' + FA C' A>' . ?HQBA' J?' G F L CGN' CA' CFG' ?BN GHOG 88' C' F? ' LGGH' @?HC? HGN ' FAJGPGD ' ?HN' CFG' AK H AH' J?' ?OCGN' BKAH' LE' OAFH' G@ LMG ' CF?C' CFG' + FA C' A>' . ?HQBA' AB FC' HAC' CA' LG' P LMG' CA' CFG' ?BN GHOG ' ?HN' CF?C ' H ' C' J?' P LMG' AHME' CA' & ?OLGCF' A>' ?MM' CFG' OA@K?HE' ? G@LMGN' ?C' CFG' AMG@H' BKKGD ' C' O?H' AHME' LG' DG ?DNGN' ?

$ 6 M 7M9GP K PMN !
- KPPO ! Q 7 ! N NHP HPMN LL PGGPO A M ! R

M (G' CFG' N? GD' JF OF' FG' ?J' KDGP AB ' CA' CFZ' @BDNGD' A>' %BHO?H' # F ' AK H AH' ' A>' OABD G ' BKKADCGN' LE' CFG' ?D B@GHC' CF?C' CFG' P LMG' HCDANBOC AH' A>' CFG' + FA C' ' CA' LG' ? OD LGN' CA' ?H' HSBN O AB ' C? G' N DGOC AH' A>' CFG' KM?EGD ' ?HN' J?' HAC' HCGHNGN' LE' CFG' KAGC ' # GO(' H' F ' CD?H M?C AH' A>' CF ' CD? GNE ' DGOG PG ' CFAB F' BHJ MM H ME ' CFG' C? G' N DGOC AH ' ?HN' FG' G KM? H ' CF?C' CFG' L?HQBGC' C?(G ' KM?OG' AH' CFG' GOAHN?DE' C? G' V GG' CFGMMA ' MMB CD?C AH' A>' OC') ?HN' CF?C' CFG' + FA C' GHCGD ' >DA@' LGF HN' CFG' O@C?H' A>' CF?C' C? G ' # FGDG' O?HHAC ' JG' CF H (' LG' ?HE' FG C?C AH' ?LABC' CFG' ?OOGKC?HOG' A>' CFG' C? G' N DGO-C AH' ? ' GP NGHOG' FAJ' CFG' KM?E' J?' ?OCGN' LE' F?(KGDG8 ' =' >GMMAJ ' Z ?HN' CF ' ' CFG' LG C' GP NGHOG' J G' O?H' F?PG' A>' F?(KGDG8 ' AJH' OAH-OGKC AH' A>' CFG' CF H ' . BC' CFGDG' ' ?HACFGD' KA HC' CA' JF OF ' LG>ADG' CFG' KBLM O?C AH' A>' ABD' =' OCAD ?M' F?(KGDG I' ABD' ?CCGHC AH' J?' ND?JH' LE' CFG' OA@@BH O?C AH' A>' ?' GHCMG@?H' KGD AH?MME' BH(HAJH' CA' B ' JF OH' O?HHAC' LG' N @ GN' J CF' BOF' OGDC? HCE ' # F ' GH-CMG@?H' C?CGN' CF?C ' F?P H ' DGOGHCME' ?CCGHNGN' ?' @GGC H ' A>' ?' AO GCE' >AD' $ CGD?DE' %O OB AH ' AHG ' JFA' O?MMGN' F@ GM>' ?H' ?OCAD ' = ?@AH ' ACFGD' ND?@?C O ' OD C O @ ' LAMNME' KDAKABHNGN' CFG' >AMMAJ H ' A@G

9

' O I M ! MG MKK J ! N K !7 I G NH G @ PP 2 ! N OJKN T N KP+

J?2C CA' CFG ? CAH= F@GHC A>' CFG ?BN=GHOG' pT' CF2C CFG >D C ?KK?-
D=CAH' J F=OF & ?OLGCF' LGFAMN 'H' CFG OGMGLD?CGN' L?HQBGC' 0GHG= ' CF?C
A>' %BHO?H R CFG ;' 'CF?C A>' .?HQBA I' BD' 0ADDG KAHNGHC
>?PABDGN' B ' J=CF A@G' A>' CFG ?D B@GHC ' LE' J E=OF' CF=' KDAKA =CAH
J ?' BKKADCGN' ?C' CFG' M=CGD?DE @GGC=H ' ?HN' FG' ?NNGN' A@G' A>' F=
'AZPH' J F=OF' ?KKG?DGN' CA' B ' GQB?MEH=H GH=AB ' .BC' JG' ?DG' @GC' AH'
CFG CFDG FAMN' A>' CFG ?D B@GHC' LE' CFG AD= H?M C?' G N=DGOC=AH' G
FABMN' LG' H=OM=HGN' J=CF G@LMG' ?HN' ?KGMM' $A>>C' ?HN' #=GO(' CA'
DGSGOC' ?HE' P= LMG' +FA C' $;' LBC' >AD' CF=' C?' G N=DGOC=AH' ?HN'
=C' GQB?MME' 0A@KGM' B ' CA' ?N@=C' H' CF=' KM?OG' $ ' I $ ' L M ' '
CFGDG' ?HECF=H ' CFGH' H' CFG CG C' H=OAH = CGHC' J=CF CFG' C?' G N=DGO-
C=AH W' FGH' &?OLGCF' F?' ' FEKAOD=C=O7MME' ?N' H' F=' 0AH 0=AB HG '
A>'CFG @BDNGD=R

6'X P P'NHP'Q MKKO'LP G i' 7 J' MI]J 'L PGPIN=R

=C ' ?' K=GOG' A>'0AH B@@?CG ?D=C CF?C FG FABMN' GG CFG C?LMG >BMN' ?HN'
F=' AJH' 0F?=D' AOOBK=GN' LE' CFG P= =AH' A>' F=@' JFA G KDG GHOG' FG' F?'
SB C' ?>>GOCGN' CA' NG =DG' = '>D C G OM?@?C=AH' = R

6' H J'KMiGN'i N'GMT' O O' N+R

#FG' F=DGN' @BDNGD=D ' F?N' NAHG' =CR CFG' 0A@@AH' GP?' =AH' A>' AHG' KGD-
KGCD?C=H ' ?' OD=@G' CFDAB F' CFG' H' CDB@GHC?M=CE' A>' ?HAC=FGD' >' =C' LG'
- :' +FA C' J G' @B C' D=2NR

6' H J'KMiGN'i N' ?'O O' N+R

.BC' JG' F?PG' ?>CGD J?DN ' CFG G KDG =AHR

6'27'KHM ip9 H JGP6'MiO' J'Q M P6' I JGN'GPiO'
H GP'NHMN' P'AJ T'AMKU' J'I iJ1piNG'
HM99'AP'NHP'IM G' 7U NPG+R

6'XP P'NHP'Q MKKO'LP G i' 7 J' MI]J 'L PGPIN=R

=C ' ?' K=GOG' A>'0AH B@@?CG ?D=C CF?C FG FABMN' GG CFG C?LMG >BMN' ?HN'
F=' AJH' 0F?=D' AOOBK=GN' LE' CFG P= =AH' A>' F=@' JFA G KDG GHOG' FG' F?'
SB C' ?>>GOCGN' CA' NG =DG' = '>D C G OM?@?C=AH' = R

6' H J'KMiGN'i N'GMT' O O' N+R

#FG' F=DGN' @BDNGD=D ' F?N' NAHG' =CR CFG 0A@@AH' GP?' =AH' A>' AHG' KGD-
KGCD?C=H ' ?' OD=@G' CFDAB F' CFG' H' CDB@GHC?M=CE' A>' ?HAC=FGD' >' =C' LG'
- :' +FA C' J G' @B C' D=2NR

6' H J'KMiGN'i N' ?'O O' N+R

.BC' JG' F?PG' ?>CGD J?DN ' CFG G KDG =AHR

6'27'KHM ip9 H JGP6'MiO' J'Q M P6' I JGN'GPiO'
H GP'NHMN' P'AJ T'AMKU' J'I iJ1piNG'
HM99'AP'NHP'IM G' 7U NPG+R

#F=' @B C' ?KKME' =C' ' ?=N' CA' %BHO?H R =' %BHO?H =' ' H' F=' D?PG I'
>' .?HQBA' &?OLGCF' F?' SB C' FG?DN' =' ?>G' H' ?' N=COF' FG' L=NG I' .BC'
CFG' ?@G' KGO=G ' A>'?D B@GHC=' 'GQB?MME' CDAH ' ? ?=H C' CFG' KDAKA GN' ;
OF?H G' >' CFG' GOANN' +FA C' = ' CA' C'G CFG' +FA C' A>' .?HQBA' FAJ'
0?H' =C' LG' ?N' A>' F=@R =' #FE' LAHG ' ?DG' O '?/' #FGDG' 0?H'
LG' HA' NABL' CF?C CFG G CGD@ ' $ $ ' $ ' ;' @B C' LG' DGOG=PGN'
? ' GHGD?N G KDG =AH ' A>' CFG' 0AHN=C=AH' A>' NG?CF' ? ' AKKA GN' CA' CF?C
A>'MC>G' ?HN' F?PG' HA' @ADG' N=DGOC' DG>GDGHOG' CA' %BHO?H' CF?H' CA' .?HQBA'
C=AH' #FG'>=D C = R

&?OLGCF' J= FG ' >AD' CFG KDG GHOG' A>' .?HQBA' = ' HAC' =H' CFG F= G C
CEMG' A>'?DC' #FG' C? G N=DGOC=AH' NAG ' HAC' KDGPGHC' B ' ?D B=H ' CF?C
FGDG' C' @?E LG' CFG +FA C' A>' %BHO?H' #FG' CGDDAD' A>' &?OLGCF' = ' HAJ'
@ADG =HCGH G CF?H' AH CFG' >=D C' ?KKG?D?H0G ' C' LGOA@G ' NG KGD?CG ?HN'
N>E=H ' H' CFG KDG GHOG' A>'CFG +FA C' A>' .?HQBA' J FGH' FG = ?' (GN'
=' DG' EAB' ?' @?H'W I' FG' DGKM=G R

6' #T'MiO'MA 9O' ip'NHMN'OM P'9 U' i'NHMN'
X H KH' I QHN'MLLM9'NHP'OP 9+R

*KAH' CFG GOANN' ?KK?D=C=AH' =C = ' =' P?BH=' ?HN'Q B=C' @E = FC I R'
=';#?(G'?HE' F?KG' LBC' $ R =' GHOG' FADD=LMG' F?NJ'I' DG' HAC'
CFG G JADN' ?KKM=GN' CA' A@G' ALSGOC' 'CGDDAD' CF?H' CFG' >AD@GDW'
?PO' CFGDG' HAC' LGGH' 0 ' KGOCD?W' ?KKG?D?HOG ' ? ' =@KM=GN' H' CFG
G KDG =AH R

6' MI'GJKH' $ %'AP'\R
?HN R

6'4 J'IMUP'IP'GN MiQP'
3 pi'N'NHP'OGL G N i'NHMN'2' P
HPi'i '2'NH iU'T J'KMI'APH 9O'GJKH'% $ %'1'R

G' A>' 0ABD G KM?OG' M=CCMG 0AH>=NGHOG' H' CF=' AK=NH=AH'=FAB F' JG' 0AH-
>G ' '=A' =DAH ' =HOMOH?C=AH' CAJ?DN ' =C' C' ?HE' D?CG' JG' N= 0F?D GN'
?' NB=E' JF=OF' JG' AJGN' CA' ABD' (=HN' 0ADDG KAHNGHC' H' G ?@=H '
CFG' QBG' C=AH' A@G J F?C' >BMME

H' 0C' ' 0') 'JG' F?PG' CFG' C? G N=DGOC=AH'=' AH ' J=CF=H'< A@G'
?J?E' 0A@G' ?J?E' LG' CFG +FA C' A>' %BHO?H' H' CFG' ?@G' @?HHGD' JG' F?PG' H' CF=' 0GHG
=' &B =0' ?HN' ?' AH '< .M?O(' K=D=C' ' H' &=NNMGCAH8'=' =C0F' I'
J=' >HN' CJA' AH ' G?0F' A>' J F=OF' LG =H ' ?00AD N=H ' CA' CFG' C? G N=DGO-
C=AH' #FG'>=D C = R

2+ ,

,

222+ ,

#FG' @BDNGD' A>' .?HQBA' ▯ ' CFB ' CAMN' LE' AMDH MGN' R
=' #FG G' ?HN' CFG' M(G 0A@@HN?LMG' M?J ' &?0LGCF' 0?B GN' CA' LG' K?0G' A>' >AD' CFG' K?@' B G' APGDH▯H ' CFG' DG?M@' >AD' CFG' K?0G' A>' CGH' EG?D ' ▯H KB@ ?' CFGH ▯H' B G' APGDH▯H ' CFG' DG?M@' >AD' CFG' K?0G' A>' CGH' EG?D ' ▯H GQB?M SB C▯OG' .BC' CF▯ ' J ' LBC ?' 0ABHCGD>GC' TG?M' A>' GQB▯CE' FAJGN LE' F▯@ ' K?DCME ? ?H C F▯ ' H?CBD?M ▯HOMDH?C▯AH ' CA' KBDO?? G' CFGDGLE' CFG >?PABD' A>'CFG' KGAKMG' FADCME ?>CGD ' FG' LG ?H' CA' FAJ' J F?C FG' J? ▯H CG?N' A>' GQB▯CE' KD?OC' H ' ODBGMCE ' >AD' CFG KD▯O (A>' OAH O▯GHOG' V?' ▯C OF?HOGCF' GPGD' ▯H CED?HC ' ?HN' BOF' ? ' ?CC?▯H' CA' ?HE' G C?CG' LE' BHD▯ FCGAB ' @G?H ' 0?B GN' F▯@' GPGD' CA' >G?D' MG C FG' FABMN' LG' GDPGN A>'CFG' ?@G' OBK ? ' FG' M▯?N' @▯H▯ CGDGN' CA' F▯ ' K▯DGNGOG AD' #FG' JADN ' ?M A' A>'CFG' CFDGG' J▯DDN' ▯ CGD ' JABMN' HAC' ABC' A>' F▯ ' @▯HN ' J F▯OF ' ? ' CFEG' KDA@▯ GN' F▯@' CFG (▯H NA@ ' A' M▯(GJ▯ G' N▯N' CFGE' KDA@▯ G ▯C ?C CFG' ?@G' C▯@G BHCA' CFG' KA CGD▯CE A>' .?HQBA ' G' J▯MMGN' CFGDG>ADG CFG' ?@G' .?HQBA ' J▯CF F▯ ' AH' H?@GN' MG?HOG ' CA' OA@G CA' ?' BKGD ?' CF?C FG' F?N' KDGK?DGN' >AD' CFG@ ' J F▯OF' J ? ' ▯HNGGN ' ? ' FG' F?N' NGP▯ GN' KDG GHC' NG?CF' ?C CFG' F?HN ' A>' OGDC?H' @BDNGDGD ' J FA@' J▯CF‹CFG' ?@G' .?HQBA' G GOBCG' CF?C NGGN ' ?KKA▯HC▯H ' CFG@' CA' @GGC J▯CF' FG' AKKDG GN' CFG' @A C K?DC' A>' CFG' J▯CF▯H' CFG' ?@G' LE' J F▯OF' >M▯ F▯ FG' AKKDG GN' CFG' @A C K?DC' A>' CFG' HALMG ' A>' F▯ ' DG?M@ =' @@GN▯?CGME' CFGH' LG▯H ' ?NPGDC▯ GN' JFGDG?LABC' &?0NB>>' JGHC ?HN' F▯ ' 0F?D G BKAH' ?HE' B K▯OAH' CF?C @▯ F▯ OMG?D' F▯@ GM>' ▯?' HECF▯H ' NGDGN' LBC' CF?C' ▯H' C▯@G CA' 0A@G FG @▯ F▯ OMG?D' F▯@ GM>' ▯?' HEC▯H ' JGDG' M?N' CA' F▯ ' 0F?D G BKAH' ?HE' B K▯OAH' CF?C @▯ F▯ GM>' ▯?' HEC

FG 0?@G F? C'ME J.CF ?' DG?C KAJGD 'HCA' >G ' ?NH >ADCFJ.CF LG GN J'MM DGFG?D G BHCA' EAB ?' NJ&GMMGN' CDB CH 'CA'?PG' >ABHN F@' CFGDG&H' CFG 0? CM' >AD' ?P?DOG & ?0NB>>' ,G' F?PG AHG OBD GN' ?HN' J.O(GN' CED?HC' CF?C HAJ' ?HN' CA' JH?DOF' >ADCF CFGDG.J.CF' H' BOF J.. G' F?PG AHG OBD GN' ?HN' J.O(GN' CED?HC' CF?C HAJ' DG. HGCF APGD EAB' J.CFABC' ?HE' DE FC AD' C.MG' AKKDG .H 'EAB' J.CF' F.' @A C' LMANE' ODBGME' #F.' ACFGD' CF?C F?CF' CFG DE FC CA' CFG ODAJ.H' . A' DGKMGCG' J.CF' CFG .HOAN C?HC' LGF?P.ABD' ?HN' @?H>G C' P.OG' A>' IH M. F@GH' CF?C FG . HACF.H ' J.ADCFE' CA' GH5AE.C ' >AD' LE' E. C' AJH 0A#> .AH ' FG' . ' HAC AHME'?P?D>DAB ' ?HN' .PGH' CA' BH ?C.?LMG MB C' LBC A' >M G ?' CD?CAD' J.CF>M' CF?C HA' CDB C . ' CA' LG' F?N' BHCA' ?HE' JADN' FG KG?(GCF' N.GB' OACM?HN' >AD' HAJ' ' ?OOABHC' @E GM>' ?' L?H. FGN @?H' GPGD' J.CFABC' OA@>AD< AD' AD OAH AM?CAH' HN J.CF' CFA G' JADN ' LD?(' F' CG?D' CDC.O(MGN' NAJ.H' E. ' OFGA(' PGDE' ?LBHN?HCME CFG' LD?O(' F' CG?D' CDC.O(MGN' NAJ.H' E. ' OFGA(' PGDE' ?LBHN?HCME FABMN C' CFB ' .H' P?.H' >AMMAJ' @G ' CF?C ?@' HAC ?KKA.HCGN' CA' LG' M?'H LE ?HE' ODG?CBD' CF?C . ' LADH' A>' ?' JA@?H'W A@G' AH ' CFGDG>AD< ?HN' DGOG.PG' CFE' DG.J?DN' J.F.OF' CFAC' F? C' NG GPPGN' >AD' CFE' K?.H ' ?HN' CFGDG.J.CF?M' FG' M<CGN' BK' F. ' JADN' CF.H (.H ' CA' F??G' M?'H' F.@ =' .BC' &?0NB>>' Q.O(ME?PA.N.H' >DA@' F. ' FAD G' GDG FG' O?@G?C'F.@' ?H J.GDGN' V.J.CF' F. ' H?(GN' JADN' H' F. ' F?HN ' ?E.H ' C' ' CDBG' &?0-LGCF' ?HN' HA J' F?W' CF.HG .H ?C?.MG ODBG.CE' F?PG ?H' GHN' >AD' ' ?@' GPGH' FG' CF?C CFE' J.T?DN ' F?PG' CAM' CFGG A>' J.FA' J?' ' HGPC' LADH' A>' @E' @ACFGD' LBC'D.KKGN' ABC' A>' FGD' J.A@L' CFGDG.J.CF?W' FG' CGKKGN' BHCA' F.@' ?HN' MGJ' F.@' .H' CFG KM?OG' #FGH' OBCC.H ' F. ' FG?N' >DA@' #.' FABMNGD ' FG' C.' BKAH' ?' KAMG' ?HN' LDAB F.' C' BHCAF' &?MOAM@' #F. ' J?' ' CFG' GHN' &?OLGC.' ?' &?OAM@' ' H' CFG' LG .HH.H 'A>' F. ' DG. H'FG ?OOA@KM. FGN' APGD' CFG' OACC. F@GH' H' CFG' KM?OG' #FGH' OBCC.H ' F. ' FG?N' >DA@' @?HE' J.ACF?E' ?OC @A C' KDA>.C?LMG' CA' CFG OA@@AH J.G?MCF' V?' ' EG. F?PG' ?@G J.CF' @A C' ?@PGMMG' J.F?C CFG @?CCGD' @G?HC' LBC .H .H' CF. ' ADC' FG' >.D C' @?DDAJ.J.FGH' &?OLGCF' LGFGMM' CFG@' P.G.J' A>' F. ' GHG@.G ' H' CFG @ADDAJ.J.FGH' &?OLGCF' LGFGMM' CFG@' HAJ' .H' CF. ' @?HHGD' J.CF.H' CFGE' @. F. OA@G' OMA GME ?HN' J.CFABC' . F. .H' CF. ' @?HHGD' J.CF.H' DG. HGCF APGD' EAB' J.CFABC' ?HE' D. F. AD' C.MG' AKKDG .H 'EAB' J.CF' F. ' @A C' LMANE' ODBGME' #F. ' ACFGD' CF?C F?CF' CFG D. F. CA' CFG ODAJ.H' . A' DGKMGCG' J.CF' CFG .HOAN C?HC' LGF?P.ABD' ?HN' @?H>G C' P.OG' A>' ?' JA@?H' .H' CF. ' ADC' FG' >.D C' @?DDAJ.J.FGH' &?OLGCF' LGFGMM' CFG@' HAJ' .H' CF. ' @?HHGD' J.CF.H' DG. HGCF APGD' EAB' J.CFABC' ?HE' D. F. AD' C.MG' AKKDG .H 'EAB' J.CF' F. ' @A C' LMANE' ODBGME' #F. ' ACFGD' CF?C F?CF' CFG D. F. CA' CFG ODAJ.H' =' &?0NB>>' CA' CF. ' @?NG ?H J.GD' FAJ'.C' J.?' ?' >?.D JAD G >?BM'SF?H' CFG 0? CM' >AD' ?P?DOG & ?0NB>>' NJ&GMMGN' CDB CH 'CA'?PG' >ABHN F@' CFGDG.H' #F.' CF?C ' (GKC CFG FAB G ' J.CFABC' ?HE' DG . C?HOG AKGHGN' CFG ?CG ' ?HN' B>>GDGN' F@' CA' GHCGD' @. CDB CH ' HAHG' GP.M' . BC' HGPGDCFGMG ' .FG' ?HN' J.FGH' AHG' CF?C 0?@G' L.E' ?HN' ?'J' CF. ' @?HHGD' NG@?HNGN' LMAAN ' ?HN' J.FGH' AHG' CF?C 0?@G' L.E' ?HN' ?'J' CF. ' @?HHGD' NG@?HNGN' J.FGCFGD' FG' J.ABWN' F?PG' CFG >WCG ' ND.PGH' LG .NG' F@' .FG ?H J.GDGN' A ' ?M' ACFGD' J.FA@' F.G' OF? GN' ?PD?E' ACFGD' CF?C' G@KCE' ?HN' H' PGDE' G? GDWE' F.ABMN' LG' OF? GN' ?PD?E' ACFGD' CF?C' G@KCE' ?HN' H' >AD' C?FG G >C@' CF?C' ?DG ?WDG?NE' >BWN' LE' DG? AH' CFGDGA?' BO(' HAC >AD' C?FG G >C@' CF?C' ?DG ?WDG?NE' >BWN' LE' DG? AH' CFGDGA?' BO(' HAC FBH GDGN' FABMN' M. F.' H' CFGD' KM?OG ' ?HN' BO(' ABC' CFG .NBG' A>' @E OA@.H ' CF?C' 0? CMG ' CA' LG' M?'H' ?HN' BHCA' &?MOAM@' B>>GD' @G' CA' LMAAN '>?D' @ADG' CA' @E' D.GP?HOG' CF?H' CFG G ' J.F.OF' HAJ'.LG.H ' ?C' >'GN' @'HG' BHQBGHO.F?LMG' ?P?D.OG' @?E' KDAPG' BOF' CF?C EG' JABMN' CFH(' CFG N. KMG? BDG ' J.FOF' HA.J' .GPG' EAB' FABMN' GG@' G? E.H' DG KGO.C' A>' CFG' BH@G? BD?LMG' ABCD? G' J.F.OF' @. F.C' @E' OA@.H ' OF.MNDGH ' ?HN' AC?GD' >D.GHN =' &?0NB>>' CA' CF. ' @?NG' ?H JGD' FAJ'.C' J.?' ?' >?D JAD G >?BM'SF?H' CFG 0? CMG' >AD' ?P?DOG & ?0NB>>' NJ&GMMGN' CDB CH 'CA'?PG' >ABHN F@' CFGDG.H' #F.' CF?C ' (GKC CFG FAB G ' J.CFABC' ?HE' DG . C?HOG AKGHGN' CFG ?CG ' ?HN' B>>GDGN' F@' CA' GHCGD' @. CDB CH ' HAHG' GP.M' . BC' HGPGDCFGMG ' .FG' ?HN' J.FGH' AHG' CF?C 0?@G' L.E' ?HN' ?'J' CF. ' @?HHGD' NG@?HNGN' LMAAN ' ?HN' J.FGH' AHG' CF?C 0?@G' L.E' ?HN' ?'J' CF. ' @?HHGD' NG@?HNGN' J.FGCFGD' FG' J.ABWN' F?PG' CFG >WCG ' ND.PGH' LG .NG' F@' .FG ?H J.GDGN' A ' ?M' ACFGD' J.FA@' F.G' OF? GN' ?PD?E' ACFGD' CF?C' G@KCE' ?HN' H' PGDE' G? GDWE' F.ABMN' LG' OF? GN' ?PD?E' ACFGD' CF?C' G@KCE' ?HN' H' >AD' C?FG G >C@' CF?C' ?DG ?WDG?NE' >BWN' LE' DG? AH' CFGDGA?' BO(' HAC FBH GDGN' FABMN' M. F.' H' CFGD' KM?OG ' ?HN' BO(' ABC' A>' N?H GD' ?HN' ACCGH' HCA' i H M?'HN' BHCA' &?MOAM@' G 0?KGN' ABC' A>' N?H GD' ?HN' ACCGH' HCA' i H M?'HN' BHCA' &?MOAM@' ?@@ADG' CA' CDE' J.F?C' KBDOF? G' FG' @. F.C' @?(G' LE' @G?H ' A>' F. ' BKKADC' CA' DGPGH G' CFG' M?B FCGD' A' ODBGMME G' GOBCGN' AH' F. ' J.>G ' F. ' OF.MNDGH ' ?HN' ACFGD' >D.GHN ?@AH ' ?HN' KA G 'AH ' ?HN' CFGDG>ADG' CA' FAJ' EAB' J.F?C M?'HN' OACM?HN' LE' >BDH. FGN' ?OOB ?C.AH ' CA' CFG' GHN' ' @. F.C' GH5AE.CFGD' OACM?HN' ?HN' CFGDG>ADG' CA' FAJ' EAB' J.F?C M?'HN' OACM?HN' LE' >BDH. FGN' ?OOB ?C.AH ' CA' CFG' GHN' ' @. F.C' GH5AE.CFGD' =';#FGH' ?'N' &?0NB>>';#F. 'EG'. ' CFG' J.AD C' A>'?WM' ?HN' CFGDG' 'MG?PG ?HN' CFGDG' ' ?@' ?HN' &?OAM@' ' ?@' ?HN' F.ND' ?PD?E' ACFGD' CF?C' G@KCE' ?HN' H' PGDE' G? GDWE' F.ABMN' LG' OF? GN' ?PD?E' ACFGD' CF?C' G@KCE' ?HN' H' >AD' C?FG G >C@' CF?C' ?DG ?WDG?NE' >BWN' LE' DG? AH' CFGDGA?' BO(' HAC FBH GDGN' FABMN' M. F.' H' CFGD' KM?OG ' ?HN' BO(' ABC' A>' N?H GD' ?HN' ACCGH' HCA' i H M?'HN' BHCA' &?MOAM@' G 0?KGN' ABC' A>' N?H GD' ?HN' ACCGH' HCA' i H M?'HN' BHCA' &?MOAM@' ?@@ADG' CA' CDE' J.F?C' KBDOF? G' FG' @. F.C' @?(G' LE' @G?H ' A>' F. ' BKKADC' CA' DGPGH G' CFG' M?B FCGD' A' ODBGMME G' GOBCGN' AH' F. ' J.>G ' F. ' OF.MNDGH ' ?HN' ACFGD' >D.GHN

AM.H FGN' CFB ' H?DD?CG ' CFG' ?C? CDAKFG R

=' G' F?N' BOF' OAH>.NGHOG' H' F. ' KDAKFGO.G ' CF?C FG' LGM.GPGN' FG FABMN' HGPGD' LG' P?HQB. FGN' C.MM .GDH?HG' J.AAN' J.GDG' LDAB F.' CA' %BH ' .H?HG' HAD' EGC' CA' LG' M?'H J.CF' ?HE' @?H' CF?C' FABMN' LG' AD' J.?' ' LADH' A>' ?HE' J.A@?H

', &?MOAM@ ' >AMMA.J.H ' F? C.ME ?>CGD' &?OLGCF ' 0?@G' CFG' H. F.' LG>ADG' CA' CFGDG>ADG' CF?C' J.AAN' H' F. ' F?HN ' ?.L ' ? ' FG' LG?D' F.' LG?D' CFGG' ?HN' CFGDG>ADG' ?E' F. EG' BH?F?KKE ?HN' @. GD?LMG' OACOF@GH' J.F.OF' ?DG CFB ' .OABD GN' J.CF' A' @?HE' ?HN' BHNDE' 0?M?@.CG ' G?OF' ?HN' CA' .H?DOF' >ADCF' CFGDG.J.CF' H' BOF J.. G' F?PG' AHG OBD GN' ?HN' J.O(GN' CED?HC' CF?C HA.J' CFGE' @. F. OA@G' OMA GME ?HN' J.CFABC' . F. .H' CF. ' @?HHGD' J.CF.H' DG. HGCF APGD' EAB' J.CFABC' ?HE' D. F. AD' C.MG' AKKDG .H 'EAB' J.CF' F. ' @A C' LMANE' ODBGME' #F. ' ACFGD' CF?C F?CF' CFG D. F. CA' CFG ODAJ.H' . A' DGKMGCG' J.CF' CFG .HOAN C?HC' LGF?P.ABD' ?HN' @?H>G C' P.OG' A>' ?' JA@?H' .H' CF. ' ADC' FG' >.D C' @?DDAJ.J.FGH' &?OLGCF' LGFGMM' CFG@' HAJ' .H' CF. ' @?HHGD' J.CF.H' DG. HGCF APGD' EAB' J.CFABC' ?HE' D. F. AD' C.MG' AKKDG .H 'EAB' J.CF' F. ' @A C' LMANE' ODBGME' #F. ' ACFGD' CF?C F?CF' CFG D. F. CA' CFG ODAJ.H' =' &?0NB>>' CA' CF. ' @?NG ?H J.GD' FAJ'.C' J.?' ?' >?D JAD G >?BM'SF?H' CFG 0? CM' >AD' ?P?DOG & ?0NB>>' NJ&GMMGN' CDB CH 'CA'?PG' >ABHN F@' CFGDG.H' #F.' CF?C ' (GKC CFG FAB G ' J.CFABC' ?HE' DG . C?HOG AKGHGN' CFG ?CG ' ?HN' B>>GDGN' F@' CA' GHCGD' @. CDB CH ' HAHG' GP.M' . BC' HGPGDCFGMG ' .FG' ?HN' J.FGH' AHG' CF?C 0?@G' L.E' ?HN' ?'J' CF. ' @?HHGD' NG@?HNGN' LMAAN ' ?HN' J.FGH' AHG' CF?C 0?@G' L.E' ?HN' ?'J' CF. ' @?HHGD' NG@?HNGN' J.FGCFGD' FG' J.ABWN' F?PG' CFG >WCG ' ND.PGH' LG .NG' F@' .FG ?H J.GDGN' A ' ?M' ACFGD' J.FA@' F.G' OF? GN' ?PD?E' ACFGD' CF?C' G@KCE' ?HN' H' PGDE' G? GDWE' F.ABMN' LG' OF? GN' ?PD?E' ACFGD' CF?C' G@KCE' ?HN' H' >AD' C?FG G >C@' CF?C' ?DG ?WDG?NE' >BWN' LE' DG? AH' CFGDGA?' BO(' HAC FBH GDGN' FABMN' M. F.' H' CFGD' KM?OG ' ?HN' BO(' ABC' A>' N?H GD' ?HN' ACCGH' HCA' i H M?'HN' BHCA' &?MOAM@' G 0?KGN' ABC' A>' N?H GD' ?HN' ACCGH' HCA' i H M?'HN' BHCA' &?MOAM@' ?@@ADG' CA' CDE' J.F?C' KBDOF? G' FG' @. F.C' @?(G' LE' @G?H ' A>' F. ' BKKADC' CA' DGPGH G' CFG' M?B FCGD' A' ODBGMME G' GOBCGN' AH' F. ' J.>G ' F. ' OF.MNDGH ' ?HN' ACFGD' >D.GHN

E %

2+

R =&

2 2 "CB?CGN H CFG @AAD CA CFG ABCF A> CFG CAJH A ? CA HCGDOGKC CFG @?DOF A> CFG HP?NGD >DA@ >G CA CFG DAE?M DG NGHOG A> CFG HADCF NG ?HN ?M@A C MGPGM CD?OC A> FG?CF G CGHN ABCF-J?DN >DA@ ADDG ?@N C JFOF CFG @?DOF A> ?H ?D@E @ FC LG N OGDHGN >DA@ ? DG?C N C?HOG C @B C LG @GHCAHGN CF?C CFG C? G NDGOCAH =? ?@K HG?D ADDG I NAG HAC AOOBD HCFG AD H?M ?MCFAB F C >OMG?D HCFG CFDN OGHG CF?C & ?OLGCF ?HN . ?HQBA ?DG AH CFGD J?E CFCFGD R

6" 7M G8C KM99MO CA O PG O .

R =(! $2

$. 4 (! :(! " : R #F M?HN A> C AMB@L?M G HCFG DCF A> ADCF A> CFG OA? C A> G ? MCCMG CA CFG G? C A> ADCF BGGH >GDDE MG ?HNGD J? JDGO(GN AH CF M?HN ?HN GHCGDC?HGN LE ? FGD@C H @G@ADE A> F KDG GDP?CAH MG -?HNGD >ABHNGN ?@AH? CGDE CA JFOF DG?C ?HOCCE ?CC?OFGN >AD @?HE OGHCBDG ?HN CFG DG@?H A> JFOF ?DG CMM OAH KOBAB C J? A>CGH KMBHNGDGN LE !H M F @?D?BNGD LBC C J? A GHGD?MME LGMGPGN CF?C CFG ?HC HP?D?LME ?PGH GN FO@ GM> AH CFG KD?CG CF?C CFG ?ODGNHG A> CFG KM?OG ? CFG OGHG A> OAH>GDGHOG ?HN OAHCD?OC DG@?HGN BHO@K?DGN #FG , ADJGE?H (H I J? KDAL?LME OA@-KGMMGN CA NO LBD G FO = CGH CFAB ?HN NAMM?D I AH CFO KAC LG>ADG LBDEH F @GH AH CFG AM A> G HCFG ?HN G@KF?CO ? KA LMG

R =&$.2

A@@AH BKGD COCAH ? H CFG ?D@BD AH CFG LADNGD A> !M H ?HN ?@ ? CFG KM?OG A> CFG HCGDPGJ LGCJGGH &?OLGCF ?HN CFG JGDN CGD @ADG NDG?DE KGOG A> @AADM?HN HAC CA LG >ABHN H ?MM OACM?HN C G? CGDH M@C ?LABC @MG >DA@ ADDG ?HN C JG CGDH >ABD >DA@ ?@ ?HN CFG FO F DA?N >DA@ CFG G KM?OG HCGD GOC C #FO = LM? CGNFG?CFI JCFABC CDGG AD FDBL >GJ K?COFG A> A?C ?DG PO LMG FGDG ?HN CFGDG ?HN CFG GEG DGKA G AH ?>D KM?HC?CAH ?C AHG G CDG@CE LBC ?M ?DABHN LMG?(?HN LDAJH @?NG BK A> KG?C ?HN LA <J?CGD JFCG CAHG ?HN LB FG A> >BDTG ?HN FMM ?HN ?M HG A> LMBG G? LGEAHN JFOF ?DG CFG NO C?HC FMM A> "A ?HN ?CFHG LABHN C CA CFG HADCF ?>?D@ CG?N AD CJA @?E LG GGH ?>?D A>> ?HN CFG DBH A> ?O? CMG DO G >DA@ ?@N C ?>GJ CDGG AH CFG G C?CG A> .DANG A> .DANG AH CFG HADCF JG C #FGDG A@GCFH C?DCMH CA ?CD?H GD H GGH CFG AMC?DE >BDG A> CFG KG?C NO GD AD DB F ?CFGDGD @AP H ?@N C CFG J? CG H CFG BH FHG A> ?O?M@ ?BCB@H N?E LBC CFG NG AM?CAH A> CFG OGHG H CAD@E JG?CFGD AD JFGH CFG CJM FC >A ?DG CD?MH APGD CFG K?CFMG FG?CF AD GCCMH NAJH BKAH CFG KAAM @B C LG HNG OD L?LMG

.AGOG H?DD?CG CFG HCGDPGJ A> &?OLGCF ?HN .?HQBA JCF CFG JGDN CGD ? ?H ?OCB?M AOOBDDGHOG ?HN FG DGKG?CGN LE AMH FGN .BOF?H?H JFA G @HN J? ?PGD G >DA@ ?N@CCH @ADG BKGD-CCAH CF?H 8 HGOG ?DE CA FO CADO?M >NGMCE DGM?CG CFG JFAMG OGHG ? ? NDG?@ A> &?OLGCF8 C H AJ O?DOGME KA LMG GPGH >AD CFG @? H?CAH A> CFG FO CADO?M CBNGHC CA @?(G CC OFACOG LGCJGGH CFG OGHG A> CFG GHGD?M @ABHCGN ?HN ?CCGHNGN LE CFGD CDAAK @GGCH CFG JCOFG HCFG ?OCB?M KDG GHOG AH CFG J? CG A> CFG Z?D@BD ?HN CFG GHOABHCGD A> CFG ? KDH KDC A> &?OLGCF JCF CFG KDAKFGC A> C >?CG ?@N CFG JMNGD OGHGDE A> CFG M?HN A> NDG?@ >?D ? CFG BKGD COCAH O OAHOGDHGN JCF CFG DG?M FO CADE CFG KAGC F? LABHN B HCFG F @ FCGD KGMM #FG COFG A> F?(KGDG F?PG LGOA@GBDG?MCG

R =%$ I 2

+M?@ ? CMG >PG @MG >DA@ AD>?D O AHG A> CFG >ABD AD >PG O? CMG HCFG JFOF CFG @BDNGD A> %BHO?H O GDDAHGAB ME NGOM?DGN CA F?PG LGGH KGDKGCD?CGN DGP AB CA 3 2 ? @?MM O? CMG CJA CADG F F CAAN AH CFO KAC OA@@?HN H ? JNG G CGHC A> MGPGM OABHCDE LABHNGN CFG AHG NDGOCAH LE CFG D?H G A> %BH H?FG MM ?HN)*%

JCFH PGJ A> .DH?@ MM #D?NCAH ? H CFO AMN CDAH FAMO ? CFG AOO? AH?M DG NGHOG A> &?OLGCF JFA FAJGPGD ? JMM LG GGH GM GJFGDG OABMN HGPGD F?PG NJGMC JCFH CAHG J?MM #FG KDG GHC @? HO>OGHC GN>OG O ?LAPG ?? FBHNDGN >GGC H FG FC ?HN OAHC?H ? FBHNDGN DAA@ ? ?HN CFG J?MM A> CFG AMNG C K?DC A> CFG LBMNH ?DG >O>CGGH >GGC CFO(H ?HOGHC LGN CG?N O KDG GDPGN H C AH JFOF C KDGCGHNGN CF?C %BHO?H J? @BDNGDGN +M?@O ? CMG @?NG LE CD?NCAH CFG OGHG A> ?HACFGD @BDNGD R CF?C A> &?MOAM@ H 73/ #FG KDAKGDCE K? GN HCA CFG F?HN A> CFG CD?CF@ADG >?@ME VCA JFA@ C CMM LGMAH H /3 2 AH A00? AH A> CFG @?DD? G A> 0AFH $EAH ?HOG CAD A> CFG >?@ME JCF ? N?B FCGD A> "ALGDC >DA@ JFA@ CFG G C?CG J? DGOGPGN ? ? O

R =%$! 0 R

?JNAD ? CMG ?HACFGD BKKA GN OGHG A> CFG @BDNGD A> %BHO?H KADCAH A> %BHO?H8 OA?C A> @? M KDGCGHNGN CA LG FAJH CFGDG $?HN ?M A CFG OF?@LGD H JFOF FG J? @BDNGDGN JCF CFG DGOG OBC ABC A> CFG CFO(HG A> CFG J?MM H JFOF CFG (H 8 P?MGC FN F@ GM> NBDH CFG KGDKGCD?CAH A> CFG NGGN ?JNAD ? CMG ?LABC @MG >DA@ ?@ ?HN C?HN AH ?D H DABHN ?LAPG CFG JHN-H A> CFG ?MNGD APGDMAA (H ? J NG CD?OC A> AANM?HN LABHNGN AH CFG HADCF LE CFG & AD?E DCF C F? ?@A?C ?HN ND?JLDN G ?HN ?M K?DC A> C JCFABC N?CG FAJ @?D(A> PGDE FO F ?HCQBCE #FG @ADG @ANG@ K?DC LG?D CFG N?CG A> 5 7 #D?NCAH ?E CF?C CFG AD H?M LBMNGD A> CFO O? CMG J? NG DGN CA MA?N ?H ? JCF CFG AMN FG OABMN ?>>ADN >AD FO GN>OG CA >AMMAJ JFGDG CFG ? FABMN MG?N ?HN LBMN JFGDG C FABMN CAK #FG ? CAKKGN ?C ? F?JCFADH H CFG JAAN ?HN CFO F?JCFADH J? LBMC HCA CFG OGHCDG OF?@LGD A> CFG DABHN >MAAD A> CFG O? CMG #FGDG C CMM JADH ?HN OBC ?J?E CMM C ? MGHNGD JAANGH KMM?D H CFG @N C A> CFG ?HCQBG ?K?DC-@GHC .G NG C C?HN CFG OFG C JFOF OAHC?HGN CFG AMN ?HN FGDG C BKKA GN N CFG CD?H A> %BHO?H @@ MG H DGPGM JCF CFG GDP?HC A> &?OLGCF AH CFG HO FC A> CFG @BDNGD #FG CD?H GD JFA C?HN H CFG MAJ N@ P?BMC DG DGC CF?C FO CADE ?HN CD?NCAH O?HHAC LG @?NG CA ? DGG

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ADDG ? ?CAJH A> DG?C ?HCQBCE C C JG CGDH G CDG@CE CFGDG ? ?H G@HGHOG OA@@?HN H CFG DPGD CFG MGPGM OABHCDE CA CFG OA? C A> &AD?E DCF ?HN CFG CAJH H CFO KAC ?NP?HC? GAB >AD CDGH CF ?HN BDPGE C?HN CFG DBH A> ?H ?HO GHC O? CMG CFG J?MM A> JFOF ?DG PGDE @? PG ?HN CFG ?DOFCGOCBDG ? H #D?NCAH NGOM?DG CF?C LG>ADG CFO O? CMG J? LBMC CFG >ADC &A N CFGDG H JFOF H %B>>B J? @BDNGDGN H 145 AD 144 C ? KDAL?LMG CF?C CFO >ADC J? CFG DG NGHOG A> %BHO?H ?HN ?>CGDJ?DN A> &?OLGCF JFGH CFG OABDC AD DAE?M ?D@E ? ?C ADDG #FG ?@? H?CAH A> CFG CBNGHC A> CFG OFDAHOMGD AD A> F?(KGDG >G AH CFO DGGH @ABHN ? CFG KAC JFGDG &?OLGCF LGHC CFG (HGG CA FO APGDG H JFMG HCGDH?MME AOOBKGN JCF CFG DGGCH JFOF F?N SB C @GC FO@ AH CFG ?D@BD

. R = 3 & " $: ! 2

.AGOG NGOM?DG CF?C &?OLGCF8 O? CMG H JFOF %BHO?H J? @BDNGDGN J? CF?C JFOF CAAN AH ?H G@HGHOG CA CFG ABCF G? C A> CFG CAJH A> HPGDHG C OGDC?H CF?C CFG LBMNH O?MMGN ?? O? CMG JFOF CAAN CFGDG J? D?TGN CA CFG DABHN LE &?MOAM@ ?H@ADG CFG AH A> %BHO?H JFA LBMC ?HACFGD AH ?? NO>>GDGHC K?DC A> CFG FMM C J? CF M? C NO @?HCMGN H CFG J?D A> /5 JFOF %D 0AFH AH ?HN .A JGMM GHCGDGN H 3 ?KK?DGHCME JCFABC ?HE B KOOAH CF?C C J? HAC CFG NGHCO?M KM?OG H JFOF %BHO?H J? DGOGPGN LE $?NE &?OLGCF .A JGMM HAC AHME DGOA HO G CFG =KMG? ?HC G?C I A> CFG LBMNH LBC MAA(BK JCF PGHGD?COAH CA CFG L?CCMG@GHC AH JFOF CFG D?PGH ODA?(GN G NGOM?DG R =F?N ?DA@?HCO ?CO >?OCAH H GGH %D 0AFH AH ?OCB?MME H C I C ?KKG?D FAJGPGD >DA@ CFG DG G?DOFG A> ?HCQB?D?H CF?C CFG O? CMG A> &?OLGCF8 N?E JGDG HAC LBMC A> CAHG ?HN @ADC?D ?C ?MM #FG =PCD>GN >ADC I %FA G PG CO G ?DG >ABHN O?CCGDGN APGD OACM?HN ?HN JFOF ?DG OAHSGOCBDGN CA LG CFG JAD(A> CFG KD@OCPG GMCO HF?L C?HC DG@?H ?@E CGDE

? ?' ?? 7 7

LAC=' ? ' CA' CFG=D' 0AH CDBOC=AH' ?HN9' KBDKL G ' LBC' J□CF CFG G 0GKC=AH' A>' CFG G' CFGGD ?DG HA' CD?0G ' A>' GDGOC=AH ' A>' CAHG' A' G?DME ?' N?CG ? ' CFG'DG□ H' A>' %BH0?H' #FG' >ADC ' ?HN' 0? CMG ' A>' CFA G N?E ?KKG?D' CA' F?PG' LGGH' 0A@KA GN' A>' C□@LGD' ?HN' AN ' J□FOF' ODB@LMGN' ?HN' N□ AMPGN'?J?E' ? G ' ? A' MG?P□H ' AHME' ?' >?HC O□DOMG' BKAH CFG A□M' CA' @?D(' CFG KM?OG' JFGDG CFGE' CAAN' C□' 'CFB 'CF?C CFG' □CG A>' $BH ' C?□HGN' #F□ ' >?OC ?LABC CFG @GCFAN' A>' LB□MN□H ' H' CF?C' G' GCCMG ' CFG QBG C□AH' A>' %BH0?H8 ' @BDNGD' ?C ?JNAD' ? CMG ' AD' +M?@□ ' AD ?HE' ACFGD CA' JFOF' CF?C' GPGHC' F?' LGGH' ? □ HGN ' C' 0ABM' HAC' F?PG' C?(GH KM?OG' H' ?HE' LB□MN□H ' HAJ'H' G □ CGHOG C' □ ' HAJ' LGM□GPGN' LE' A@G' CF?C' %BH0?H' J? ' HAC' ? ? □H?CGN' ?C ?MB' LBC' M?□H' H' L?CCMG' $?CGD' F□ CAD□?H '>AMMAJ' .AGOG'□H' F□ ' NGOM?D?-C□AH' CF?C' CFG ('□H ' J? ' @BDNGDGN' H' &'?OLGCF8 ' 0? CMG ?C' HPGDHG ' LBC' CFG' DG □ CGD' A>' CFG' D□ADE' A>' C' HND□J8 ' ?E ' =' %AHO?CF' □HCGD' >GOCB ' G C'H' L $ /' AD□BH' ?E ' CF?C' LG□H ' JABHNGN' FG J?' 'OAHPGEGN' CA' I M □H ' ?HN' N□GN' CFGDG' #FG' @G?H□H ' A>'L D K' LG□H ' ='CFG @□CF8 ' N J G M□H I ' □C F? ' LGGH' 0AHSGOCBDGN' CF?C' CFG ('□H ' J? ' @BDNGDGN' LE' ?@LB FGN' ? ? □H ' ?C' AD' HG?D' ? @□CF8 ' N J G M□H ' H' CFG' HG□ FLABDF=AN' A>' I M □H

BKKA □H ' CFG @BDNGD' CA' F?PG' C?(GH' KM?OG ' FA J GPGD' ?C' &'?OLGCF8' 0? CMG' ?C' HPGDHG ' CFG' ?LANG' @□ FC' J GMM' LG' ?□N' CA' F?PG = ?' KMG?-?HC' G?C I' #FG' F□MM' APGDF?H ' CFG' D□PGD' G ' ?HN' 0A@@?HN ' ?' >HG P□G'J' A>' CFG' CAJ□H ' CFG' BDDABHN□H ' MGPGN ' ?HN' CFG' @ABHC?□H ' J F□OF' GHOMA G $A0F' G ' CA' CFG' JG C' #FG' G@□HGHOG □ ' ?C KDG GHC'ODA'JHGN' J□CF' CFG' FGJ' 0? CMG ' J□FOF' OAHC?□H ' CFG' OABDC ' ?HN' CFG A>>□OG ' OAH-HGOCGN' J□CF' CFGC?' A' PG C□ G ' DG@?□H' A>' &'?MOAM@ ' 0? CMG ' P□ □CGN' LE' %D' 0AFH AH' ?HN' .A J GMM' ? ' CFG' &'?OLGCF8 ' 0? CMG A>' .AGOG' ?HN' F?(KGDG

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A>' CFG □OC□ F' (□H NA@' M?E' CJA' @□MG ' HADCF J?DN' >DA@' CFG' KDG GHC' CAJ□H' A>' GDC□F' C' J? ' CFG' DG □NGHOG' A>' CFG OACC□ F' @AH?DOF ' ? ' CFG'DG□ H' A>' %BH0?H' #FG' >ADC ' ?HN' 0? CMG ' A>' CFA G N?E ?KKG?D' CA' F?PG' LGGH' OA@KA GN' A>' C□@LGD' ?HN' AN ' J□FOF' ODB@LMGN' ?HN' N□ AMPGN'?J?E' ? G ' ? A' MG?P□H ' AHME' ?' >?HC O□DOMG' BKAH CFG A□M' CA' (□H ' ODAJ□HGN' H' A>' GHHGCF' &' MK□H ' ?HN' CFGDG' J? ' ?'MAH ' GD□G ' G?DME' ? ' CFG'DG□ H' A>' GDC□F' C' J? ' CFG' DG □NGHOG' A>' CFG OACC□ F' @AH?DOF ' ? ' CFG'DG□ H' A>' %BH0?H' #FG' >ADC ' ?HN' 0? CMG ' A>' CFA G N?E ?KKG?D' CA' F?PG' LGGH' OA@KA GN' A>' C□@LGD' ?HN' AN ' J□FOF' ODB@LMGN' ?HN' N□ AMPGN'?J?E' ? G ' ? A' MG?P□H ' AHME' ?' >?HC O□DOMG' BKAH CFG A□M' CA' (□H ' ODAJ□HGN' H' A>' GHHGCF' &' MK□H ' ?HN' CFGDG' J? ' ?'MAH ' GD□G ' B GN'? ' CFG' D□ADE' A>' CFG' G?J' A>' AFD' APGD□ H ' ?' OADAH?C□AH ' H' G C□@□H CGD' LLGE ' #F□ ' CAHG' J? ' D□@APGN' CA' OAHG' >DA@' %BH C?>>F? G ' CFG' E□GC' G?DM□GD' DG □NGHOG' A>'CFG' OACC□ F' (□H ' LE' GHHGCF' ' AAH'?>CGD' CFG' >ABHN□H ' A>' CFG' ?LLGE' A>' OAHG' LE' CFG' BMNGG ' □H' 636 ' ?HN' J?' CC?H' >GDDGN' LE' iNJ?DN' ' CA' G C□@□H CGD' LLGE' □H' 214' #F□ ' D□@?D(?LMG' CAHG' □ 'D□GKADCGN' CA' F?PG' >ABHN' □C ' J?E' CA' %BH C?>K□ G C?(GH' KM?OG' H' ?HE' LB□MN□H ' HAJ'H' G □ CGHOG C' □ ' HAJ' LGM□GPGN' LE' A@G' CF?C' %BH0?H' J? ' HAC' ? ? □H?CGN' ?C ?MB' LBC' M?□H' H' L?CCMG' $?CGD' F□ CAD□?H '>AMMAJ' .AGOG' □H' F□ ' NGOM?D?-C□AH' CF?C' CFG ('□H ' J? ' @BDNGDGN' H' &'?OLGCF8 ' 0? CMG ?C' HPGDHG ' LBC' CFG' DG □ CGD' A>' CFG' D□ADE' A>' C' HND□J8 ' ?E ' =' %AHO?CF' □HCGD' >GOCB ' G C'H' L $ /' AD□BH' ?E ' CF?C' LG□H ' JABHNGN' FG J?' 'OAHPGEGN' CA' I M □H ' ?HN' N□GN' CFGDG' #FG' @G?H□H ' A>'L D K' LG□H ' ='CFG @□CF8 ' N J G M□H I ' □C F? ' LGGH' 0AHSGOCBDGN' CF?C' CFG ('□H ' J? ' @BDNGDGN' LE' ?@LB FGN' ? ? □H ' ?C' AD' HG?D' ? @□CF8 ' N J G M□H ' H' CFG' HG□ FLABDF=AN' A>' I M □H

BKKA □H ' CFG @BDNGD' CA' F?PG' C?(GH' KM?OG ' FA J GPGD' ?C' &'?OLGCF8' 0? CMG' ?C' HPGDHG ' CFG' ?LANG' @□ FC' J GMM' LG' ?□N' CA' F?PG = ?' KMG?-?HC' G?C I' #FG' F□MM' APGDF?H ' CFG' D□PGD' G ' ?HN' 0A@@?HN ' ?' >HG P□G'J' A>' CFG' CAJ□H ' CFG' BDDABHN□H ' MGPGN ' ?HN' CFG' @ABHC?□H ' J F□OF' GHOMA G $A0F' G ' CA' CFG' JG C' #FG' G@□HGHOG □ ' ?C KDG GHC'ODA'JHGN' J□CF' CFG' FGJ' 0? CMG ' J□FOF' OAHC?□H ' CFG' OABDC ' ?HN' CFG A>>□OG ' OAH-HGOCGN' J□CF' CFGC?' A' PG C□ G ' DG@?□H' A>' &'?MOAM@ ' 0? CMG ' P□ □CGN' LE' %D' 0AFH AH' ?HN' .A J GMM' ? ' CFG' &'?OLGCF8 ' 0? CMG A>' .AGOG' ?HN' F?(KGDG

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H' ?□ MG' A>'CFG' ?LLGE' A>' 0AHG' DG@?□H ' >GJ' KAAD' F?L□C?C□AH ' ?MAHG' G □ C' AH' CFG' □CG A>'CFG' ?HO□GHC' DAE?M' OCE

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□ M?HN' A>' AH?_ GK?D?CGN' AHME' L E' ?' H?DDA'J'0F?HHGM' >DA@' CFG' □ M?HN' A>' &'BMW' A>>?' CFG' JG CGDH' 0A? C' A>' # EMM ' ?' ' CFG' KM?OG' A>' GKBMDBDG' A>' @?HE' OACC□ F' (□H ?HN '?OOADN□H ' CA' CD?N□C=AH ' A>' GPG□?M' D□ F' ?HN' AD J G □?H' @AH?DOF ' #F□ ' M□CCMG' □ M?HN ' AHME' CFDGG' @□MG ' MAH ' ?HN' AHG' ?HN' ?' F?M5' LDA?N ' J ? ' AHOG' CFG' @A C' □@KADC?HC' KAC' A>' CFG' J FAMG' OMB CGD' A>' .D□C□ F' MG ' C' J ? ' □HF?L□CGN' LE' %D8N ' KDGP□AB ' CA' CFG' EG?D' 543 ' J FGH' AMB@' &' GM□@' &> GD B ' ?>CGD J ?DN ' 0?MMGN' C' AMB@L?'M?HNGN' J□CF' C J GMP'G 0A@K?H□AH ' ?HN' LG ?H' CA' KDG?0F' FD□ - C□?H□CE' '@AH? CGDE' J ? ' AAHG C?LM' FGN' AH'CFG' KAC'?HN' AC□GD ' M?HAL'G ?DN ' ?DA G □H' CFG' HG□ FLABD□H ' □ MG ' ?HN' AH' CFG' @?□HM?HN ' ?' >HG 0?CFGND?M' J ?' ' LB□MC' ?HN' ?' HBHHGDE ?C' ?' FADC N□ C?HOG' >DA@' □C' CFG DB□H ' A>' LACF' A>' J F□OF' C□M□' DG@?□H ' #FG' DGKBC?C□AH' A>' CFG' MG?DH□H ' NAOCD□HG ' ?HN' N□ O□KM□HG' A>' CFG G G C?LM□ F@GHC ' G CGHNGN' APGD' CFG' J FAMG' FD□ C□?H' J ADMM' >AD' A@G' OGHCBD□G ' NGPACGG ' A>'D?H (' AD' ACFGD' G@□HGHOG' CDAPG' >AD' ?N@□ □AH' □HCA'CF@G ' @□ □AH?DJG ' A>' CFG' F□ FG C' HGOCGN' J□CF' CFGC?' A' PG C□ G ' DG@?□H' A>' &'?MOAM@ ' 0? CMG ' P□ □CGN' LE' %D' 0AFH AH' ?HN' .A J GMM' ? ' CFG' &'?OLGCF8 ' 0? CMG A>' .AGOG' ?HN' F?(KGDG

GKBMCBD' >DA@' CFG' C□@G' A>' □C ' GDGOC□AH' #FG' □ M?HN' J?' GPGD?' □@G ' ?PGN' J□GDG' DG@APGN' CA' DGM?HN' H' OAH GQBGHOG' A>'CFG' KGDKGCB?M' KGD□M ' LBC' CFG' @AH? C□D' G C?LM□ F@GHC ' BDP□PGN' GPGDE' BOF' ?CC?O(' ?HN' DG@?□HGN □H' FAHABD' C□MM' CFG' EG?D' 54 ' J FGH' CFG' ?OC' A>' CFG' AH-PGHC□AH' A>' i C?CG ' J ? ' K? ' GN' LE' J F□OF'?MM' @AH? CGD□G ' J□GDG' NAA@GN' CA' NG@AMC□AH' BOF' LAA(' ?HN' DGOADN ' ? ' OAB□MN' LG >ABHN' □H' AH? J□GDG' LBDHC' CFG' CA@L ' J□GDG' LDA(GH' AKGH' ?HN' CFG' DG?CGD' HB@LGD' A>' □C ' FA C' A>' ODA G ' CFDAJ□H' NAJH' AD' O?DD□GN' ? J ?E

#FG' O?C?FGND?M' A>' AH?'? ' GGH ?>?D' A>>' >DA@' CFG' ABC □NG' A>' □H ?M8 ' ?PG' □H' C?>?' C?HN□H ' ?ABC ? ?□H C' CFG' □ JG CGDH' (E'□ ' ?' □H BM?D' ALSGOC□H' CFG' @□N C' A>' A@G' A>'CFG' J□MNG C' OGHGDE' A>'CFG' AOG?H R CFG AHME' CA(GH' A>' F□ F' O□P□M□ ?C□AH R CFG' AMC?DE' DGOAD□N' A>'?H' □HCGMMGOCB?M' J ADMM' J F□OF' F?' K? GN' ?J?E' C' KDG □NG ' APGD' ? J□NG G CGH□' A>' CAD@E' J ?CGD ' J□CF' CFG□D' O?CCGDG□ □ MG ' ?HN' CFG' CAHG' ODA G ' A>'□C' OG@GCGDE' ?HN' CFG' MA>CE' J?MM ' ?HN' ? AH' +ACF□O' ?DOFG ' A>' C' PGHGD?LMG' LB□MN□H ' >AD@' ?' CD?H G' OAHCD? C' J□CF' CFG' FAPGM ' A>'CFG □ FGD@GH' J F□OF' C?HN' BKAH' CFG' FADG >□ FGD@GH' J F□OF' C?HN' BKAH' CFG' FADG

H' CFG' OG@GCGDE' ?@AH ' CFG' @AHB@GHC ' A>' CFG' >ABHNGD ' ?HN' A>' @?HE' BL GQBGHC ?LLAC ' ?DG' CFDGG' DAJ ' A>'CA@L ' ?□N' CA' LG' CFA G A>' CFG' OACC□ F' D□ F ' ?HN' AD J G □?H' (□H ' □H' HB@LGD' DGKADCGN' CA' LG' >ADCE G□ FC' AD' C?CC@GHC ' M□(G CFG G ' FA J GPGD' CFGDG □ ' HA' ?BCFADC□E LBC' CD?N□C□AH ' #D?N□C□AH' □C GN>' NAG ' HAC' KDGCGHN' CA'□HN□P□NB?M□ G' CFG G CA@L ' A' CF?C' CFG' CD?H GD' @B C' LG' ?C□ >GN' J□CF' CFG (HAJ□GN G' CF?C J□CF□H' CFG' GHOMA BDG' J FGDG' FG' C?HN ' M□G %BH0?H' ?HN' &'?OLGCF

ADK?OF' C'J' @□MG ' >DA@' ADC' □M□?@' DGC?□H ' A@G' N□ C□HOC□AH >DA@' LGCH ' CFG' K□?OC' J FGHOC' CFG' LAN□G ' A>' CFG' OACC□ F' @AH?DOF ' J GDG' G@L?D(GN' >AD' CFG' ?ODGN' □ M?HN' FG□□ F□MG' CD?PGD □H ' CFG' CAD@E J ?CGD ' J F□OF' BDDABHN' CFG G' MAA@E J G CGDH' □ MG ' CFG' □@?□H ' DGC?□H ' H?CDAH H?CBD?MME' DGPGDC ' CA' CFG' ?HO□GHC' N?E ' J FGH' CFG' >BHGD?M' CD?□H' A>' L?D(' J ? ' CA □H ' ?@□N C' CFG' J?PG ' ?HN' CFG' OF?HC' A>' CFG' @AH(' @□ FC' LG FG?DN' >DA@' ?>?D' J GMOA@□H ' CFG' DG@?□H ' A>' CFG' @AH?DOF' CA' CFG□D' OAH-GOD?CGN' A□M

A@G' A>' CFG' D□ F' ?HN' AD J G □?H' (□H ' LBD□GN' □H' AH?' J GDG' K□M-D□@ ' J FA' F?N' ?LN□O?CGN' CFG□D' CFDAHG ' ?HN' DGC□DGN' CA' CFG' @AH? CGDE A>' C' A□M□@L?

6' HP PAT' GHM9$ P' GHMO ' HP' ?J I AP G' 7 J'H GN'MI0' I MUP' O GK P T 3 ' I' PL N' 7JG+R 1/+ ' ')')*)

E %

') R ='& ' ' ' ' '0 $' ' $ '$:F

C' □ ' HAC' ? OGDC?□HGN' AH' JF□OF' F□MM' A>' CFG' %BH □H?HG' D?H G' CFG' ABC□HG' A>' . □DH?@' □MM' □ 'P□ □LMG' >: LBC' ? ' CFG' N□ C?HOG' □ ' CJGMPG' @□MG ' □H' ?' N□DGOC' M□HG ' HA' ! GHC□HGM' AH' CFG' %BH □H?HG' □MM ' OABMN' GG' CFG' JAAN' ?C' . □DH?@' LG □H' CA' @APG ' AD' GPGH' CF?C' CFGDG' J? ' ?' JAAN ' G' @B C' BKKA G' G□CFGD' CF?C' CFG' N□ C?HOG' J? ' OAHCD?OCGN' >AD' CFG' KAGC8 ' KBDKA G ' AD' CF?C' CFG' JAAN' O?MMGN' . □DH?@' G CGHNGN' >DA@' CFG' F□MM' >AD' A@G' @□MG ' □HCA' CFG' KM?□H R

6' X NH !' NH G' NH PP' I 9P' I MT' T J' GPP' N' K I !Q+R

!

' AMGD□N G8 ' G?DME' AHHGC' S !' CFG' BC□FAD' A>' CFG' "ALLGD I' F□ ' □@? □H?C□AH' □ ' GHOF?□HGN' CA' CFG' @A C' CGH□LMG' OGHG' A>' CF?C' KM?E ' N□ DG ?DN□H ' ? ' □C' JGDG ' ?MM' CFG' ?OOG AD□G ' LE' JF□OF' □C ' FADDAD ' ?DG' @□C□ ?CGN' ?HN' DGHNGDGN' GHNBD?LMG R

6' KH 99P [NHMN' H J '2' J9O' HM P' GH%O' N ' O P+
27' NH JQH' NHP' GHJOOP !Q' I O! QHN' 2' HMO' GP!N'
0 I ' NHP' OM U' OJ!QP !' 7' NHP' N P ' N I P P!N'
HMN' 7PM 7J9' KP ' M' 7M I GH%O' 7MNHP %G' K TS
/ PGN' !' G I P' M7NP I I P!N' MJQHN' I P' I PM !'
QHN' GNM I L' I P' I NM9[#' N J I LHM!N' GH JN'
9MKU' " ' GK PM I %O ' M!O' M99' HP ' Q A9 !' JN'
5 I ! GH%O' GH J!U' B I ' NHP' I P' NHP !Q' GKP!P[R

C' J8? ' □MM' ?' A@GJF?C' □@□M?D' @?HHGD' CF?C' F?(KGDG8 ' DGKDG GHC?C□AH' A>' CFG' @BDNGD' A>' %BHO?H' ?>>GOCGN' CFG' □@? □H?C□AH' A>' & D ' □NNAH R

6'2N' MG' I T' KJGN I ' N ' GNJOT' I T' KHM MKNP G' MN' ! QHN ' HP!' M99' NHP' O I PGN K' KM PG' M!O' AJG !PGG' 7' NHP' OMT' P P' P ≠ 1!' NHP' ! QHN' L PKPO !Q' NHMN' !' H KH' 2' MG' N ' MLLPM ' !' NH G' LM N' 7 ' NHP' 7 GN' N I P ' 2' GHJN' I TGP97' JL ' MG' JGJM9 ' HP!' ! 9' NHP' 7M I 9T' P P' PN PO ' M!O' K I I P!KPO' I T' GNJOT' 7' / MOT' MKAPNH≠ #G' NHP' KHM_ MKNP ' G' P T' GH N ' 2' NH JQH N' 2' GH J9O' G 1!' MKK I L9 GH' N≠ P !Q' NHP!' !9T' N P!NT' TPM G' 7' MQP ' 2' AP9 P PO ' MG' I M!T' NHP G' O ' AP9 P P ' NHMN' 9 NN9P' I P' MG' !PKPGGM T' NHM!' N ' QPN' NHP' OG' !N ' I T' HPMO8' 7 ' NHP' !PKPGG NT' 7' O GK I !MN !' M!O' NHP' OP P9 L I P!N' 7' KHM MKNP ' MN' NHMN' N I P' 7' 9 7P ' HMO' GKM KP9T' P!NP PO' !N ' I T' I MQ !MN !≠ JN ' N ' L KPPO≠ 2' P!N' !' NH' N 9P MA9P' K I L GJ P ' !' NHP' G 9P!KP' 7' NHP' ! QHN ' @M' ! QHN' 2' KM !' !P P ' 7 QPN ' N 99' 2' KM I P' N ' NHP' MGGMGG !MN !' GKP!P ' HP!' NHP' H G' 7' NHP' GKP!P' GP' N ' M' OPQ PP' NHMN' I MOP' N' I L GG A9P' 7 ' I P' N ' QPN' 7M NHP ≠ 2' G!MNKHPO' JL' I T' KM!O9P ' M!O' HJ PO' JN' 7' NHP' I' !' M' LM WTG I ' 7' NP ≠ T' O PGG' MG' 7' G 9U ' M!O' NHP' JGN9 !Q' 7' N ' MG' 2' MGKP!OPO' NHP' GNM G' N ' Q ' N ' APO ' GPP I PO' N ' I T' LM! K GN JKU' 7M!KT' 9 UP' NHP' I P I P!N' 17' M' GLPKN P' LJ GJ !Q' I P≠ #N' 9MG 2' PMKHPO' I T' KHM I AP ' HP P' 2' 7 J!O' I T' HJGAM!O' 7MGN' MG9PPL≠ 2' K9MLLPO' I T' KM!O9PGN KU' O !' JL !' NHP' NMA9P ' NH JN' NHP' LL P ' 7' LJNN !Q' N' JN9 M!O' 2' NH P ' I TGP97' !' I T' APO ' NH JN' OM !Q' N ' GNMT' P P!' N ' NMUP' 77' I T' K9 NHPG+R'

#F□ ' @A C' □HCGDG C□H ' K? ? G' ?KKG?D ' CA' B ' CA' □HPAMPG' CFG' OAH-□NGD?C□AH' A>' CFG' KD□HO□KMG ' BKAH' JF□OF' CFG' G ?@□H?C□AH' A>' BOF' ?' JAD(' A>' ?DC' ? ' & ?OLGCF' O?H' ?MAHG' LG' ?CCG@KCGN ' #A' ?H?METG' CFG' OAHNBOC' A>' CFG' KMAC ' CA' G F□L□C' CFG' ALP□AB ' ?HN' CFG' M?CGHC' >G?CBDG ' A>' CFG' OF?D?OCGD ' CA' KA□HC' ABC' CFG' KDAKD□GC□G ' ?HN' CFG' KMGHNABD ' A>' CFG' KAGC□O?M' M?H B? G R CFG G' ?DG' NBC□G ' JF□OF ' FAJGPGD' ? DGG?LMG' CFGE' @?E' LG' CA' ABD GMPG ' ?DG' O?DOGME' NG@?HNGN' LE' CFG' H?CBDG' A>' CFG' BLSGOC' ?HN' CFGE' F?PG' LGGH' A' A>CGH' ?CCG@KCGN' CF?C' CFGDG' □ ' @?H□->G C' N?H GD' A>' LG□H ' CDS□>G ?HN' JG?D□ A@G' □>' JG' FABMN' GHCGD' □HCA' CF□ ' J□NG' >□GMN ' G' F?MM ' CFGDG>ADG ' ?KKME' ABD GMPG ' ? ' CD□OCME' ? ' KA □LMG' CA' ?H' □HQB□DE' □HCA' CFG' H?CBDG' A>' CF?C' KAGC□O?M' ?DC' LE' JF□OF' CFG' FADDAD ' A>' CF□ ' DG?C' CD? GNE' ?DG' OAH>□HGN' J□CF□H' CFG' M□@□C ' A>' KMG? BD?LMG' G@AC□AH

>' CFG' ND?@?' A>' & ?OLGCF' JGDG' CA' KDANBOG' CFG' ?@G' G>>GOC' BKAH' CFG' @□KN' A>' ?H' □@? □H?C□PG' DG?NGD' ? ' CF?C' NG OD□LGN' LE' & D ' □NNAH ' □C' JABMN' HAC' LG' CFG' DG?C' JAD(' A>' ?DC' JF□OF' □C' DG?MME' □ ' >' ABD' KAGC' F?N' DG AMPGN ' B □H ' CFG' JADN ' A>' F□ ' AJH' CFGMMA ' CA

6' MAM!O !' M3' P I GP+
1!' H %G' HPMO' H G' MKKJ I J9MNP R

CFG' @□NH□ FC' CGDDAD ' BOF' ? ' & D ' □NNAH ' F? ' NG OD□LGN ' JABMN' F?PG' □HNGGN' LGGH' ?' CD□LBCG' CA' 0 .' LBC' HAC' CA' CFG' KAJGD' JF□OF' F? ' KDANBOGN' & ?OLGCF ' #FG' K?DA E @' A>' >G?D ' CFG' K?H□O CDBO(' >?HOE ' CFG

' P I M!OM' AT' G≠ OO !G ' !GP NPO' !' HP '6' / 7P' R' AT' ≠ M I LAP99+
)*'

?HN' >DA@' GPGD?M' K?DC ' A>' CFG' %BH □H?HG' D?H G' CFG' ABC□HG' A>' . □DH?@' □MM' □ 'P□ □LMG' >: LBC' ? ' CFG' N□ C?HOG' □ ' CJGMPG' @□MG ' □H' ?' N□DGOC' M□HG ' HA' ! GHC□HGM' AH' CFG' %BH □H?HG' □MM ' OABMN' GG' CFG' JAAN' ?C' . □DH?@' LG □H' CA' @APG ' AD' GPGH' CF?C' CFGDG' J? ' ?' JAAN ' G' @B C' BKKA G' G□CFGD' CF?C' CFG' N□ C?HOG' J? ' OAHCD?OCGN' >AD' CFG' KAGC8 ' KBDKA G ' AD' CF?C' CFG' JAAN' O?MMGN' . □DH?@' G CGHNGN' >DA@' CFG' F□MM' >AD' A@G' @□MG ' □HCA' CFG' KM?□H R

6' X NH !' NH G' NH PP' I 9P' I MT' T J' GPP' N' K I !Q+R

' KDA CD?CGN' GH G ' A' LG?BC□>BMME' NG OD□LGN' LE' CF□ ' □@K? □AHGN' ?OCDG ' JGDG' CFG' DG BMC' A>' CFG' □HCGH □CE' J□CF' JF□OF' FG' F?N' >□ GN' FGD' @□HN' BKAH' CF?C' K?DC' A>' CFG' KM?E' JF□OF' FG' J? FGD GM>' CA' ?OC ' H' CFG' GHNG?PABD' CA' GC' CFG' JADN ' □HCA' FGD' FG?N ' FGD' AJH' >□HG' GH□B ' J? ' H?CBD?MME' (□HNMGN' CA' LGFAMN' ?' OA@KMGCG' P□ □AH' A>' CFG' JAHNGD>BM' OGHG ' ?□H' ?HN' ? ?□H' JGDG' CFG' JADN ' DGKG?CGN ' AH' CF?C' H□ FC' JF□OF' FG' OABMN' HGPGD' >AD GC R □H' CFG' □MGHOG' A>' CF?C' H□ FC' JFGH' ?MM' ?LABC' FGD' JGDG' MGGK□H ' HN' CFGH' FG' FG?DN' CFG' AJM' FD□G(' ?DH□N C' CFG' FBDD□GN' CGK ' □H' CFG' >?C?M' OF?@LGD R ?HN' FG' ?J' CFG' LMAANE' F?HN ' A>' CFG' ? ? □H Z?HN ' KGD AH□>E□H ' CFG' @BDNGDG ' FG' DB FGN' CA' N□K' FGD' AJH' F?HN ' □H' CFG' ADG' A>' %BHO?H ' C' □ ' KGD>GOCME' GP□NGHC' CF?C' CF□ ' □HCGH □CE' A>' OAHOGK□AH' F? ' O?DD□GN' CFG' FADDAD ' >?D' LGEAHN' CFG' M□@□C ' A>' KMG? BD?LMG' G@AC□AH ' ?HN' F? ' KDANBOGN' ?MM' CFG' CGDDAD ' A>' ?' DG?M' @BDNGD ' A' DG?NGD' A>' CFG' KM?E ' ?HN' HA' KGOC?CAD ' O?H' DG ?DN' CF□ ' KM?E' ? ' & D ' □NNAH ' DG ?DNGN' □C ' H' CF?C' H□ FC' FG ' KDAL?LME' >AD' CFG' >□D C' C□@G ' F?N' ?' CDAH ' CFAB F' □@KGD>GOC' P□ □AH' A>' CFG' OF?D?OCGD' A>' $?NE' & ?OLGCF ' BOF' ? ' FG' ?>CGDJ?DN ' NGM□HG?CGN' □C ' ?HN' □H' CF?C' O? G ' JF?C' CA' ?MM' A>' B ' @B C ' BHNGD' ?HE' O□DOB@ C?HOG ' LG' ?' JAD(' A>' ?DC ' FAJGPGD' MAD□AB ' J? ' CA' FGD' ?M@A C' ?' DG?M□CE ' C' J? ' CFG' □ AM?-C□AH' A>' CFG' OGHG ' NG@?HNGN' LE' FGD' AJH' ?CCG@KC' CA' OAHOG□PG' CFG' OF?D?OCGD' A>' $?NE' & ?OLGCF ' JF□OF' @?NG' □C' A' CGDD□LMG' CA' & D ' □NNAH ' S ' F?PG' CA' DG ?DN' □C' ? ' ?' K?DC' A>' ?' DG?C' JFAMG ' JF□OF' OA@L□HG ' ?HN' F?D@AH□TG ' J□CF' ?MM' ?DABHN' □C ' >AD' JF□OF' JG' ?DG' ?NGQB?CGME' KDGK?DGN' LE' JF?C' F? ' AHG' LG>ADG ' ?HN' JF□OF R GPGH' □>' JG' QA(' ?C' □C' ? ' ?' K□O-CBDG' JF□OF' DGKDG GHC ' AHME' CF?C' AHG' KADC□AH' :' CFG' ?OC□AH R Z□?' C□MM' □C ' AJH' DGKA G ' □C ' AJH' F?D@AHE' A>' OAMABD□H ' □C ' AJH' OF□?DA OBDA R □ ' CA' LG' GGH' BHNGD' ?' H?CBD?M' M□ FC ' #FGDG' J? ' ?' KDGCGDH?CBD?M' M□ FC' BKAH' □C' JFGH' & D ' □NNAH ' ?J' □C' ? ' FG' F? ' NG OD□LGN

#FG' ? ? □H?C□AH' OGHG' A>' CFG' GOAHN' ?OC' □ ' N□@ME' F?NAJGN' ABC' □H' CFG' >□D C' M□HG ' A>' CFG' ND?@?' JFGH' CFA G' @E CGD□AB ' LG□H R

R' ' NHP %O ' M!O' G ' 9O' !' NHP ' MNN P8
HMN' 9 U' ! N' 9 UP' N P' !HMA NM!NG' %NHP' PM NH+
#!O' TPN' M P' !%N R S

F?PG' DG AMPGN' CA' A

<' JL !' NHP' HPMNH'
HP P' N ' I PPN' NH' MKAPNH+R

G' (HAJ' CFGDG' □ ' CA' LG' GP□M ' HG' A>' CFG' OD□C□O ' A>' CFG' M? C' ? G' F? ' AL GDPGN ' =' #FG' □COFG ' FGDG' NG@' CA' LG' □HCDANBOGN' >AD' HA' ACFGD' KBDKA G' CF?H' CA' >GMM' B ' CFGE' ?DG' CA' @GGC' ? ?□H I' >' CFG' □COFG ' F?N' HAC' LGGH' □HCDANBOGN' □H' CFG' >□D C' OGHG R □>' JG' F?N' HAC' (HAJH' CF?C' CFGE' JGDG' ?LABC' =' CA' @GGC' J□CF' & ?OLGCF I R CFG' H?DD?C□PG' A>' & ?O-LGCF8 ' KDAJG ' □H' CFG' GOAHN' OGHG ' ?HN' CFG' DG AMBC□AH' A>' %BHO?H' CA' ODG?CG' F□@' #F?HG' A>' ?JNAD ' JABMN' F?PG' LGGH' OA@K?D?C□PGME' KA□HC-MG ' #FG' CGH' M□HG ' A>' CFG' >□D C' □COF' OGHG' □PG' CFG' (GE HACG' A>' CFG' CD? GNE' #FGE' C?(G' B ' ABC' A>' CFG' OABD G' A>' ADN□H?DE' M□>G ' CFGE' CGMM' B ' CFGDG' □ ' CA' LG' ?' =' BKGDH?CBD?M' AM□O□C□H ' I' CFGE' FAJ' B ' CF?C' JG' ?DG' GHCGD□H ' □HCA' CFG' G@K□DG' A>' CFG' BHDG?M' ?HN' CF?C' CFG' O□DOMG' A>' CFG' @? □O□?H' □ ' CA' LG' ND?JH' ?LABC' B ' FGH' CFG' □COFG ' =' @GGC' ? ?□H I' CFG□D' ? GHOE' LGOA@G ' @ADG' OMG?D' #FGDG' CFGE' ?DG ' ? ?□H' @BCCGD□H ' A>' CFG□D' BHOABCF' KGMM ' □H' M?H B? G' J8F□OF' ABHN ' HG□CFGD' A>' G?DCF' HAD' FG?PGH ' ADCBH?CG' ?DG' CFA G' JFA' F?PG' H EGD' GGH' CFG' >C? G' □COFG

7 ? Ε '

A>' &?0LGCF' F? M((G >AD@ ' J□CF LG?DN ' ?HN' LDAA@ ' □H □H '
%8 PGH?HC8 'CD?PG C□G A>' F?(KGD8 '8□O '>□HG ?HN AMG@H
□HNGGN' LB□ J□LOF' □ ' BCCGDME □H?NGQB?CG CA' G KDG 'CFG F?(KGD□?H
CFG ?OC□AH' ?HN' KDGK?DG' B '>AD' □C '>?C?W KDA DG ' ?HN' OAN B@@?C□AH
□G?'? ' □□ NAG ' HA□ >AMA□' CFG □MW KDA' DGNGD' CFG BKGD C□C□AH
□ J? ' ?H' G>>GOC A>' F□ ' OAN B@@?CG' (□MW CA' DGNGD' CFG BKGD C□C□AH
G GHC□?MWE KAGC□O?W' FGH J□G' FG?D' □H' □@? □H?□AH' CFG' NDB@' BKAH
CF?□ J□MN' FG?CF' ?HN' GG CFG P□OCAD□AB ' GHGD?W '□H' CFG ='KDAKGD' CG@-
KGD?@GH□ >AD' GHGD?□H ' AD' DGOG□P□H ' BKGD C□C□AB ' □@S'DG □AH I'0'
J□G' OAHHGOC J□CF CFG G KAGC□O?W □CB?□AH ' CFG' MA>□E LG?□H ' A>' CFG
='□@KGD>GOC' KG?(GD I' ?HN' CFG MA>□GD' J□ADN ' A>' CFG ='KDAKFG□D' DGGC-
□H

6' #'99' HM99' MKAPNH[' HM 9'N ' \NHPP'\NHMIP' 7' :9M I G[
#'99' HM 9' MKAPNH' ' HM 9'N ' \NHPP'\NHMIP' 7' M O [
#'99' HM 9' MKAPNH[\NHM\ GHM99 AP' 2OIQ' HP PM7NP +R

C' □ ' CFG DA@?HOG A>' CF□ ' □CB?□AH' J□OF CFDA J ' □C ' OF?□@' APGD' CFG
BL GQBGH□' FADDAD ' A>' CFG DG?M□ ?D□AH A>' CFG KDAKFGOE ' ?HN' (GGK ' CFG
J□FAMG' ND?@?' J□CF□H' CFG M□@□C ' J F□OF' GK?D?C□G' CD? GNE' ?HN'
= GJ ?C□' ?MGHN?D I' >' A@G #?CG' F?N' M?□N' F□ ' F?HN' BKAH' &?0-
LGCF' ? ' BKAH' $G?D' V>AD' %8 PGH?HC' J□FA' N□N' @?HB>?OCBDG' □C' □HCA'
A@GCF□H ' J□OF□H' BK' CA' CFG' C□@G A>' B□H' J? ' KM?□EGN' ? ' F?(KGDG8 '
F?N' EG□' ?' @?O(' A>' CFG KAG□' □H' F□@ R □>' A@G @?CCGD A> '?OC' JADN'
@AH GD' F?N' CFAB F□' □C' AAN' GDP□OG' CA' ='CFG D□' □H ' GHGD?C□AH' I' CA'
GC' D□N' A>' CFG □COFG ' ?HN' F?N' □PGH' CFG B BDKGD' ?HN' F□ ' J□>G AHME'
CFG□D' ?@L□C□AH' CA' C□@BM?CG' CFG□D' ?OC□AH ' FG' JABM' F?PG' KDANBOGN' ?
+GAD G' . ?DHJ□GM' □H CG?N' A>'?' &?0LGCF' :

C' □ ' BKAH' CFG' N□>>GDGH□' DGOGK□AH' A>' CFG BKGDH?CBD?W' □H>MBGHOG'
KDAOGGN□H ' ABC' A>' CFG' N□>>GDGH□' 0AH C□CBC□AH' A>' CFG□D' @□HN ' LE' JF□OF
J G' @B □' ?KKDGO□?CG' CFG CD□('□H ' N□>>GDGHOG ' □H' CFG OF?D?OCGD ' A>'
&?0LGCF' . ?H'QBA' ?HN' $?NE' &?0LGCF ' #FG G' ?DG' CFG' CFDGG' JFA'
?DG' CFG' AMG' DGO□K□GHC ' A>' CFG KDAKFGOE' A>' CFG □COFG ' ?HN' CF□ '
0AH □NGD?C□AH ' ? ' □C ?KKG?D ' CA' B ' @B □ NGCGD@□HG ?WW CF?□ F? ' LGGH'
?□N' BKAH' CFG' VQBG C□AH' JFGCFGD' &?0LGCF' J? ' AD' J? ' HAC' ?' LD?PG
@A@GHC' CFGE' G OW?□@R

6' #'O J1 'M'O M 1 8
$ MKAPNH'O N9'K IPRS

?WW CFG□D' KAJGD ' ?DG' LGHC' BK' CA' CFG ?OOA@KW□ F@GHC' A>' F□ ' DB□H'
F?(KGDG' □PG 'B ' HA' OFADB G ' A>R

'X P'OMIKP'N 'NHP' PKH PG' 7' J '7PPN8R
?HNR

6' XP'79T'AT'I QHN'%'I IQG\'N LG' 7'GL NG+R

G' @?(G ' CFG' BKGD C□C□AH CGWW' BKAH' CFG ?OC□AH' A>' CFG' CD? GNE' ?HN'
HA□' ?'SA□'>?DCFGD' ?HN' CFB ' FG' @?(G 'CFG' BKGD C□C□AH' F?D@AH□TG' J□CF
CFG ?OC□AH' ?HN' KDGK?DG' B '>AD' □C '>?C?W KDA DG ' ?HN' OAN B@@?C□AH'
C' J? ' ?H' G>>GOC A>' F□ ' OAN B@@?CG' (□MW CA' DGNGD' CFG BKGD C□C□AH'
G GHC□?MWE KAGC□O?W' FGH' J□G' FG?D' □H' □@? □H?□AH' CFG' NDB@' BKAH'
CF?□ J□MN' FG?CF' ?HN' GG CFG P□OCAD□AB ' GHGD?W '□H' CFG ='KDAKGD' CG@-
KGD?@GH□ >AD' GHGD?□H ' AD' DGOG□P□H ' BKGD C□C□AB ' □@S'DG □AH I'0'
J□G' OAHHGOC J□CF CFG G KAGC□O?W □CB?□AH ' CFG' MA>□E LG?□H ' A>' CFG
='□@KGD>GOC' KG?(GD I' ?HN' CFG MA>□GD' J□ADN ' A>' CFG ='KDAKFG□D' DGGC-
□H

6' #'99' HM99' MKAPNH[' HM 9'N ' \NHPP'\NHMIP' 7' :9M I G[
#'99' HM 9' MKAPNH' ' HM 9'N ' \NHPP'\NHMIP' 7' M O [
#'99' HM 9' MKAPNH[\NHM\ GHM99 AP' 2OIQ' HP PM7NP +R

C' □ ' CFG DA@?HOG A>' CF□ ' □CB?□AH' J□OF CFDA J ' □C ' OF?□@' APGD' CFG
BL GQBGH□' FADDAD ' A>' CFG DG?M□ ?D□AH A>' CFG KDAKFGOE ' ?HN' (GGK ' CFG
J□FAMG' ND?@?' J□CF□H' CFG M□@□C ' J F□OF' GK?D?C□G' CD? GNE' >DA@' CFG
= GJ ?C□' ?MGHN?D I' >' A@G #?CG' F?N' M?□N' F□ ' F?HN' BKAH' &?0-
LGCF' ? ' BKAH' $G?D' V>AD' %8 PGH?HC' J□FA' N□N' @?HB>?OCBDG' □C' □HCA'
A@GCF□H ' J□OF□H' BK' CA' CFG' C□@G A>' B□H' J? ' KM?□EGN' ? ' F?(KGDG8 '
F?N' EG□' ?' @?O(' A>' CFG KAG□' □H' F□@ R □>' A@G @?CCGD A> '?OC' JADN'
@AH GD' F?N' CFAB F□' □C' AAN' GDP□OG' CA' ='CFG D□' □H ' GHGD?C□AH' I' CA'
GC' D□N' A>' CFG □COFG ' ?HN' F?N' □PGH' CFG B BDKGD' ?HN' F□ ' J□>G AHME'
CFG□D' ?@L□C□AH' CA' C□@BM?CG' CFG□D' ?OC□AH ' FG' JABM' F?PG' KDANBOGN' ?
+GAD G' . ?DHJ□GM' □H CG?N' A>'?' &?0LGCF' :

C' □ ' BKAH' CFG' N□>>GDGH□' DGOGK□AH' A>' CFG BKGDH?CBD?W' □H>MBGHOG'
KDAOGGN□H ' ABC' A>' CFG' N□>>GDGH□' 0AH C□CBC□AH' A>' CFG□D' @□HN ' LE' JF□OF
J G' @B □' ?KKDGO□?CG' CFG CD□('□H ' N□>>GDGHOG ' □H' CFG OF?D?OCGD ' A>'
&?0LGCF' . ?H'QBA' ?HN' $?NE' &?0LGCF ' #FG G' ?DG' CFG' CFDGG' JFA'
?DG' CFG' AMG' DGO□K□GHC ' A>' CFG KDAKFGOE' A>' CFG □COFG ' ?HN' CF□ '
0AH □NGD?C□AH ' ? ' □C ?KKG?D ' CA' B ' @B □ NGCGD@□HG ?WW CF?□ F? ' LGGH'
?□N' BKAH' CFG' VQBG C□AH' JFGCFGD' &?0LGCF' J? ' AD' J? ' HAC' ?' LD?PG
@A@GHC' CFGE' G OW?□@R

' 9P OQP%G / NP M T'&PIM iG' 9P ;'L;' ;
N' LPK IPiG' 7'3iQ9 GH'5 MIMN K'- PNG' 9;' ;'L;' +

6' : PMMP'NMMI'A NH'HT'NHP'M99 HM 9 HP PM7NP +R

FD ' D ' CFG' AMG'?MMB DAH'CA'CFG JGDND D CGD ' = G'J DMM' KG?('>BDCFGD I'
G?M ' FD ' >?CG

GDG' CFGH' BK' CA' CFD ' KADHC JG F?PG' CFG' BKGDH?CBD?M' DH>MBGHOG'
NGCGD@DHDH ' CFG' KDA DG ' A>'CFG ?OCAH' JCF 9' KDGODKDC?CAH' JFDOF' DH
OAH AH?HC' CA' H?CBDG' ?M@A C BKGDH?CBD?M' ?HN' EGC' DC D ' DH DC GM>' CDDOCME
DC GM>' ?KKG?D ' ?M@A C BKGDH?CBD?M' ?HN' EGC' DC D ' DH DC GM>' CDDOCME
OAH AH?HC' CA' H?CBDG' C' JAD(DH ?HN' CFDAB F' FB@?H K? AH ' ?HN'
>GGMDH ' C' JAD(CFDAB F' BHLGMDG>' ? ' JGMM' ? ' CFDAB F' LGMDG>' C
KGD@?NG ' CFG' GHCDDG' ?OCAH' JFGCFGD' DH DC ' DGKA G' AD' DH DC ' CB@BMC'
FGH = CFG' FG?GH ?LDG?CF' @GMM ' JAADH ME I' DH &?OLGCF8 ' O? CMG' JG
>GGM CF?C DC D ' ? ' CDG?OFGDAB ' CA' CFG =' GHCMG' GH G ' I' A>'%BHO?H' ? ' CFG
LM?HN D F@GHC ' A>'FD ' FA CG ' ?HN' CF?C CFD ' 0?M@' D ' LBC' CFG' KDGMBNG' CA'
CF?C = BHDBME I' HD FC JFDOF D ' CA' >AMMAJ JCF DC ' =' M?@GHCDH I' ?HN' DC '
=' CD?H G ODG?@ ' A>' NG?CF I' . BC' CFD ' D ' ?' K?DC' A>' CFG' KAGCDE' A>' CFG
?OCAH' JFDOF' (GGK ' CFG' FADDAD' JDCFDH' CFG' LNBHN ' KDG ODCLGN' LE' ?' F
?DC' #FG' LG?BC>BM' ?N?KC?CAH' A>'CFG' OF?D?OCGD ' CA' CFG' ?OCAH' 0AH CB-
CBCG '?' FD FGD' G GHC?M' A>'CFG' KAGCDE' #FG' M? C OGHG' A>' CFG' >D C ?OC'
JFGDG' &?OLGCF' @?D F?M ' LG>ADG' F@' CFG' ' 0AH GQBGHOG ' A>'
CFG' @GNC?CGN' ODC@G' ?HN' CFG' '?D B@GHC ' ? ' ?H C DC ' 0A@@' -
DAH R ?MM' CFG' JFDMG >AD GCCDH ' CF?C CFG DG?M' QBG CAH ' CF?C A>'CFG' AHG
CGK' >DA@' DHHAOGHOG' HCA' BDMCR ?HN' JFGDG ?MM' CFG G' KDBNGHC?M' 0AH-
NGD?CAH '?DG ?C' AHOG' APGDJFGM@GN' LE'?' BDMCE' GHGD E' JFDOF' NG KD G '
? ' JGMM' ? ' DGHABHOG ' CFG@R CF?C OGHG ' DHNGGN' @ADG' CGDDLMG' CA' B '
CF?H' CFG ? ? DH?CDAH' OGHG ' >AD DC FAJ ' B ' FAJ' @GH'>?MM' CFDAB F'
CFGD' AJH' JG?(HG ' ?HN' CFG' L?N' CDGH CF' A>'ACFGD ' . BC DH ?MM' CFD '
JBG' GG' CFG' NGGK' KFDMA' AKFE' A>' CFG' KAGCR F' ' KDA>ABHN' (HAJMGN G' A>'
CFG' KDCH ' A>' FB@?H' ?OCDAH' NGDDPGN' KGDF?K ' >DA@' F ' G KGDGHOG' A>'
GPGDE N?E' ODC@G ?HN' >AMME' LBC MC>CGN' DHCA' CFG' F FG C' KAGCDE' LE' F ' '
@?DPGMMAB ' D@? DH?CDAH' G' (HAJ' CF?C ?>CGD' CF ' CFG' OGHG' A>' CFG'
@BDNGD' @B C' OA@G ' MM' CFG' KDGK?D?CADE' DHODNGHC ' ?DG' KAGCO?M ' #MCG'
F?PG' HAJ' HA' KAJ'GD' APGD' F@

/ U' i%'MQM i'?' OM P' i N+R
6'?%9Q 'i ' I P
?'MI ' M7 M O'N ' NH iU' HMM?' HM P%O IP'8

6' : PMMP'NMMI'A NH'HT'NHP'M99 HM 9 HP PM7NP +R

FD ' D ' CFG' AMG'?MMB DAH'CA' CFG JGDND D CGD ' = G'J DMM' KG?('>BDCFGD I'
G?M ' FD ' >?CG

GDG' CFGH' BK' CA' CFD ' KADHC JG F?PG' CFG' BKGDH?CBD?M' DH>MBGHOG'
NGCGD@DHDH ' CFG' KDA DG ' A>'CFG ?OCAH' JCF 9' KDGODKDC?CAH' JFDOF' DH
OAH AH?HC' CA' H?CBDG' ?M@A C BKGDH?CBD?M' ?HN' EGC' DC D ' DH DC GM>' CDDOCME
>GGMDH ' C' JAD(CFDAB F' BHLGMDG>' ? ' JGMM' ? ' CFDAB F' LGMDG>' C
KGD@?NG ' CFG' GHCDDG' ?OCAH' JFGCFGD' DH DC ' DGKA G' AD' DH DC ' CB@BMC'
FGH = CFG' FG?GH ?LDG?CF' @GMM ' JAADH ME I' DH &?OLGCF8 ' O? CMG' JG
>GGM CF?C DC D ' ? ' CDG?OFGDAB ' CA' CFG =' GHCMG' GH G ' I' A>'%BHO?H' ? ' CFG
LM?HN D F@GHC ' A>'FD ' FA CG ' ?HN' CF?C CFD ' 0?M@' D ' LBC' CFG' KDGMBNG' CA'
CF?C = BHDBME I' HD FC JFDOF D ' CA' >AMMAJ JCF DC ' =' M?@GHCDH I' ?HN' DC '
=' CD?H G ODG?@ ' A>' NG?CF I' . BC' CFD ' D ' ?' K?DC' A>' CFG' KAGCDE' A>' CFG
?OCAH' JFDOF' (GGK ' CFG' FADDAD' JDCFDH' CFG' LNBHN ' KDG ODCLGN' LE' ?' F
?DC' #FG' LG?BC>BM' ?N?KC?CAH' A>'CFG' OF?D?OCGD ' CA' CFG' ?OCAH' 0AH CB-
CBCG '?' FD FGD' G GHC?M' A>'CFG' KAGCDE' #FG' M? C OGHG' A>' CFG' >D C ?OC'
JFGDG' &?OLGCF' @?D F?M ' LG>ADG' F@' CFG' ' 0AH GQBGHOG ' A>'
CFG' @GNC?CGN' ODC@G' ?HN' CFG' '?D B@GHC ' ? ' ?H C DC ' 0A@@' -
DAH R ?MM' CFG' JFDMG >AD GCCDH ' CF?C CFG DG?M' QBG CAH ' CF?C A>'CFG' AHG
CGK' >DA@' DHHAOGHOG' HCA' BDMCR ?HN' JFGDG ?MM' CFG G' KDBNGHC?M' 0AH-
NGD?CAH '?DG ?C' AHOG' APGDJFGM@GN' LE'?' BDMCE' GHGD E' JFDOF' NG KD G '
? ' JGMM' ? ' DGHABHOG ' CFG@R CF?C OGHG ' DHNGGN' @ADG' CGDDLMG' CA' B '
CF?H' CFG ? ? DH?CDAH' OGHG ' >AD DC FAJ ' B ' FAJ' @GH'>?MM' CFDAB F'
CFGD' AJH' JG?(HG ' ?HN' CFG' L?N' CDGH CF' A>'ACFGD ' . BC DH ?MM' CFD '
JBG' GG' CFG' NGGK' KFDMA' AKFE' A>' CFG' KAGCR F' ' KDA>ABHN' (HAJMGN G' A>'
CFG' KDCH ' A>' FB@?H' ?OCDAH' NGDDPGN' KGDF?K ' >DA@' FD

HN' CFGH' OA@G ' CFG ACFGD' KDAKFGOE' A>' ?>GCE R

6' MKAPNH' GHM99' ip p ' M]]J GH%O' AP ' JiN 9
: PMN' I M I ' O'N ' H QH' 5J!G iMIP H 99
HM99' K I P' MQM iGN' H I +R

%AG ' C' KDANBOG' CD?HQB□MC□CE'W MN' LGEANH' □ ' NG KGD?CAH' R

/' (" ' M ' T]' NHP' p O' G GNP G'\
, 'I T 9 OD
(" ' M I P' NHPT i N' AT' T]'O
, ' iOppo' I T 9 O+
(" ' 2i7PKNPO' AP' NHP'M ' HP p i' NHPT OP8 +
HP' QM99 L i'Q' 7H GP' XH ' MG%' KM I P' AT'Y +
iO' OM I %O' M99' NH GP' NHMN' N JGN' NHP I '[S2' O O' HPM'
' % G'N ' ,NH pp' I T' 9 O' NHMN' A iQ' T]' O
MKOJ 7' G 79PO' N ' 3iQ9Mi O+
(" ' O9PO' N ' 3iQ9Mi O' \
', # T ' I T' Q O' 9 O+
(" ' I P' NH]' MiN K LMM6N' I T O PMO' PWL9 NG
HP' 79 QHNT' LJ L GP' ip p ' G %P N U+
i9PGG' NHP' OPPO' Q ' NH' N ' O I' NH G' I IPiN
HP' p T' 7 GN9 iQG 7' I T' HPM N' GHM99 AP'
HP7 GN9 iQG 7' I T' HM i%+ # iO' p pi' i +
'K i' I T' NH JQHNG NH' MKNG' AP' N' NH JQH%' MiO' O ip8
P CP' JL i' O 7P8 Q P N ' NHP' PQQP' 7 NHP' G O'
HP' KMGN9P' 7' MKOJ77?' 99 GJ L GP8
" G' 7P' H G' AMAPG' MiO' M99 J!7 NJ!MNP' G J9G'
HM%' N MKP' H I' i' H G' 9 ip+R

'#FG' DGCDL□BC□AH' J F□OF' >?M ' BKAH' $?NE' & ?OLGCF' □ ' KDGO□ GME' CF?C
J F□OF' □ ' >□CGN' CA' FGD' B□MC' #FG' KAJ□GD>BM' J□MM □ ' BL$GOCGN' CA' CFG
NA@□H?C□AH' A>' FGD' AJH' □@KGD>GOC' GH G ' G' O?HHAC' NJGMM' BKAH' FGD'
CGDD□LMG' KBH□ F@GHC' #FGDG' O?H' LG' HACF□H ' LGEAHN' CFG ? AHE A>R

6' " P%G' NHP' G IP99' 7' NHP' A9 O' GN 99 ' M99%HP' LP 7J1 PG' 7' # MA M' 99 i N'G PPNPi'
NH G' 9 NN9P' HMiO+R' $

#FG' PGH G?HOG' >?M ' @ADG' GHCME' AH & ?OLGCF ' >AD' FG' □ ' □H ?OC□P□CE '
FG □ ' C□MM' OAH>□NGHC' □H' KDAKFGC□O' GOBD□C□G ' #FG' OAHCG@KM?C□PG'
@GM?HOFAME' J F□OF ' FAJ GPGD' A00?' □AH?ME' 0A@G ' APGD' F□@' □H' CFG' M? C'
CDB MG □ ' C□MM' CDBG' CA' CFG' KAGCDE' A>' F□ ' 0F?D?OCGD R

#FG' KD□HO□KMG' J F□OF' J G' F?PG' CFB ' A' □@KGD>GOCME' ?CCG@KCGN' CA'
G F□L□C' ' CFG' MG?NO□H ' 0F?D?OCGD□ C□O' A>' CF□ ' MAD□AB ' CD? GNE□ ' J□CFABC'
NABL□' CF?C' J F□OF'OAH C□CBCG ' CFG' G GHC□?M N>>GDGHOG' LGCJ GGH' ?' JAD(' A>' CFG' F□ FG C' GH□B ' ?HN' ?' JAD(' A>' @GN□AOD□CE' □CFABC' 0 '
R LE' JF□OF' JG' FGDG' G KGO□?MME' @G?H' CFG' ?L□M□CE' CA' KDANBOG' CDAH '
G O□CG@GHC' LE' CFG' N□ KM?E' A>' 0GHG ' A>' FADDAD R ZM' KAGC' A>' CFG' F□ FG C'
ADNGD' J ? ' GPGD' @ ?NG ' LBC' CF□ ' ?MAHG' NAG ' HAC' @?(G' BOF' ?' KAGC' >'
FG □ ' O?MMGN' BKAH' CA' KDG GHC' BOF' OGHG ' CFGE' @B C' GPGH' □H' CFGD'
@A C' CD□(□H ' >AD@ ' LG' ? AO□?CGN' J□CF' CFG' LG?BC□>BM' #FG' KDG-
G@□HGHOG' A>' F□ ' ?DC' □H' CF□ ' K?DC□OBM?D' O?H' ?MAHG' KDGPGHC' CFG@' ?>>GOC□H '
CFG' □@?' □H?C□AH' LGEAHN' CFG' M□@□C ' A>' KMG? BD?LMG' G@AC□AH' #A' (GGK'

#FG' K? ? G' ?HN' CFG' BL' GQBGHC' AHG' A>R

6' I ' MiO'N I 8 MiO'N I +
ppLG' i' NH G' LPMNT' LMKP' 7 I' OMT'N ' OMT+
'NHP' 9MG%' GT99MA9P' 7' PK OPO'N I P8
iO' M99' J ' TPGNP OMTG' HM P' 9 QHNPO' 7 9G'
HP' MT'N ' 0J6NT' OPMNH R S

CGMM' B ' A>' A@GCF□H ' F□ FGD' ?HN' LGCCGD' □H' F□ ' 0F?D?OCGD' CF?H' CFG'
? ? □H' ?HN' CFG' B' BDKGD' G' J ?' CFG' P□OC□@' A>' = CFG' GQB□PAO?'
C□AH' A>' CFG' >□GHN'I' ?HN' FG' F?' K?N' ?' >G?D>BM' KGH?MCE' >AD' F□ ' LGM□G>'
#FG' >□H?M' ?PGH □H ' □ ' ?' 0A@K? □AH?CG' AHG' >AD' FG' N□G ' ?' J?DD□AD8'
K? □H ME

6'?' 99 i N' T P9O+
', H GG' NHP' Q J!O' AP?' P' T J!Q' M9K 9 i %G' 7PPN+
iO' N ' AP' AM' NPO' NH' NHP' MAA9P%G' KJ GP+
H JQH' IMI' O' AP' K IP' N ' 5J!G iMIP
iO' NH' J' LL G%O' AP iQ' 7 i ' IMI'A i+
4PM' ?' 99' N' T NHP' 9MGN' P7 P' I T' A OT'
?' NH ' I T' M 9 UP' GH P9O+R

"ÐOF?DN .AH?H?HN ?HN GH ?MMGE ,LAA(G 0?MMGN CFG Ð CADE A?
#DAEMB ,?HN DG BN? I' OOADN□H ,CA &?MAHG8 ,CFGADE,CFG OAKE-
D□ FC□H 472 J? ,?H "ALGDC ,,LBC□H 476'? HGJ,GHCDE'OM?□@ ',C ?AD
.AH□?H ?HN ?MMGE, H'CF?C 0? G CFGDG @B C F?PG LGGH ?H? Ð H-
HGJ,G□NÐC□KH A?,JF□OF CFG CÐCMG K? G LG?D ,CFG ?NN□CAH?M DGOA@@GHN?-
□AH A>,=' ,□C J? ,?OCGN,LE CFG Ð H 8 ,&?SG CE8 GDP?HC ,?C CFG
+MALG I

HN FGDG ?D G ,CFG QBG □AH JFGCFGD CFG G KDG □AH <=HGPGD
□?MGN J□CF CFG □? GIR =?HGPGD OM?KKGD OM?JGN J□CF CFG K?M@ ,A?CFG
PBM ?D I R = HA□ BMM□GN J□CF CFG @A(E LDG?CF A>,CFG @BM□CBNG I'
@G?H CF?C CFG KM?E F?N HA□LGGH ?OCGN ?C ?MM,AD CF?C□C F?N HA□LGGH
?OC GN AH CFG KBLM□D' C? G, #FGDG□ ,? AAN NG?M A?KDAL?L□M□CE□H
CFG OAHSGOCBDG A?#□GO(' BKAH CF□ ' BLSGOC

6 2!' NHP' LM9MKP 7G IP Q PM LP G IMQP'7 H I' N MG L AMA9T PWL PGGT
N IPO' IP 7 9J 'MIO' PGG OM L' ='GJAE IPO'M I N KP 7M'GPK IO'K LTS'
Y MG MKMPO'AT'NHP IQMG MEPGNTMG P MING'MN'NH ;9 AP8% I N'NH I9OIQ' N'IPKPG_
GM T'N ' PLPMN'N9 P TPM # JN' I'7MK'A NH'NHPGP K L PG M P IP'MIO'NHP'GM IP
PO N LI#' HP'N JNH' G'NHMN' I'NHMN' PO N I' HP P'I ,IPIN I' G IMOP' 7'NHP'
NHPMN P' I' H KH'NHP'L9MT' MG PL PGPINPO' P7 IO'M'L P7MKP' I' H KH'N 'Q P'MI'
MOO N IM9 M9JP'N '"HP'L PKP'NHP'A UGP99P G MGGP N'NHMN' N' IP P'HMO'APPI'MKNPO'
MIO'L INPO'M'IP 'N N9P LMQP' I' H KH' N' G'GNMNPO'N 'HM P'APPI'MKNPO'MN'NHP':9 AP
HPMN P'ATH G MEPGNT%G P MI%G# HP' OMNP' 7'NH G'MG' 7'NHP' NHP'N N9P LMQP'
G' =+R

OOADN□H ' CA' CF□ ' CFGADE' ?'KDG>?OG □ ' J□CCGH' J F□OF GC ' ABC' J□CF' ?
M%G' (HAJ'H' CA' LG' BOF' LE' GPGDE' KGD AH' JFA' LBE ' CFG' LAA(' ?HN'
CFGH' LGO?Ð G' CFG M%G □ ' >ABHN' ABC' ?' HGJ' C□CMG K? G' □ ' KD□HCGN'
?O(HAJMGN □H ' CFG' CDBCF' CF?C' CFG KM?E' F?N' LGGH' ?OCGN' ?HN' CFG' ME□H '
KDG>?OG □ ' J□CFND?J□H' HAC' ?MM' CF□ ' CFG @A C >ADOGN' □HCGDKDGC?C□AH
A>' CJA' PGDE' □@KMG >?OC ' J F□OF' ?DG' KGD>GOCME' OAH □ CGHC' J□CF' G?OF
ACFGD'W' #DA□MB ' ?HN' DG □N? J? ' ?' HGJ' KM?E' ?HN' □C F?N' HAC' LGGH
KBLM□OME' ?OCGN' J FGH' CFG AD□ □H?M' GN□C□AH?M' P?MBG' CA' CFG' K□GOG I' >AD' FG
HAC' C?CG CF□ ' CA' □PG ?H' = ?NN□C□AH?M' P?MBG' CA' CFG' K□GOG I' >AD' FG
GP□NGH□ME CF□H('CF?C CFG O□DOB@ C?HOG @?E' LG' □HSBD□AB ' CA' CFG ?MG
A>' CFG' LAA(' R =' "G>B G' HAC' HAD' M□(G' CF□ ' CFG' MG ' >AD' HAC' LG□H '
CF?C□C J? ,';?' HGJ' KM?E' HGPGD' C?MGN' LE' CFG C? G I' J? ,?MCA GCFGD'
>?M G R

6' ‡ - LP' I'H G ¥ MA9P' 7'3O N IG 7' HMUGLPM PMG -9MTG %HM IQ' IPI_
N IPO' IP 7 9J 'MIO' PGG OM L' ='GJAE IPO'M I N KP' 7M'GPK IO'K LTS'
Y MG MKMPO'AT'NHP IQMG MEPGNTMG P MING'MN'NH ;9 AP8% I N'NH I9OIQ' N'IPKPG_
GM T'N ' PLPMN'N9 P TPM # JN' I'7MK'A NH'NHPGP K L PG M P IP'MIO'NHP'GM IP
PO N LI#' HP'N JNH' G'NHMN' I'NHMN' PO N I' HP P'I ,IPIN I' G IMOP' 7'NHP'
NHPMN P' I' H KH'NHP'L9MT' MG PL PGPINPO' P7 IO'M'L P7MKP' I' H KH'N 'Q P'MI'
MOO N IM9 M9JP'N '"HP'L PKP'NHP'A UGP99P G MGGP N'NHMN' N' IP P'HMO'APPI'MKNPO'
HMU'AP IQ7 JIO' 'I N JG 7M9GPH O'NHPT'M7NP M OG GJLL PGGPO' NHP'L P7MKP8
MIO'L INPO'M'IP 'N N9P LMQP' I' H KH' N' G'GNMNPO'N 'HM P'APPI'MKNPO'MN'NHP':9 AP
HPMN P'ATH G MEPGNT%G P MI%G# HP' OMNP' 7'NH G'MG' 7'NHP' NHP'N N9P LMQP'
G' =+R

BE
,
@ÐADG CF?H CF?C =',$AMM□B ' □>' ?' JD□CGD' A>' CF?C H?@G G □ CGN' ?C' ?M' J?
□CFABC' GHCGD□H ' □HCA' CFG' QBG CAH' JFA' $AMM□B ' J? ' AD' LGM□GP□H
GB□CAH' LD□H ' B ' L?O(' CA' CFG' KA□HC' JF□OF' J□G' J?' JD□CGD' A>' CF?C H?@G' >DA@' JF□OF' J□G'
GHB□HG' 0AKE' #FG' 0AH □NGD?C□AH ' A>' CFG' >AMA' ?DG' HAC' 0ADDGOC□AH ' A>' GDDAD ' □H
CFG' AD□ □H?M' NABLC' CF?C G?0F' CG C J? ' KD□HCGN' >DA@' ?' N□>>GDGHC' LBC' ?
G' F?PG' HA' NABLC' CF?C G?0F' CG C J? ' KD□HCGN' >DA@' ?' N□>>GDGHC' LBC' ?
GHB□HG' 0AKE' #FG' 0AH □NGD?C□AH ' A>' CFG' GHB□HGHG ' A>' CFG' AD□ □H?M'
GN□C□AH' LD□H ' B ' L?O(' CA' CFG' KA□HC' JF□OF' J□G' C?DCGN' □H ' D□CFGD' DBMG ' D?CFGD' CF?H' LGGH'
CFG@' V?' BLSGOC' KBLM□OME' KD?E' >AD' CFGD□' DBMG ' D?CFGD' CF?H' LGGH'
KD?GN' V?' EAB' ?DG' LE' KM?EGD ' JFA' AM□O□C' EABD' □HNBM GHOG' □H' KDA-
MA BG ' ?HN' GK□MA BG

G' F?PG' LG CAJGN' @ADG' ?CCGH□AH' BKAH' CF□ ' □HQB□DE' CF?H' □C @?E
?KKG?D' ?C' >□D C □HCD□H □O?MME' CA' NG GDPG ' LBC' □C @B C' LG' LADHG' □H' @□HN
CF?C' CFG' AD□ □H?M' QB?DCA' GN□C□AH ' BKAH' CFG' ODGNL□M□CE' A>' JF□OF' CFG G
?' @BC□M?CGN' ?HN' □@KGD>GOC' OAKE' DA@' JF?CGPGD' GOAHN?DE' ABDOG
QBG C□AH ' F?PG' LGGH D?□ GN □ ' HAC' M□(G GPGD?M' A>' CFG' G?DM□E' QB?DCA '
CG C A>' CFG' QB?DCA' ?HN' A>' CFG' >AM□A' ' JF□OF' JG' F?PG' □HN□O?CGN' □H' ABD'
>AAC HACG ' B>>□O□GHCME' FAJ' CF?C' CFG' AD□ □H?M' J? ' @A C ?OOBD?CGME'
GHB□HG' 0AKE' #FG' ?MCGD?C□AH ' A>' CFG' >AM□A' ?DG' HAC' 0ADDGOC□AH ' A>' GDDAD ' □H
KD□HCGN' #FG' ?MCGD?C□AH ' A>' CFG' >AM□A' ?DG' HAC' 0ADDGOC□AH ' A>' GDDAD ' □H
CFG' AD□ □H?M' LBC' >AD' CFG' @A C K?DC' M□ FC' OF?H G ' A>' G KDG □AH'
G' F?PG' HA' NABLC' CF?C G?0F' CG C J? ' KD□HCGN' >DA@' ?' N□>>GDGHC' LBC' ?
GHB□HG' 0AKE' #FG' 0AH □NGD?C□AH ' A>' CFG' GHB□HGHG ' A>' CFG' AD□ □H?M'
GN□C□AH' LD□H ' B ' L?O(' CA' CFG' KA□HC' JF□OF' J□G' C?DCGN' □H ' D□CFGD' DBMG ' D?CFGD' CF?H' LGGH'
CFG@' V?' BLSGOC' KBLM□OME' KD?E' >AD' CFGD□' DBMG ' D?CFGD' CF?H' LGGH'
KD?GN' V?' EAB' ?DG' LE' KM?EGD ' JFA' AM□O□C' EABD' □HNBM GHOG' □H' KDA-
MA BG ' ?HN' GK□MA BG

□NG I' DA@' CF□ ' C?CG@GHC □C ?KKG?D ' CA' B ' F□ FME' KDAL?LMG' CF?C □H
CFG □H C?HOG ' LAGF' A>' $G?D ' ?HN' #DA□MB ' ?HN' DG □N? ' CFG KM?E ' JDGG
KGD>AD@GN ' >AD' CFG' >□D C C□@G' LG>ADG' CFG (□H ' CF?C CFG' OAK□G A'
N□>>□OBMC'A>'CFG' QB?DCA' ?HN' A>' CFG' >AM□A' □>?O?C□AH ' .BC' BKKA G ?HA□GC□AH' A?'OM?
KDAKD□GCAD ' A>' CF□ ' >□D C OAMMGOCCGN' GN□C□AH A>' F?(KGDG8 ' JADG ' GHCGDGN'
BKAH' CFG' C?C□AHGD 8 DG □ CGD ' □H' 423 ' ?' OM?□@' CA' CFG' OAKE□ F□ A>'
□ CGGH' KM?E ' = HAC' >AD@GDME' GHCGDGN' CA' ACFGD' @GH I' #FG' KDA-
KD□GCAD ' A>' CF?C' GN□C□AH' J GDG' >ABD' □H?M' QB?DCA ' FFN' @GD GN' LE'? □ H-
K?DC' CFG' 0AKE□ F□ A>' CFG' AD□ □H?M' QB?DCA ' FFN' @GD GN' LE'? □ H-
@GHC' .BC □C □ ' HAC' N□>>□OBMC' CA' □@? □HG CF?C .AH□?H' ?HN' ?MMGE' AD
CFGD□' DGKDG GHC?C□PG ' CFG' KA G AD ' A>' CFG' 0AKE' A>' CF□ ' □H MG' KM?E'
@□ F□ F?PD' DG>B GN' CA' 0A@G' CA' CGD@ ' J□CF' CFG' KDAKD□GCAD ' A>' CFG' >AM□A'
?HN' CF?C' CFG' KD□HC□H ' A>' CF□ ' KM?E' J? ' HGOG □C ?KKG □H' ?HN' DG □N?' BHNGD' CF□ ' □@KDG -
K? ? G □H' CFG' KDG>?OG' CA' #DA□MB ' ?HN' DG □N?' BHNGD' CF□ ' □@KDG -
□AH' R ='#F?H(' ADCBHG' >AD' CFG' O?KG □C F?CF' @?NG ?@AH C' EAB'
□HOG' LE' CFG' D?HN' KA G AD ∦ J□M ' ' LGM□GPG' EAB' FABMN' F?PG
KD?GN' >AD' CFZ@' D?CFGD CF?H' LGGH' KD?GN' I' #FGDC □ ' ?H' AL OBD□CE' □H
CF□ ' K? ? G J F□OF' J G O?HHAC' ?CCG@KC' CA' OM?D' BK' □>' JG' DGOG□PG ='CFG
D?HN' KA G AD I' ?' ' CFG' KDAKD□GCAD ' A>' CFG' +MALG' #FG?CDG ' ∂ .BC'
BKKA G ='CFG' D?HN' KA G AD' I' CA' I' LG' ?' #GO(' F?' 'OAHSGOCBDGN' A@G
DG?C' KGD AH? G' KDAL?LME' CFG' (□H ' F□@ GN>' >AD' J FA@' CFG' KM?E' J?'
G KDG ME' JDCCGH' ?HN' ?' DG?C' NG?M A>' CFG' AL OBD□CE' A>' CFG' KDG>?OG
P?H□ FG ' U.E' CFG' D?HN' KA G AD ∦ J□M ' EAB' FABMN' F?PG' KD?EGN' >AD'
KD?EGN' VP' EAB' ?DG' LE' KM?EGD ' JFA' AM□O□C' EABD' □HNBM GHOG' □H' KDA-
MA BG ' ?HN' GK□MA BG

G' F?PG' LG CAJGN' @ADG' ?CCGH□AH' BKAH' CF□ ' □HQB□DE' CF?H' □C @?E
?KKG?D' ?C' >□D C □HCD□H □O?MME' CA' NG GDPG ' LBC' □C @B C' LG' LADHG' □H' @□HN
CF?C' CFG' AD□ □H?M' QB?DCA' GN□C□AH ' BKAH' CFG' ODGNL□M□CE' A>' JF□OF' CFG G
?' @BC□M?CGN' ?HN' □@KGD>GOC' OAKE' DA@' JF?CGPGD' GOAHN?DE' ABDOG
QBG C□AH ' F?PG' LGGH D?□ GN □ ' HAC' M□(G GPGD?M' A>' CFG' G?DM□E' QB?DCA '
CG C A>' CFG' QB?DCA' ?HN' A>' CFG' >AM□A' ' JF□OF' JG' F?PG' □HN□O?CGN' □H' ABD'
>AAC HACG ' B>>□O□GHCME' FAJ' CF?C' CFG' AD□ □H?M' J? ' @A C ?OOBD?CGME'
GHB□HG' 0AKE' #FG' ?MCGD?C□AH ' A>' CFG' >AM□A' ?DG' HAC' 0ADDGOC□AH ' A>' GDDAD ' □H
KD□HCGN' #FG' ?MCGD?C□AH ' A>' CFG' >AM□A' ?DG' HAC' 0ADDGOC□AH ' A>' GDDAD ' □H
CFG' AD□ □H?M' LBC' >AD' CFG' @A C K?DC' M□ FC' OF?H G ' A>' G KDG □AH'
G' F?PG' HA' NABLC' CF?C G?0F' CG C J? ' KD□HCGN' >DA@' ?' N□>>GDGHC' LBC' ?
GHB□HG' 0AKE' #FG' 0AH □NGD?C□AH ' A>' CFG' GHB□HGHG ' A>' CFG' AD□ □H?M'
GN□C□AH' LD□H ' B ' L?O(' CA' CFG' KA□HC' JF□OF' J□G' C?DCGN' □H ' D□CFGD' DBMG ' D?CFGD' CF?H' LGGH'
CFG@' V?' BLSGOC' KBLM□OME' KD?E' >AD' CFGD□' DBMG ' D?CFGD' CF?H' LGGH'
KD?GN' V?' EAB' ?DG' LE' KM?EGD ' JFA' AM□O□C' EABD' □HNBM GHOG' □H' KDA-
MA BG ' ?HN' GK□MA BG

=',#FG' AD□ □H?M' CADE I' ?E ' I DENGH' =' J? ' J D□CCGH' LE' AHG' $AMM□B ' ?'
$A@L?DN' □H' $?C□H' PGD G' ?HN' CD?H M?CGN' LE' F?BOGD' □HCA' I H N□ F '
□HCGHNGN' ' BKKA G' ?' ?C□DG AH' CZG' □HOAH C?HOE'A>' JA@GH' '>□HN'
HAC□FH ' 7 ' □C ?@AH ' CFG' ?HO□GHC ' HAC' A' @BOF' ? ' CFG' H?@G DG □N?'
AHOG' @GHC□AHGN' F?(KG?DG' V?' ' F□HCGN XX $ ' .'
$ ' 0 J' @ANGMGN' □C' □HCA' CF?C KM?E' JF□OF □ ' HAJ' 0?MMGN' LE' CFG
H?@G' A>' #DA□MB ' ?HN' DG □N? I' G F?M' F?PG' AOO?' □AH' CA' DGPGDC' CA'
%DENGH8 ' AK□H□AH' A>' CF□ ' KM?E' ?HN' CA' F□ ' CD?H @BC?C□AH' A>' □C' □HCA'
J F?C FG' OAH □NGDGN' F□ ' AJH' >□HG AMN' F?BOGD' F□@ GM>' KG?(' A>'
=' &EHG' BOCAD' $AMM□B I' ?HN' □H' F□ ' ?NNDG ' CA' CFG' &B G' □H' CFG
LG □HH□H 'A>'CFG' GOAHN' LAA(' FG' ?E R

6' 'P P T9 P'?' IP'PWPKG8
HMN' 7'I 'GPIN IPI%2'NH G'PIO NP+
JN' JN' 7'/MN I' I' I'T'N IQJP' N' NP+R

?' A@GJF?C A@GJFGDG I U JG ?C AHOG DGOG PG CFG = #DA B ' ?HN DG GNG I' A>' F?BOGD ? ' CFG >ABHN?CAH A>' F?(KGDG8 ' KM?E ' >' F ' KGD>GOC ?OQB?HC?HOG' JCF CF?C KAG@ CFGDG O?H LG HA' NABLC ' F?BOGD ' A>' ?M ! H M F' CPDCGD ' J? ' CFG AHG JFA' JABMN F?PG CFG DG?CG C OF?D@' >AD F?(KGDG ' #FG " ?KG A>' $BODGOG ' JDCCGH KDGO GME HF CFG ?@G' PGD D>O?CAH ? ' F?BOGD8 ' ='#DA B ' ?HN DG GNG I' FGH $ADGHT Z ' H' #FG' &GDOF?HC A>') GHOG ' G OM?@ R

6'2!' GJKH M' ! QHN
9JG ' I PNH !UG ' I J! NPO NHP EM!' M99
! O' G QH%O' H G G J9 N M O' NHP : PK M!' NP ! NG'
X HP P PGG O' 9MT' NHMN' ! QHN R S

PG @?E' LG' BDG CF?C F?(KGDG F?N HF ' @DDN CFG >AMMAJ H ' K? ? G ' A>' F?BOGD R

6' L !' NHP M99B' 7MGN' PUP J9O' HP M9U
MO' !' NHP : PPU7 G H GN' HP J9O' TGPP+
! O' N ' H I GP97 QHN' NHJG' HP J9O' TNM9U
Y / ' [T !OP ' G I !P b' 9MOT' 7 PP+
1 ' P99 G T !OP ' NHP P' NHP' NP ! N7P' AP+
! O' NHP ! KP' K I PNH' NH G M ' NHMN' G G ' G NP
HMN' ! ' I T G J9 2' 7PP9 N' O NH' I P' A NP+%
HP' OMT' Q %NH' 7MGN ' M ! O' M7NP ' NHMN' KM I P' P P+
! O' TPN' KM I P' ! N' N ' 9JG PGP O'
" P' 9 UPNH' 7 NH' AT' HPOQP ' AT' N PP ' AT' Q P+
! O' 7M ' H G' HPMO' P ' N9 P' M99 HP' 9M O+R

& D ' + AN J H' F? ' SB CME' AL GDPGN' CF?C CFG F?(KGDH' OA@@GHC?CAD ' F?PG' NAHG' HSB COG' CA' F?BOGD H' HAC @ADG' N COHOCME' ? AOO?CH ' F ' KAG@' J CF' CF ' DG@?D (?LMG' KM?E

6'2N' J9O' AP' PWN P I P9T' J! EJGN' N ']J N' NHP' K !G OP MN ' 7' HMJKP %G' L P I' 7' Y 9JG' M ! O' PGP OP% NH JN ! N K !Q' NHP' H QH' H ! J ' N' HMG' PKP PO' !' HM !Q' APP !' I MOP' NHP' 7 J! OMN !' 7' !P 7' NHP' L9MTG' 7' HMUPGLPM ' HP P' GPP I G N ' HM P' APP !' !' NH G' PGLPKN' M' G N 7' K !GL MKT' !' NHP' K I I P! NMN G' JL !' HMUP_ GLPM ' MQM !GN' NHP' Q9 T' 7' J ' 9O' 3 ! Q9 GH' AM O' 2 !' HMN' NHPT' HM P' X NNP !' K !_ KP ! !Q' NH G' L9MT ' NHPT' I MUP' M P T' G9 QHN' I P ! N !' 7' HM ! KP 8 NHPT' HM P' ! N K !GJ9NPO' H G' L P I ' 7 ' NHP' LJ L GP' 7' 99JGN MN !Q' NH G' MO I MA9P' O M I M8' M ! O' NHPT' HM P' MQ PPO ' MG' 7M ' MG' L GG A9P ' N ' N M ! G7P ' N ' M ! NHP ' MJNH ' NHP' H ! J ' 7' HM !Q' GJLL9 PO' I MNP M9G' N ' NHP' N MQ K' M N GN' 5 ' ? H ! G !' GMTG ' Y HMUPGLPM P' HMG' !' H G' GN T' 7 99 PO ' 7 ' NHP' Q PMNP ' LM N ' NHP' 9O' A U' 7' MWN !' H KH' MG' NHP !' P T' L LJ9M 8 AJN' NHP' KHM MKNP ' 7' HP G NPG ' 7' H KH' N' I MUPG ! ' I P ! N !' G' M' L 7' NHMN' NH G' L9MT' MG' NNP !' M7NP ' HML I M !' HMO' LJA9 GHPO' H G' P G !' 7' " I P % ' NPP P ! G' MGGP NG' NHMN' Y HMUGLPM P' PKP PO' NHP' Q PMNPGN' LM N' 7' H G' I MNP M9G' 7 ' NHP' GN JKNJ P' 7' NH G' L9MT' 7 I ' NHP' TP' UP' 7' / TOQMNP+% # ! O' , ' M9 !P' PLPMNPO9T' N PMNG' NHP' Y " GN T' 7' NHP' 5PGN JKN !' 7' T ' N M ! G9MNPO' AT' MWN ! % MG' Y HMUGLPM P%G' MJNH NT' % !' NHP' K I L G N !' 7' NH G' O M I M ' + + + + ' HP' 7MKN' G ' NHMN' NHP' L9MT' 7' HMUPGLPM ' P' M P' HP P' K !G OP !Q' HMG' 7 ' NG' I M !' 7 J! OMN !' NHP' L P I ' 7' HMJKP ' M ! O' G ! OPANPO' 7 ' I M ! T' MKKPGG T' HP9LG' N ' NHP A UG' I P ! N ! PO' AT' NHP' K I I P ! NMN G++++++++++

6 X P' M P' ! N ' H P P ' 9P7N' N ' L AMA 9 NT' M ! O' K !EPKNJ P' MG' N ' NHP' JGP' I MOP' AT' HMUPGLPM ' 7' NHP' L P I ' 7' NDMJKP ' " G NHP ' G J KPG P P' HML I M ! ' G' N M ! G9M_ N !' 7' " I P ' NHP' Y T' U% 7' / TOQMNP ' M ! O' MWN !%G' Y " GN T' 7' NHP' 5PGN JKN !' 7' T+% 2N' G P99 U ! ' NHMN' NHP P' G ! ' N MKP' 7' NHP' LM N KJ9M ' GN T' 7' Y 9JG' M ! O' PGP OP' % M I !Q' NHP' M ! K P ! NG' 2N' KKJ G ' ! OPPO ' ! ' / TOQMNP' M ! O' MWN !8 AJN' NHP' ! M I P' M ! O' MKN !G 7' - M ! OM JG ' M' P T' PGGP ! N MG' LP G !MQP' !' NHP' NM9P' MG' P9MNPO' AT' HMUPGLPM ' M ! O' HMJKP ' M P' P ! N P9T' M ! N !Q ' PWKPLN' M' G !Q9P' I P ! N !' 7' H I ' AT' / TOQMNP ' M ! O' NHMN' NH' M !' PWL PGG' P7P P ! KP' N ' HMJKP ' MG' H G' MJNH NT' HMUPGLPM ' HMG' NMUP !' NHP' GN T' 7' HMJKP ' NH' M99' NG' I LP 7PK_ N !G' M ! O' OP7PKNG ' M ! O' HMG' K L PO' NHP' GP PG' 7' NG' !K OP ! NG' NH' H G' KJGN I M T' 7 OP9 NT8 M !' PWMKN ! PGG' GP9O I ' N ' AP' 7 J! O' !' M ! T' NHP ' O M I MN K' NP +R' 7

MCFAB F' CFG' @?H' HO NGHC ' H' CFG' ?NPGHCBDG ' A>' CFG' + DGG (' MAPGD' ?HN' F ' >?CFMG ' @ CDG ' ?DG' >AMMAJGN' J CF' MCCMG ' NGP?C AH ' EGC ' HNGKGHNGHCME' A>' CFG' JAHNGD>BM' N>>GDGHOG' H' CFG' OF?D?OCGD T?C AH ' CFG' JFAMG' CADE' BHNGD' CFG' CDG?C@GHC' A>' F?(KGDG' LGOA@G ' CFADAB FME' AD H?M ' H' HA' KM?E' NAG ' FG' ?KKG?D' CA' B ' CA' F?PG' ?' @ADG ' OA@KMGCG' @? CGDE' APGD' F ' @?CGD?M ' AD' CA' @ABMN' CFG@' HCA' @ADG' KM? C O' F?KG ' LE' CFG' >ADOG' A>' F ' @A C' BDK? H ' @? H?C AH ' #FG' DG?C' A@GD O' KAG@' CFG' DBNG' DA@?HOG' A>' CFG' NG CDBOC AH' A>' #DAE ' CFG' LG?BC>BM' GM?LAD?C AH' A>' CF?C' DA@?HOG' LE' F?BOGD ' ?DG' ?MM' BLSGOCGN' CA' F ' PAHNDAB ' ?MOFG@E ' ?HN' HGJ' >AD@ ' ?HN' OA@L H?C AH ' ?DG' O?MMGN' >ADCF' A' M>GM (G ' CF?C' ?MM' CFG' DGKDG GHC?C AH ' JF OF' F?PG' KDGOGNGN' CFG@' MAA (' OAMN' ?HN' D N' C?CBG ' HAC' J?D@' ?HN' LDG?CF H ' @GH' ?HN' JA@GH ' AMGD N G8 ' CFGADE' A>' CFG' KD HO KMG ' BKAH' JF OF' CF ' J? U G>>GOCGN' ' JG' F?PG' HA' NABLC ' G GHC?MME' CDBG R

6 9M I ' HM97' !K9 !PO' N ' AP9 P P' NHMN' HMUGLPM P%G' I M !' AEPKN' @ ' GHM99' 2' MNHP ' GMT' H G' J9 !Q' I LJ9GP% ' MG' N ' N M ! G9MNP' NHP' L PN K' HP PG' 7' - MQM ! G I ' !N ' NHP

+ ' 9P OQP ' / NP M T' &P I M ! G ' 9# +' L# #
N ' / 7P' 7' HMJKP ' 9# +' @EN + ' L#)+
n / NP M T' &P I M ! G ' 9# +' L# +
)' & O KJ9 JG9T' P! OP PO' AT' - LP' MG' - -' ' (%$ %
2 - H TQ M ! ' HP9 I PNG ' NH' K PGNG ' A NH' 7' H GPHM ' M ! O' I PNM9 ' !' I NMN !' 7' NHP' : POK ' MLLPM ' !' " LP%G' K 99PKN ! ' M ! O' G ' 7M ' APM ' JN' NHP' L PN%G' OPGK LN !+
) $

! N' 9PGG' JOP ' AJN' I P' ! NP99PKNJM99T' Q JG ' M ! O' I P' '2# M G' 7' H GN M ! ' KH M9 T ' M ! O' N ' GJAGNM ! N MNP' NHP' O GN ! KN' M ! O' Q MKP7J9' L 7 9PG' ' JN9 ! PG' 7' NHP' " I P K' PL K' !N ' NHP' 79PGH' M ! O' A9 O' 7' NHP' I M ! N K' O M I M S ! ' GH N ' N ' Q P' M' Q M ! O' H GN T L PKP' ! ' NHP' AJGN' GNT9P' 7' # 9AP N' 5J P +R' ?' ++

CFABC ?CCG@KCH ' CA' G FL C' ?MM CFG @?CGD?M ' PF O>' F?(KGDG' F? ' CFB ' @?NG' F ' AJH ' JG F?MM ' H' CFG' MMB CD?CAH ' CA' G?OF' ?OC ' PG' A@G' K? ? G ' >DA@' F?BOGD8 ' KAG@' F?K@?H8 ' A@GD ' ? CAH8 ' ='%G CDBOCAH' A>' #DAE I' ?HN' $EN ?CG8 ' ='#DAE' . AA (I' H' JF OF' CFG' DG?NGD' @?E' CD?OG' CFG' DG G@LM?HOG ' PF OF' FAJGPGD' ALP AB ' AD' @HBCG ' GQB?MME' @?H>G C' CFG' ?@G' KAJGD' H' CFG' ND?@?CO' KAGC' A>'>? F AH ' ?' KGD>GOC' J8FAMG' ABC' A>' CFG' @A C' HOAH DBAB ' K?DC

' %#

H' ABD' HACOG' A>' CFG' OA CB@G' >AD' CFG' & N B@@GD' F C8 ' %DG?@' PG F?PG' PGH' ?' NG OD KCAH' A>' CFG' NDG ' ?HN' ?D@ ' A>' CFG' + DGG (' NBD H ' CFG' FGDAO?M ' ? G '?' MMB CD?CGN' LE' CFG' >DGTG' A>' CFG' ?DCFGHAH ' #A' CFG' H>AD@?CAH' CFGDG' OAMMGOCGN' @?E' LG' ?NNGN ' AH' CFG' KDG GHC' A00? AH ' CF?C' ?>>ADNGN' CA' B ' LE' CFG' M?N' A>' A@GD ' ?HN' CFG' P? G ' ?HN' C?CBG ' KA G GN' AD' NG OD LGN' LE' CFG' M?CG' & D ' AKG ' OOADN H ' CA' CFG' M?CCGD' ?BCFAD CG ' CFG' #DAS?H ' ?HN' ACFGD' FDE ?H ' ?KKG?D' CA' F?PG' JADH' CFG' CBH O' J CF' MGGPG ' CA' CFG' JD C ' CFG' C FC' CDAB GD ' AD' K?HC?MAAH ' ?HN' CFG' O?K' J CF' CFG' KAHC' LGHN H ' >ADJ ?DN ' H' CFG' >AD@' A>' JF OF' CFG D' FGM@GC ' JGDG' @?NG ' H' J ?D' CFG' CBH O' A>' @?M' OA@KA GN' A>' D H ' GJH' >M?C' BKAH' MG?CFGD' AD' OMACF ' M (G' CFA G' A>' CFG' H MA ' ? AH ' ?HN' AD@?H ' A>' CFG' GMGPGHCF' OGHCBDE ' JABMN' GG@' CA' F?PG' N C H B FGN' CFG@' H' GHGD?M >DA@' CFG' + DGG (' JFA' JADG' CFG' OB D? ' ?HN' CFG' DG?PG ' A@GD ' FAJGPGD ' LE' F ' NG OD KCAH ' A>' CFG' ?D@ABD' A>' CFG' #DAS?H ' FGDAG ' JABMN' HNBOG' B ' CA' LGMGPG' CF?C' C' N N' HAC' ?MJ?E ' A' G GHC?MME' N>>GD' >DA@' CF?C' A>' CFG' + DGG (' G' NG OD LG ' ?D ' JFGH' ?D@ H ' >AD' CFG' A@L?C' J CF' & GHGM?B ' ? ' KBCC H ' AH' DG?PG ^' >? CGHGN' J CF' MPGD' LBCCAH ' ?' CFAD? ' AD' LDG? C KM?CG ' ?HN' ?' FGM@GC' J CF' ?' FAD GF?D' ODG C ' H' ?H' AMN' O M ?H' P? G' CAA ' H' CFG' AKG' OAMMGOCAH ' V ! HG? ' ' DGKDG GKCGN' H' OA@KMGCG' + DGO ?H' ?D@ABD ' ?H ' JG' ?CFGD' >DA@' CFG' P? G ' CF?C' CFG' FDE ?H' F GMN ' M (G' CF?C' A> CFG' @?TAH J? ' CFG' KGMC?' AD' @?MM' G@ MBH?D' F GMN ' ?HN' CM GD' >?PABD CG' JG?KAH' CFG' L KGHH ' AD' NABLMG' ? G ' , GC' A@GD' NAG ' HAC' @?(G' CF ' N C HOC AH ' LBC' ?D@ ' CFG' #DAS?H ' J CF' CFG' M?D G' ADL OBM?D' F GMN' A>' CFG' + DGG (' CFG' CJA' KG?D ' CFG' JADN ' YO ' G' ?M A' NG OD LG ' CFG' J?DD AD ' A>' LACF' ?D@ G ' ? ' JG?D H ' AOO? AH?MME' CFG' (H ' A>' LG? C ' APGD' CFG D' ?D@ABD' ' C' CF?C' A@G' A>' CFG' KAGC ' ?HN' K? HCGD ' A>' + DGGOG ' M (G' ?MM' CFA G' A>' CFG' & NNMG' G ' DGKDG GHCGN' KGD AH ' A>' GPGDE' H?C AH' ?HN' KGD AN' H' CFG' A CB@G' A>' CFG' OABHCDE' ?HN' C@G' H' JF OF' CFGE' CFG@ GMPG ' JDACG' AD' K?HCGN ' AD' 8? ' CFGDG' DG?MME' MCCMG' AD' HA' N>>GDGHOG' LGC JGGH' CFG' + DGG (' ?HN' #DAS?H ' JFGH' ?D@GN' >AD' L?CCMG' W UU' H' CFG' M?CCGD' O? G ' ?DG' JG' CA' MAA (' BKAH' CFG' HCGDG C H ' > BDG ' A>' ?D ' ?HN' ACFGD' FDE ?H ' DGKDG GHCGN' AH' CFG' ?HO GHC' P? G ' YO ' ? ' CF H ' A>' HA' ?BCFAD CEW' #FG G' ?DG' QBG C AH ' CFG' N 0B AH' A>' JF OF' JABMN' DGQB DG' @BOF' @A DG C @G' ?HN' K?OG' CF?H' O?H' LG' ?>>ADNGN' CA' B ' H' CFG' KDG GHC' H C?HOG ' ?HN' JG' @B C' OAHCGHC' ABD GMPG ' J CF' CFG' ?PAJ?M' CF?C' JG' MG?H' CA' CFG' ' NG ' ?HN' OAH NGD' CF?C' CFGDG' O ' CF?C' DG@?D (?LMG' N>>GDGHOG' LGC JGGH' CFG' + DGO ?H' ?D@ABD' ?HN' CF?C' A>' CFG' #DAS?H ' JF OF' @?E' LG' AL GDPGN' H' CFG' G ?@KMG ' ?MMBNGN' CA' # FG' FDE ?H ' ?DG' DGKDG GHCGN' H' FAG ' CFG' + DGG (' H' ?HN?M ' AD' P CF H?(GN' >GGC ' JFGH' JG?D H ' CFG' DG?PG

#FG' ?D@ ' A>' OF MMG ' PADH' LE' ?CDAOMB ' ?DG' ?N' LE' A@GD' CA' F?PG' LGGH' A>' LD? ' ADH?@GHCGN' J CF' AMN ' #FA G' @?NG' >AD' OF MMG ' LE') BMO?H' JGDG' A>' P?D AB ' @GC?M R CFG' DG?PG ' A>' CH ' CFG' OAD GMGC' A>' AMN ' CFG' JADN' A>' LD? ' CFG' FGM@GC' J CF' ?' >ABD>AMN' ODG C' A>' MNGN' FAD GF?D ' CFG' F GMN' A>' CFG' @A C' GM?LAD?CG' PAD (@?H F K ' #FG' ?D@ ' A>' %A@GN' JGDG' ?MM' LD? ' ' CFA G' A>' S? ' CGGM ' ?@G@HAH8 ' OB D? ' J? ' OA@KA GN' A>' CGGM ' CH ' ?HN' AMN ' ?HN' ADH?@GHCGN' J CF' ND? AH ' #FG' F MC' A>' F ' JADN' J? ' AMN ' CFG' FG?CF' MPGD ' ' LBO (MGD' J? ' NG>GHNGN' LE' CGH' OODOMG ' ?HN' CJGHCE' LA G ' A>' LD? ' ?HN' H' CFG' OGHCDG' F?N' ?' + AD AH8 ' FG?N ' #FG' FGM@GC' J? ' BD@ABHCGN' LE' ?' >ABD>AMN' ODG C' A>' FAD GF?D

2 # " LP ' H P P ' O PG' ! N' Q P' JG' H G' MJNH NT' 7 ' G ' OPG Q ! MN ! Q' NHP' 7 QJ P' H KH' ! ' NHP' PO N !' 7' ' G' NP I PO' 6' M' 5)' M ! +R
' HP ! ' HP P7 P' 6 NHP' P99 Q PM PO' : PPUG\R' 5 PG' ! N' NHMN' OPG Q ! MN !' I L9T' M' LPKJ9 M NT' O GN ! QJ GH ! Q' NHP I ' 7 I ' NHP ' # G MN K' ' NHP ' LL ! P ! NG' \

i' N 99'HM P'2'NM PO+
' #T'N 'NHP' 9PM PI i'Q' AJN' HP P%G TPN' i'NHP' O'
HP PM7NP' 'NHP'UIPMO'IQ'NHP'IMU i'Q' 7'NHP'KMUP'NHP' HPMN '
iQ' 7'NHP' PI'MIO'NHP' AMU i'Q' 7'NHP'T'J'IJGN'GNMT'NHP'
#G'N JP'NH J'NP99%G'N'IP' HPI'2'GMT'2'9 P'HP 8
JN'GMT iQ'NHJG' iGNPMO'7 'gMIO'+AM9I+
H J'9MT%'N i'p p T'QMGH$NHMN'9 P'HMNH'Q PI'IP'
HP'UI 7P'NHMN' IMOP'N+
' 2'GLPMU'i 'I P'NHMI'N JNH+
i' H J'O G'N i D'GLPMU'G 'IJKH+
' %OM NH'2%9'i N'IPOO9P'i%#' /PN'HP'AP'MG GHP' G'
7'GHP'AP'7M '%N G'NHP'APNNP'7 'HP 8 MI'GHP'AP' N'GHP'HMG
NHP'IpiOG'i'HP' i'HMiOG+
i': O'-MiOM JG'[" 'i '-MiOM JG'
' 2' HM P'HMO'IT'9MA J'7 'IT'N M 9# 99 NH JQHN'
i' 7'HP 'MiO' 99 NH JQHN' i' 7'T J'Q iP APN PPI'MIO'
APN PPI'AJN'GI M99'NHMiUG'7 'IT'9MA J+
i'X HMN'M N'NH J'MiQT'-MiOM JG'\ HMN' NH'IP'\
' pKMJGP'GHP' G U i'N 'IP'NHP P7 P'GHP%G i N'G'7M '
MG "P9PI';MI'GHP' P P'N'U i'N 'IP'GHP' J9O'AP'MG'7M '
i'O OMT'MG' "P9PI';G i' JiOMT+' JN' HMN' KM P'2\' 2'
KM P'i N'MI'GHP' P P'M'A9MKU M I 8 %G'M99' IP'N 'IP+
i' MT'2'GHP' G i N'7M '\
' 2'O'i N'KM P' HPNHP'T J'O ' 'i + HP%G M'7 9
N 'GMT'APH iO'HP'7MNHP 8 9PN'HP'N 'NHP' : PPUG8 MiO'G '2%99
NP99'HP'NHP'IPWN I P'2'GPP'HP '7 'IT'LM N+'2%99 IPOO9P'i '
IMUP'i 'I+ P'i'NHP'IMNNP +
i'-MiOM JG S
' N'2+
i' PPN'-M OM JG S
' - MT'T J'GLPMU'i 'I P'N 'IP'8 2' 99'9PM P'M99'MG
2'7 JiO' N'MiO'NHP P'MI'PIO+
(' ' &
i'-PMKP' T J' JiQ MK JG K9MI J G'[LPMKP'‡ JOP'
G JiOG[
D H'G'9 IP'MG' N'GNMiOG' G'MI' iQPi JG'MiO'NMGNP7J9'K PKN i'AT& P‡' HP'
9IP'i'A NH'NHP' Q IM9G'MLLPM G'NJJG S
6' 'QN M N 'NHPi'GHP'K IPG HPi'GHP' G'NHPiKP+R
$ FXP'O'i N' PKP P'NH G'LMGGMQP'MG'MI'iNP EPKN i'APQ ii iQ'6' *'NHMN'HP'
) %

O 9G' i'A NH'G OPG'["P9Pi'IJGN'ippOG'AP'7M +
X HPi' NH'T J'A9 O'T J'OM 9T'LM i'N'HP'NHJG+
2'KMii N'7QHN'JL i'NH G'M QJI piN8
2N' G'N 'GNM %O'M'GJAEPKN'7 'IT'G O+
JN'-MiOM JG S1'Q OG'H 'O'T J'L9MQJP'IP'[
2'KMii N'K IP'N ' PGG O'AJN'AT'-MiOM 8
#iO'HP%G MG'NPNKHT'N 'AP' %O'N '
#G'GHP' G GNJAA i 7KHMGNP'MQM iGN'M99'GJ N+
P99' IP'#L 99 '7 'NHT'5MLHip%G 9 P+
X HMN' PGG O' G' HMN'-MiOM 'MiO' HMN' P\
"P'APO'G2iO M8 NHP P'GHP'9 PG'M'LPM 9
PN PPI' J'29 JI'MiO' HP P'GHP' PG OPG+
/PN'N'AP'KM99%O'NHP' O9O'MiO' MiOP iQ'79 O8
1J GP97'NHP'IP KHMIN8 MiO'NH G'GM 9 iQ'-MiOM
1J'O JAN7J9'H LP' J'K i T'MiO'OJ'AM U+

' &= '

& ' " 'i 'L iKP' 9JG'\ HP P7 P'i N'M7 P9O\'
i' pKMJGP'i N'NHP P' H G' IMi%G Mi G P'G NG+
O ' IMi GH' N'G N 'AP'7 I'NHPiKP+
X HMN'ip G'+DipMG'7 I'NHP'7P9O'N OMT'\
6 $ HMN'-M G'G PNJ ipO'H IP'MiO'HJ N+
i' T' H I'+O3ipMG\
; ' 9JG'AT' pip9MJG+
i' /PN'-M G'A9PPO' %G'AJN'M'GKM'N 'GK i8
-M G'G'Q %O' NH' pip9MJG%H i+' 9 &
"M U'[HMN'Q O'GL N'G JN' 7N i'N OMT[
i' PNNP'MN'H IP+7G' J9O'2' I QHN%% P P'6 I MT+RS'
JN'N 'NHP'GL N'MA MO' S# P'T J'A JiO'NH NHP'\
' 2i'M99'G 7N'HMGNP+
i$ IP'Q ' P'NHPi'N QPNHP +
9J?4 &

HMIOR'7 ' HMN'O PG 9JG OPG P'Y HP' GH'G ik IL9PNP+ HP'IPMIiQ'
P'KiKP P'N 'AP'MNHP S2i'NHT'O GK J GP'NH J'HMiO PGN'NHMN'HMiO' 7 HP G' i'
H GP'K ILM G i'BK+
'? HiG i'PWL9M iG%- ' % %'MG'NHP'I GN'PW]J G'NP'GPiG A 9 NT' 7N JKH+

A9JGHPO M!O -M G G KHM7PO M!O M99 NHP PGN G 9MJQHPO NHMN N LMGGPO+D

- 9PN N ! 8 7 N HMG APP! M Q PMN H 9P Q !Q AT+

X P99 K JG ! 2 N 9O T J M NH !Q TPGNP OMT8 NH !U ! %N+ %

- 2 O +

0 2%99 AP G !%N G N JP8 HP 99 PPL T J M! %N P P M I M! A ! ! #L 9+

-$ #!O 2%99 GL !Q JL ! H G NPM G M! %N P P M !PNN9P MQM !GN MT+ ^ -!& " "

" M U NHPT M P K I !Q 7 I NHP 7 P9O HM99 P GNM!O JL HP P M!O GPP NHP I MG NHPT LMGG N M O 29 J I \ Q O ! PKP O 8 G PPN ! PKP PGG OM+

- #N T J L9PMGJ P+

" P P HP P HP P%G M! PWKP99P!N L9MKP8 HP P P I MT GPP I GN A M P9T 2%99 NP99 T J NHP I M99 AT NHP ! M I PG MG NHPT LMGG AT8 AJN I M U 9JG MA P NHP PGN+

+D 3# , -- -!1 7 3

- LPMU ! N G 9 JO+

HMN%G +D3!PMG 2G ! N NHMN M A M P I M! \ HP%G !P 7 NHP 79 P G 7 T 2 KM! NP99 T J+ JN I M U 9JG8 T J GHM99 GPP M! !+

- X H %G NHMN \

1 , -- -!1

HMN%G # !NP! 8 HP HMG M GH P O N 2 KM! NP99 T J8 M!O HP%G M I M! Q O P! JQH HP%G !P %NHP G J!OPGN EJOQ I P!N !$9+$ T H G P P M!O M L LP I M! 7 LP G ! SDXHP! K I PG 9JG \S2%99 GH T J 9JG M! !8 7 HP GPP I P T J GHM99 GPP H I ! O MN I P+

- X 99 HP Q P T J NHP ! O \

4 J GHM99 GPP+

- 27 HP O NHP KH GHM99 HM P I P+

% , -- -!1

HMN%G " PKN %%NHMN NHMN 9 U T J NHMN NHP P%G M 7P99 [S : NHT MT+ " PKN [SD HP P%G M A M P I M! ! PKP+S1 A M P " PKN [S/ U H HP 9 UG[NHP P%G M K J!NP!M!KP[2G%N ! N M A M P I M! \

- 1 M A M P I M! [

2G %M ! N \ 2N O PG M I M! %G HPM N Q OS/ U T J HMN HMKUG M P ! H G HP9 I PN[9 U T J T !OP O T J GPP \ 9 U T J NHP P[NHP P%G ! EPGN !Q NHP P%G 9MT !Q ! 8 NMUP%N 77 H 99 MG NHPT GMT NHP P AP HMKUG 2

- P NH GP NH G OG \

, -- -!1

% OG \ M!TNH !Q HP KM PG ! N M! NHP OP g K I P N H I N%G M99 !P T Q O%G 9 O N O PG !P%G HPM N Q O8SD4 !OP K I PG -M G T !OP K I PG -M G 9 U TP T !OP ! PKP+ 2G%N ! N M QM99M!N I M! N G%N ! N SXHT NH G G A M P ! +SXH GM O HP KM I P HJ N H I P N OMT \ HP%G ! N HJ N HT NH G 99 O " P9P!%G HPM N Q O ! +" M[% J9O 2 K J9O GPP 9JG ! [ST J GHM99 GPP 9JG M! !+

- X H %G NHMN \

% (, -!1

HMN%G " P9P!JG S2 I M P9 HP P 9JG G S HMN%G " P9P!JG8S2 NH !U HP P!N ! N 7 NH N OMT S HMN%G%" P9P!JG+

$ %% SD MG PWKPGG P+ ! HP P T .X PG 17 X !OG S6 .XHT NH G - %% % I MGNP O O+R PGG OM PN NG !NHP K I I !MKKPLNMN ! 7NHP O+ 4 $!NHP 7 9 8 NHP]JM N % ($''

" P9P!JG \ ! 8STPG HP%99 7 QHN !O 77P P!N .X$P99 S2 I M P9 HP P 9JG G [S " M U8 O T J ! N HPM NHP LP L9P K T 9JG \S " P9P!JG G M L PGN+

- X HMN G!PMU !Q 7P99 K I PG T !OP ' D

) (, -- -!1

X HP P \ T !OP NHMN%G 5P LH AJG % G 9JG[NHP P%G M I M! ! PKP[S " P I [S M P 9JG NHP L !KP 7KH M9 T+

- -PMKP 7 GHM I P LPMKP[

0 M U H I8 ! NP H I8S1 A M P 9JG[S9 U P99 JL !H I !EPKP8 9 U T J H H G G O G A9 O PO M!O H G HP9 I I P HMKUPO NHM! " PKN %G8 #!O H HP 9 UG M!O H HP Q PG [S1 MO I MA9P T JNH[HP !P%P GM NH PP M!O N P!NT+ : NHT MT 9JG Q NHT MT8 HMO 2 M G GNP P P M Q MKP M OMJQHNP M Q OOPGG HP GH J9O NMUP H G KH KP+ 1 MO I MA9P I M! [-M G SD-M G G O N N H I8 M!O 2 M M! N " P9P! N KHM!QP J9O Q P I !PT N A N+

! -, --!1 7 3

- " P P K I P I P+

#GGPG 7 9G O 9NG [KHM77 M!O A M! KHM77 M!O A M! [L OQP M7NP I PMN[2 K J9O 9 P M!O O P %NHP PTPG % 9JG+ P%P 9 U !P%P 9 U8 NHP PMQ9PG M P Q !P8 K G M!O OM G K G M!O OM G[2 HMO MNHP AP GJKH M I M! MG 9JG NHM! #QM I P I ! M!O M99 : PPKP+

- HP P G M I !Q NHP : PPUG #KH 99PG8 M APNNP I M! NHM! 9JG+

#KH 99PG \ M O MT I M! M L NP M P T KM I P9+

- X P99 P99+

X P99 P99\ S X HT HM P T J M! T O GK PN !G HM P T J M! T PTPG \ 5 T J U! HMN M I M! G \ 2G ! N A NH APMJNT Q O GHMLP O GK J GP I M!H O 9PM ! !Q QP!N9P_ !PGG NJP T JNH 9 AP M9 NT M!O G 7 NH D NHP GL KP M!O GM9N NHMN GPMG !M I M! \

- #T M I !KPO I M! M!O NHP! N AP AMUPO NH ! OMNP !NHP L P S7 NHP! NHP I M! %G OMNP%G JN8

4 J M P GJKH M! NHP D % I M! [!P U! G ! N MN HMN M O T J 9 P+

- L !I T AMKU N OP7P!O I T AP99T8 JL !I T N N OP7P!O I T 9PG8 JL !I T GPK PKT N OP7P!O I !P H !PGNT8 I T I MGU N P7P!O I T APMJNT 8 M!O T J N OP7P!O M99 NHPGP M!O MN M99 NHPGP M OG 9 P MN M NH JGM!O MNKHPG+

MT !P 7T J MNKHPG+

- MT 2%99 MNKH T J7 NHMN8 M!O NHMN%G !P 7 NHP KH P7PGN 7 NHP I N 8 7 2 KM!! N M O HMN 2 J9O !JN HM P H N 2 KM! MNKH T J7 NP99 !Q H N U NHP A9 8 J!9PGG N G P99 LMGN H O !Q M!O NHP! N%G LMGN MNKH !Q+

4 J M P GJKH M! NHP [

) (T+

%!5 I T9 O J9O !GNM!N9T GLPMU NH T J+

0 X HP P \

%!5 #N T J !H JGP8 ^NHP P HP J!M I G H I+D'

: O A T NP99 H I 2 K I P 9: 4 T+

2 O JAN HP AP HJ N+SOM P TP P99 Q O ! PKP+

- #O PJ J!K9P+

2%99 AP NH T J ! PKP AT M!O AT+

- A !Q J!K9P S,

#T M N UP! 7 I 9JG+

; - T NHP GM I P N UP! ST J M P M AM O+

+ 4 (

$!NHP 7 9 8 NHP]JM N

HP OG !A MKUPNG M P ! N !NHP 7 9 +

X OG' G'Q 7NG D'NPM G';MIO'9 P%G 7J99'GMK 7'KP'
9 P' 77P G i';MI NHP %G'PINP L GP
2)'JN I P' i' 9JG'M'NH JGMIO 7 9O'2'JN'GPP'
HMI' i'NHP'Q9MGG' 7-MIOM %G L M GP' I MT'AP8
4PN'H 9O'2' 77ǂ X Ipi'M P'MIQP9G' iQ'
$H iQG' i'M P'O ip'E T%G G J9'9 PG' i'NHP'O iQ
HMN'GHP'AP9 %O'UI G'iMJQHN'NHMN'UI G'i N'NH G S
pi'L CP'NHP'NH iQ'JiQM i%O' I P'NMNI' N' G
HMN'GHP' $MG'ip p'TPN'NHMN'p p';UIp '
/ P'Q N'G G ppN'MG' HPi'OPG P'O O'GJp
HP p7 P'NH G I MW I' JN' 79 P?2'NPMKH S
#KH p pIPIN' G'K I I MIO8 JiQM i%O'APGPPKH'
HPi'NH JQH' I T'HPM N%G'K iNPiN'7 I'9 P'O NH'APM ǂ'
NH iQ' 7NHMN'GHM99'7 I'I ip'PTPG'MLLPM ǂ' = 4 &

3 3'222 F ' ' ,' % .i ' #QMIPII i%G

7 ' ' ' ' ' (% '
" ' -
3 '- iKPG
X HM'Q P7'HMNH'GPN'NHP'EMJiO KP' i'T J'KHPPUG'\
HP'MILPL L G N i'NHMN'H LP' I MUPG
2i'M99'OPG QiG'APQJi' i'PM NH'AP9 JT
OM 9G' i'NHP'L I G%O'9M QPipPGG'KHPKUG'MIO'O GMGNP G
: ' i'NHP'piG'7MKN iG'H QHPGN'PM %O'8
#G'Ui NG'AT'NHP'K i79JW'7 I PPN iQ'GML
2i7PKN'NHP'G JiO'Lip'MIO'O p'N'H G'Q M i'
N P'MIO'p MiN'7 I'H G'K J GP' 7Q NH+
'L iKPG' G N' I MNNP'ip 'N 'JG+
HMN' PK I P'GH N' 7 J'GJLL GP'G '7M +
HMN'M7NP'GP pi'TPM G%G pQp'TPN' T' M99G'GNMiO8
NH'p p T'MKN i'NHMN'HMNH'Q ip'AP7 p
XHP p 7S P'HM P' PK O'N M9'O O'O M '

JiO iQ'APN ppi'NHP'N ' I GN'p9p IpiNG+
/ UP-p GPJG%'H GP' XHP p%G'NHPi'NHP'GMJKT'A MN
H GP' PMU'JiN IAP %O'G OPG'AJN'P piʻi '
M9 %O'Q PMNipGG'P NHP'N 'HM A J'79PO+
1 'IMOP'N'N MGN'7 ' PLNJip+' 3 pi'G'
5 NH' M9 J %G GH 'MiO' M9 J %G D NH'O OP+
2i'GN IG'77 NJip'O ' i'Hp+' MT'MiO'A QHNipGG
HP'HP O'HMNH'I P'Mii TMiKP'AT'NHP'A CPD
HMI'AT'NHP'N QP 8 AJN' HPi'NHP'GL9 NN iQ' iO'
MUPG'79PW A9P'NHP'UippG' 7Ui NNPO' MUG+
#iO'79 PG'79PO'JiOP'GHMOP Z HT'NHPi'NHP'NH iQ' 7K JMQP+
#G' JG%O' NH' MQP' NH' MQP'O NH'GTILMNH CP+
#iO' NH'MI'MKKPiN'NJi%O' i'GP97 GMIP'UPT+
&PNJ iG'N 'KH O iQ'7 NJip+ % =
J 6--' #QMIPII i S
H J'Q PMN'K I IMiOP'ip P'MiO'A ip' 7: ppKP
"PM N' 7 J'iJIAP G'G JG'MiO' i9T'GL N+
2i' H I'NHP'NPILP G'MiO'NHP I iOG' 7M9G'
H J9O'AP'GHJN'JL SHPM' HMN' 9TGGPG'GLPMUG+
PG OPG'NHP'MLL9MJGP'MiO'MLL AMN i
HP' HKH SI GN I QHNT'7 'NHT'L9MKP'MiO'G MT S
= i' i
#iO'NH J'I GN p p piO'7 'NHT'GN pNKH%O JN'9 7p S'
= i' '
2'Q P'N 'A NH'T J'GLPPKHPG S HKH' p P'GJKH'
#G'#QMIPII i'MiO'NHP'HMiO' 7: ppKP'
H J9O'H 9O'JL'H QH' i'A MGG8 MiO'GJKH'MQM i+
#G pip MA9P' pGN 'HMNKH%O' i'G 9 p +
H J9O' 7N7NH'M'A iO' 7M 'GN iQ'MG'NHP'MW9PN PP'
1i' HKH'HPM pi' OPG'Ui N'M99'NHP' :NPPU GH'PM G'F
'HGPWLP piKPO'N iQJP$ F5 '9PN'NLP9MGP'A NH S
H J'Q PMN SMiO' GP SN'HPM' 9TGGPG'GLPMU+
#QM i+' LPMU'L iKP' 72NHMKM8 MiO'AP%W' 79PGG'PWLPKN'
HMN'I MUNP'ippO9PGG' 7 IL N9PGG'AJ OPi+
5 OP'NHT'9LG'NHMI' PM P'K i7OPiN+
XHPi' MiU' HP G NPG' LPG'H G I MGN KU%EM G+
N'IMUP'H I GP97' Ai W JG'N 'NHP'L PN%G'7MNP i NT+
&' 3)2

; J N P G MG 7 PP MG OPA !M J!M I %O+
#G AP!O !Q M!QP9G8 NHMN%G NHP 7M I P !LPMKP
JN HP!NHPT J9O GPP I G 9O P G NHPT HM P QM99G+
: O M I G GN !Q E !NG N JP G OG8 M!O ? P%G MKK O
NH !Q G 7J99 7HPM N+ JN LPMKP +D!PMG+
-PMKP EM!8 9MT NHT 7 !QP !NHT 9 LG[
HP NH !PGG 7L M GP O GNM !G H G NH
27NHMN NHP L M G%O H I GP97A !Q NHP L M GP 7 NH
JN HMN NHP PL ! !Q P!P I T K I I P!OG+
HMN A PMNH 7M I P A9 G8 NHMN L M GP G 9P LJ P N M!GKP!OG
3 T J 7 T KM99 T J T J GP97+D!PMG \
; #T : PPU NHMN G I T !M I P+
3 X HMN%G T J M77M 2 L MT T J \
& $ LM O !8 %N G 7 #QM I P I ! !%G PM G+
3 " P HPM G !MJQHN L MNP9T NHMN K I PG 7 I
T+
. 2 7 I T K I P! N N H GLP H I
2 A !Q MN J I LPN N M MUP H G PM 8
GPN H G GP!GP !NHP MNNP!N P AP!N+
#!O NHP!N GLPMU+
3 LPMU 7 M!U9T MG NHP !O8
2N G ! N #QM I P I ! !%G G9PPL !Q H J
HMN NH J GHM9N U! EM! HP G M MUP+
" P NP99G NHPP G H I GP97+
J I LPN A9 9 JO+
P!O NHT A MGG KP NH JQH M99 NHPGP 9MCT NP!NG8
#!O P P T : PPU 7 I PNN9P 9PN H I U! +
X HMN T I PM!G 7M 9T GHM99 AP GL UP M9 JO+
= & , -!& "-
X P HM P Q PMN #QM I P I ! ! HP P ! T
#L !KP KM99%O " PKN @- M I G H G 7MNHP
X H ! NH G OJ99 M!O 9 !Q K !N !JPO N JKP
2G JGNT Q !8 HP AMOP I P NMUP M N J I LPN+
#!O N NH G LJ L GP GLPMU+ !QG L !KPG 9 OG[F
27NHP P AP !P M I !Q NHP 7M %GN 7 : PPKP
HMN H 9OG H G H ! J H QHP NHM!H G PMGP 8
HMN GPPUG H G L M GP I P NHM!HP 7PM G H G LP 9 8
HMN U! G H G M9 J M!O U! G ! N H G 7PM +
HMN 9 PG H G I GN PGG I P NHM! !K !7PGG !
eX NH N JM!N G N HP !9 LG HP 9 PG
#!O OM P M HP APMJNT M!O HP NH+
2! NHP M I G NHM! HP G SN H I NH G KHM99P!QP+
" PKN ! P 7 EM!G M!O 7 : PPUG
HM99 I MUP N Q O +O H G APGN N O N+
" P HMNH M 9MOT GP 7M P N JP +
HM! P P : PPU O O K I LMGG !H G M I G 8
#!O 99 N I NH H G N J I LPN KM99
O MT APN PP! T J NP!NG M!O M99G 7 T
JGP M : PK M! NHMN G N JP !9 P
27M!T K I P+ " PKN GHM99 H ! J H I 8
27! !P HP%99 GMT !.N T HP!HP PN PG+
HP : PK M! OM I PG M P GJ!AJ !N M!O ! N NH
HP GL9 !NP 7M 9M!KP+ 3 P!G I JKH+
3 H G GHM99 AP N 9O J 9 P G 9 O +D!PMG8
27! !P 7NHP I HM P G J9 ! GJKH M U !O
X P 9P7N NHP I M99 MN H I P JN P M P G 9O P G8
#!O I MT NHMN G 9O P M I P P PK PM! N L P
+ HMN I PM!G ! N HMNH ! N G ! N !9 P[
27 NHP!! P G HMNH I PM!G N AP+
HMN !P I PPNG " PKN 8 7 ! P P9GP+ 2%99 AP HP+
- P99 H I 7 PGN !P NHMN MG M I M!
X HP! " PKN %G Q M!OG P GJKU%O HP G 9O H 8
JN 7NHP P AP ! N ! J : PK M!I J9O D
1!P ! A9P I M! NHMN HMNH !P GLM U 77 P
M!G P 7 H G 9 P NP99 H I 7 I I P S
2%99 H OP I T G 9 P APM O !M Q 9O APM P
$#!O ! I T M!NA MKP LJN NH G NHP %O A M !8
#!O I PPN !Q H ID O99 NP99 H I NHMN I T 9MOT

X MG 7M P NHM! H G Q M!OM I P M!O MG KHMGNP
#G I MT AP ! NHP 9O8 H G T JNH ! 79 O+
2%99 LM !D NH G N JNH NH I T NH PP O LG 7A9 O+
" HPM P!G 7 A O GJKH GKM K NT 7T JNH[
5-- # I P!+
3 OM 9 O E3!PMG 9PN I P N JKH T J HM!O8
J LM 9 ! GHM99 2 9PMO T J 7 GN+
#KH 99PG GHM99 HM P O 7NH G !NP!N8
GHM99 PMKH 9 O 7 : PPKP 7 I NP!N N NP!N
4 J GP97 GHM99 7PMGN NH JG AP7 P T J Q +
#!O 7 !O NHP P9K I P 7M ! A9P 7 P+
= 4 & & 4&5 " 6
5-- PGN [
- X HMN GMTG 9TGGPG
5-- 2 HM P M T J!Q K !KPLN ! ! I T A M !
P T J I T N I P N A !Q N N G I P GHMLP+
- X HMN G%N \
5-- H G %N G
9J!N POQPG P HM O U! NG HP GPPOPO L OP
HMN HMNH N NH G I MNJ NT A9 ! JL
2!M!U #KH 99PG I JGN ! AP K LL%O+
1 GHPOO !Q A PPO M !J GP T 79 UP P 9+
P AJ9U JG M99+
- X P99 M!O H \
5-- H G KHM99P!QP NHMN NHP QM99M!N " PKN GP!OG
" P P N G GL PMO !QP!P M9 !M I P+
&P9MNPG !LJ L GP !9T N #KH 99PG+
- HP LJ L GP G LP GL KJ JG P P!MG GJAGNM!KP
XH GP Q GG!PGG 9 NN9P KHM MKNP G GJ I JL
#!O ! NHP LJA9 KMN ! I MUQ ! GN M !+
JN NHMN #KH 99PG P P H G A M !MG AM P!
#G AM!UG 7 / ATM SNH JQH #L 99 U! G
% G O T P! JQH S 99 NH Q PMN GLPPO 7EJOQ I P!N+
#T NH KP9P NT 7 !O " PKN %G LJ L GP
- !N !Q !H I+
5-- # !O MUP H I N NHP M!G P NH !U T J \
-
2N G I GN I PPN X H I I MT T J P9GP LL GP
HMN KM!7 I " PKN A !Q H G H ! J 77
27! N #KH 99PG \ H JQH%N AP M GL N7J9 K I AMN+
4PN !NH G N M9 I JKH L ! !O P99G8
O HP P NHP EM!G NMGNP J OPM %GN PLJNP
X NH NHP 7 !%GN LM9MNP # !O N JGN NP+ IP\ 9TGGPG
1J I LJNMN !GHM99 AP OO9T L G%O
2!NH G $9O MKN ! 7 NHP GJKKPGG
, #9NH JQH LM N KJ9M GHM99 Q P M GKM!N9 !Q
17Q O AMO J!N NHP QP!P M98
#!O !GJKH !OPWPG M9NH JQH G I M99 L KUG
NHP GJAGP]JP!N 9J I PG NHP P G GPP!
HP AMAT 7 QJ P 7NHP Q M!N I MGG
17NH !QG N K I P MN 9M QP 2N G GJLL G%O ;
" P NHMN I PPNG " PKN GGJPG 7 I J KH KP
#!O KH KP AP !Q I JNJM9 MKN 7M99 J G J9G+
MUPG I P N HP P9PKN !8 M!O O NH A 9
#G %N P P 7 I 7 NH JG M99 M I M!O GN 99%O
1JN 7 J NJPG8 H I GKM T !Q+
X HMN HPM N 7 I HP!KP PKP PG NHP K]JP !Q LM N+
GNPP9 M GN !Q L ! !N NHP I GP9 PG \
X H KH P!NP NM !%O 9 I AG M P H G !GN J I P!NG+
2!! 9PGG U !Q NHM!M P G OG M!O A G
5 PKN P AT NHP 9 I AG+
5-- : P LM O !N I T GLPPKH 8S
HP P7 P %N G I PPN #KH 99PG I PPN ! N " PKN +
/PN JG 9 UP I P KHM!NG GH J 7 J9PGN X M PG +
#!O NH !U LP KHM!KP NHPT%99 GP998 7! N+
HP 9JGN P 7NHP APNNP TPN N GH
HM99 GH NHP APNNP +F 5 ! N K !GP!N
HMN P P " PKN M!O #KH 99PG I PPN8

O ‘A NH‘ J‘H I J‘M!O‘ J‘GHM I P‘ I‘ NH G+
P‘O QQ%O‘ NH‘N ‘GN M!QP‘7 99 P G+
- ‘2‘GPP‘NHP I‘! N‘ NH‘ I T‘ 9O‘PTPG8 HMN‘M P‘NHPT‘\
5-- ‘XHMN‘Q9 T‘ J‘#KH 99PG‘GHM PG‘7 I‘ " PK\N ‘
XP P‘HP‘! N‘L JO‘ P‘M99‘GH J9O‘ PM % NH‘H I 8
JN‘HP‘M9 PMOT‘ G N ‘ !G 9P!N8
#!O‘ P P P‘APNNP‘LM KH‘ !‘#7 K‘GJ!+
HM!‘ !‘NHP‘L OP‘M!O‘GM9N‘GK !‘ 7H G‘PTPG+
H J9O‘HP‘%GKMLP‘ " PK\N ‘7M ‘27‘HP‘ P P‘7 9%O+
XHT‘NHP!‘ P‘O O‘ J‘ IM !‘ L ! !‘K JGH‘
2!‘NM ! N‘ 7 J‘APGN‘ I M!+‘ I MUP‘M‘9 NNP T8
#!O‘AT‘OP KP‘9PN‘A9 KU GH‘#EMW‘O M
HP‘G N‘N ‘7 QHN‘ NH‘ " PK\N ‘ # I !Q‘ J GP9 PG
: P‘H I‘M99 M!KP‘MG‘NHP‘ NH P ‘ IM! D
O ‘NHMN‘ 99‘LHTG K‘NHP‘Q PMN‘ T I O !
XH ‘A 9G‘ !‘9 JO‘MLL9MJGP8 M!O‘ I MUP‘H I ‘7M99‘
" G‘K PGN‘NHMN‘L JOP‘NHM!‘A9JP 2 G‘AP!OG+
27‘NHP‘OJ99‘A M !9PGG‘#EMW‘K I P‘GM7P‘ 77+
XP%99‘O PGG‘H I‘JL‘ !‘ KPG‘ 27‘HP‘7M 9+
4P%‘Q ‘ P‘J!OP‘AJ‘ L ! !‘GN 99
HMN‘ P‘HM P‘APNNP‘ I P!+ JN‘H N‘ I GG+
1J‘L EPK%G 9 7P‘NH G‘GHMLP‘ 7GP!GP‘MGGJ I PG S
#EMW‘P I L9 T%O‘L9JKUG‘O !‘#KH 99PG%L9J I PG+
- ‘ 9TGGPG‘2‘APQ !‘N ‘ P9 GH‘NHT‘MO KP8
!O‘2‘ 9G Q P‘M‘NMGNP‘ 7 N‘7 NH NH‘
‘#QM I P I ! ! ‘ P‘N ‘H I‘GN M QHN+
$ ‘KJ G‘GHM99‘NM I P‘PMKH‘ NHP +‘ - OP‘M9 !P
JGN‘NM P‘NHP‘ I MGN 7G‘ ! ‘MG‘%N P P‘NHP ‘A !P+ 9 4 &

3 3‘2 F ! ‘ , ‘!.‘ ‘ ‘ ,

‘ B $‘ "‘ 1

6 4‘ HP G NPG S
‘#QM I P I ! ! SH ‘7‘HP‘HMO‘A 9G‘\7J99‘M99‘ P ‘
QP!P M99T‘\
6 4‘ HP G NPG S
‘#!O‘NH GPZA 9G‘O O‘ J!‘\S MT‘G SO O‘ ! N‘NHP‘
QP!P M9‘ J!‘\ P P‘! N‘NHMM‘M‘A NKHT‘K P‘\
6 4‘5 Q S
‘ HP!‘ J9O‘K I P‘G I P‘ I MNNP‘7 I‘H I 8 2‘GPP‘
! !P!‘ +
6 4‘ H J‘A NKH 97G‘G ! ‘ KM!GN‘NH J‘! N‘HPM‘\ OPP9‘
NHP!+‘) * $‘!.. - ‘ F‘- ‘ ‘ $" # && ‘ 97 ‘ -‘ ,!- -
‘ "MG‘! N‘G ‘I JKH‘ N
‘ MT‘2‘I JGN‘H 9O‘T J+
‘#G‘ 9G GN L‘NHP‘PTP‘7‘" P9P!%G‘!PPO9P‘7 ‘ H I‘
HP‘K I PG‘N ‘7 QHN+
‘ -PMKP‘7 G
‘2‘ J9O‘HMD I‘LPMKP‘M!O‘]J PN!PGG‘AJN‘NHP‘7 G
9G‘! N‘HP‘NHP P8 NHMN‘HP8 9 U‘T J‘NHP P+
6 4‘1‘NH J‘OM I !PO‘KJ‘2 2‘GHM99 S
‘X 9G‘T J‘GPN‘T J‘ N‘N ‘M‘7 9%G\
‘2‘ M M!N‘T J8 7 ‘N‘7 9%G 9G‘GHM I P‘N+‘ +
‘ : O‘ OG‘ HP G NPG+
‘X HMN%G NHP‘]JM P9\
6 4‘ ‘AMOPd NHP‘ 9P‘ G Q ‘ 9PM I‘ I P‘NHP‘NP! ‘ 7 NHP‘
L K9M I MN ! ‘M!O‘HP‘ M 9G‘JL ! ‘I P+
‘2‘GP P‘NHPP‘! N+
6 4‘XP99‘Q ‘N ‘Q ‘N +
‘2‘GP P‘HP P‘ 9J!NM T+

‘ HPGP‘ OG‘M P ! N‘!‘NHP‘7 9 +
F SL J!O+
F %% ‘ SM!‘MGG+
G 3 ‘ NH‘NHP‘]JM N ‘ M O‘7 9 ‘ (•‘ PMO8‘ AJN‘2 ‘ MG‘ GJAGN NJNPO‘ "1‘
NPP P!G+

‘ & ‘ !‘NHP‘7 9 8 !‘NHP‘]JM N ‘ $"‘ ‘
=‘ ‘NHP‘7 9 8 !‘NHP‘]JM N ‘ $"‘ ‘
G 80 % S !P PO‘ !!TSG Q!7 PG (2 ‘ ‘ 2C NHP‘ O‘ !‘ NHP
NPW‘G NHP‘GJLP 9MN P‘7 8 ‘ 2!‘NHP‘L P?MKP N ‘ J‘N M!G9MN !]7‘NHP‘ A9P
P HM P‘/‘ 8 ‘N MO N !G+R
) ‘

HP GGJP 7T J L LP' GO IG MNP8
#iO'O '& OPPO'NHMN'7 NJiP'ip p'OO
PQQM 'NHP'GPN IMN i' HKH'T J'L C%O'
& KHP 'NHMI'GPM'MiO'9MiO'\ 1'NHP7N' I GN'AMGP8
HMN' P'HM P'GN 9Pi' HMN' P'O '7PM'N 'UPPL[
JN'NH P PG'Ji NHT' 7M'NH iQ'G'GN 9Pi
HMN' i'NHP 'K JiN T'O O'NHPI'NHMN'O GQ MKP
X P'7PM'N ' M MiN' i' J'iMN P'L9MKP[
' V -'9:8 E V T' EMiG'K T[EMiG'K TL
i'% G J'IMO'G GNP '2'O 'Ui 'HP' KP+
-'9:8 9 T' EM G[
'2N' G MGGMiO M+

' # # 5&#' 1 3

-' T' EMiG'K T[9PiO' I P'NPi'NH JGMiO' PTPG
#iO'2' 99'7 99'NHPI' NH'L LHPN K'NPM G+
' -PMKP'G GNP 'LPMKP+
-' Q iG'MiO'A TG' I O'MQP'MiO' iU9PO' P9O D
7N' i7MiKT'NHMN'i NH iQ'KMiGN'AJN'K T+
#OO'N 'I T'K9MI J G[9PN'JG'LMT'APN IPG
#'I PNT' 7NHMN'IMGG' 7 I MI'N 'K IP+
T' EMiG'K T[L MKN GP'T J'PTPG' NH'NPM G[
T'K T' TA J iG' 'P9GP'9PN' "P9pi'Q ‡' ' 9 4
'T JNH7J9' 9JG'O 'i N'NHPGP'H QH'GN M iG
17O iMN i' i' J'G GNP' U
IP'N JKHPG' 7 pI GP'\ 'GT J'A9 O
'I MO9T'H N'NHMN'i 'O GK J GP' 7 PMG i
'7PM' 7AMO'GJKKPG\' i'M'AMO'KMJGP+
MI']JM9 7T'NHP'GM I P'\
i' XHT'A NHP' "PKN
' XHMN' GP'\ HMN'GH PU' GNH G'\
'3GGP'I QHN'NHP' 9O'K i iKP' 7'9P NT'
#G' P99 I'TiOP NMU iQG'MG'T J'K JiGP9G'
JN'2'MNNPG'N'HP'Q OG'T J'7J99'K iGPiN'
:M P' iQGN 'I'L LPiG i'MiO'KJN' 77'
',#997PM G'MNNPiO iQ' i'G 'O P'M'L EPKN+
O ' HMN'M9MG'KMi'NHPGP'I'T G iQ9P'M I G'\
X HMN'L LJQiMN i' G i' ip'IMi%G M9 J +
'GNMiO'NHP'LJGH'MiO'piI NT' 7'NH GP'
H G]JM P9' J9O'PWK NP'\ 4PN'2'L NPGN+
XP P'2'M9 iP'N 'LMGG'NHP'O 77 KJ9N PG+
#iO'HMO'MG'MILQP'L P'MG'2'HM P' 99
-M G'GH J9O'iP%P' PN MK N' HMN'HP'HMNH'O iP+
'7M iN' i'NHP'LJ GJ N+
' ,
-M G'T J'GLPOU
/ UP' iP'APG NNPO' i'T J'G PPN'OP9 QHNG'
4 J'HM P'NHP'H iPT'GN 99'AJN'NHPGP'NHP'QM998
'N 'AP' M9 MiN' G i 'L M GP'MN'M99+
' '2'L L GP'i N' I P P9T'N ' I TGP97'
HP'L9PMGJ PG GJKH'M'APMJNT'A iQG' NH' N8
JN'2' J9O'HM P'NHP'G g 7HP'7M ' MLP'
X L%O' 77' i'H i J MA9P'UPPL iQ'HP +
X HMN'N PMG i' p P' N'N 'NHP' MiGMKU%O']JPPi
5 GQ MKP'N 'T J'Q PMN' NHG'MiO'GHM I P'N ' I P+
'N 'OP9 P'HP'L GGPGG i'JL

' ' i'NHP'7 9 8 NHP']JM N ' ' % ' HP AM9O'GJAGN NJNPO' '
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GPP G I P GGJP 7 I T GL NP7J9 PWPK MN !G HP!' NHP P%G ;#KH 99PGD S M M P P!Q !PP 27 T AP ! N NMUP!'N 99 NHPGP N 'J!OP I !P N'NHP M99G 99 GNM!O N 99 NHPT7M99 7NHP I _ GP9 PG 1' NH J Q PMN NHJ!OP OM NP ' 7 19T I LJG'7 QPN NHMN NH J M N? P'NHP U !Q 7Q OG8 M!O' P KJ T'9 GP M99 NHP GP LP!N !P K M7N 7NHT ! 7TP NMUP ! N NHMN 9 NN9P 9 NN9P 9PGG NHM! 9 NN9P N 7 I 'NHP I 'NHMN NHPT HM P[H KH GH N M I PO Q! M!KP NGP97U! G G G 'MAJ!OM!N GKM KP ' N 99 ! N !' K KJ I P!N !' OP9 P ' M 79T 7 I' M GL OP ' NH JN O M !Q NHP I MGGT !G' M!O' KJNN !Q NHP PA #7NP ' NH G 'NHP P!QPM!KP !' NHP H 9P KM I L[' MNHP ' NHP A !P MKHP[7 ' NHMN ' I PNH !UG ' G NHP KJ GP OPLP!OP!N !' NH GP NHMN M ' 7 ' M L9MKUPN 2'2 M P GM O' I T' L MTP G'8 M!O' OP 9P! T 'GMT' # I P!' X HMN H [I T 9 O' #KH 99PG[

= ' (

' X H %G NHP P'\ HP G NPG'\Q O' HP G NPG'K I P' !' M!O' M 9+

' 27' 2' K J9O' HM P' P I P I AP PO' M' Q 9N K J!NP 7P N' NH J' J9OGN ! N HM P' G9 LLPO' JN 7' I T' K !NP I L9MN !' AJN' N' G ! ' I MNNP '' HTGP97 JL !' NHTGP97[HP' K I I !' KJHGP' 7' I M!U !O'7 99T' M!O' Q! M!KP' AP' NH !P' !' Q PMN' P P!JP[HPM P!' A9PGG' NHPP' 7 I' M' NJN ' M!O' O GK L9 !P' K I P' ! N !PM ' NHPP[/PN NHT' A9 O' AP' NHT' O PKN !' N 99' NHT' OPMNH[NHP!' 7' GHP' NHMN' 9MTG' NHPP' JN' GMTG' NH J' M N' M' 7M ' K GP 2%99' AP' GN !' M!O' G !' JL !%N ' GHP' !P P ' GH JOPO' M!T' AJN' 9MCM G # I P!' X HP P%G #KH 99PG'\

' X HMN ' M N' NH J' OP JN'\ MGN' NH J' !' M' L MTP '\

' # T ' NHP' HPM P!G' HPM ' I P'[

'

' X H %G' NHP P'\

' HP G NPG ' I T' 9 O+

' X HP P' HP P' ' S # N ' NH J' K I P'\ ' X HT ' I T' KHPPGP ' I T' O QPGN !' HT' HMGN' NH J' ! N' GP PO' NHTGP97' !' N ' I T' NMA9P' G ' I M!T' I PM9G'\S I P8 HMN%G' #QM I P I ! !O

' HT' K I I M!OP ' #KH 99PG S HP!' NP99' I P' -MN ' K9JG' HMN%G #KH 99PG'

' HT' 9 O' HP G NPG' ' HP!' NP99' I P' 2' L MT' NHPP' HMN%G' NHTGP97\

' HT' U! P ' -MN K9JG' HP!' NP99' I P' -MN K9JG' HMN' M N' NH J' \

' H J' I MT%GN' NP99' NHMN' U! PGN+

' 1 ' NP99 ' NP99+

' 2%99' OPK9 !P' NHP' H 9P']JPGN !' #QM I P I ! !' K I_ I M!OG' #KH 99PG8 #KH 99PG' G' I T' 9 O8 2' M I ' -MN K9JG% U! P 8 M!O' -MN K9JG' G' M' 7 9+

' 4 J' MGKM9[

' -PMKP ' 7 98 2' HM P' ! N' O !P+

' " P' G' M' L 9PQPO' I M!+S- KPPO' HP G NPG+

' #QM I P I ! !' G' M' 7 98 #KH 99PG' G' M' 7 98 HP ' G NPG' G' M' 7 98 M!O' MG' M7 PGM O' -MN K9JG' G' M' 7 9+

' 5P P' NH G' 8 K I P+

' #QM I P I ! !' G' M' 7 9N ' 77P ' N ' K I I M!O' #KH 99PG8 #KH 99PG' G' M' 7 9N ' AP' K I I M!OPO' 7' #QM I P I ! !8 HP G NPG' G' M' 7 9N ' GP P' GJKH' M' 7 98 M!O' -MN K9JG' G' M' 7 9 L G N P+

' X HT' M I ' 2' M' 7 9 \

' MUP' NHMN' OP I M!O' 7' NHP' L P +S2N' GJ77 KPG' I P' NH J' M N+ /L U' T J' H ' K I PG' HP P' \

' ' 1 ' 2 ' '

" = 6

' -MN K9JG' 2%99' GLPMU' NH' ! A OT S I P' !' NH' I P' HP G NPG+ = 4

' " P P' G' GJKH' LMNKHP T' GJKH' EJQQ9 !Q' M!O' GJKH

' 4$ ' HP']JM N ' PMOG' % # NHP' 7 9 ' % ' HP AM9O' I MOP' NHP' KHM!QP' N ' %$ # I PM! !Q' N ' ") ' =

U!M P T' [M99' NHP' M QJ I P!N' G' M' KJKU 9O' M!O' M' H P' ' #' Q O']JM P9 ' N ' O M ' P I J9 JG' 7MKN !G' M!O' A9PPO' N ' OPMNH' JL !+ ' NHP' O T' - , 3!' !' NHP' GJAEPKN[M!O' M ' M!O' 9PKHP T' K !7 J!O' M99[= 4

3 ' X HP P' G' #KH 99PG' \

' X NH !' H G' NP!N8' AJN' 99 O GL GPO' I T' 9 O+

3 ' /PN' N' AP' U! !' N ' H I ' NHMN' P' M P' HP P+

" P' GHP!N' D J ' I PGGP!QP G ' M!O' P' 9MT' AT'

1J ' MLLP NM ! I P!NG ' G N !Q' 7' H I '

/PN' H I ' AP' N 9O' G ' 8 9PGN ' LP KHM!KP ' HP' NH !U'

X P' OM P' ! N' I P' NHP'] JPGN !' 7' J ' L9MKP+

1 ' U! ' ! N' HMN' P' M P+

' 2' GHM99' G ' GMT' N ' H I + = 4

5--' X P' GM ' H I ' MN' NHP' LP! !Q' 7' H G' NP!N8

" P' G' ! N' G KU+

6 4' 4PG' 9 ! G KU ' G KU' 7' L JO' HPM N ' T J' I MT' KM99' N' I P9M!KH 9T' ' 7' T J' 99 7M J ' NHP' I M!8 AJN ' AT' I T' HPMO ' N' G' L OP ' JN' HT ' HT'\ 9PN' H I ' GH ' JG' NHP' KMJGP+ # ' O ' I T' 9 O+ = ' - ' - "

- ' X HMN' I PG' #EMW' NHJG' N ' AMT' MN' H I ' \

5--' #KH 99PG' HMNH' ! P Q9PO' H G' 7 9' 7 I ' H I +

- ' X H '\ HP G NPG' \

5--' " P+

- ' HP!' 99' #EMW' 9MKU' I MNNP ' 7' HP' HM P' 9 GN' H G' M QJ I P!N+

5--' 8' T J' GPP ' HP' G' H G' M QJ I P!N' NHMN' HMG' H G' M QJ I P!N SD#KH 99PG+

- ' #99' NHP' APNNP 8' NHP ' 7 MKN !' G' I P' J ' GH' NHM!' NHP ' 7MKN !' JN' N' MG' M' GN !Q' K J!GP9' M' 7 9' K J9O' O GJ! NP+

5--' HP' M I NT' NHMN' GO I ' U! NG' ! N '7 99T' I MT' PMG 9T' J!N P+ " P P' K I PG' -MN K9JG+

' B

- ' ' #KH 99PG' NH' H I +

$ 5--' HP' P9PLHM!N' HMNH' E !NG ' AJN' ! !P' 7 ' K J NPGT'

" G' 9PQG' M P' 9PQG' 7 ' !PKPGG NT' ! N' 7 ' 79PWJ P+R

' #KH 99PG' A OG' I P' GMT SHP' G' I JKH' G T'

27' M!TNH !Q' I P' NHM!' T J ' GL N' M!O' L9PMGJ P'

5 O' I P' T J ' Q PMN!PGG ' M!O' NH G' ! A9P' GNMNP+

' KM99' JL !' H I 8 HP' H LPG' N' G' ! ' NHP +

JN' 7 ' T J ' HPM9NH' M!O' T J ' O QPGN ! ' GMUP+

#!' M7NP O ! !P %G' A PMNH+

3 ' " PM ' T J ' -MN K9JG' 8S

X P' M P' N ' P99' MK] JM !NPO' NH' NHPGP' M!G P G'

JN' H G' P MG !' !Q%O' NHJG' G 7N' NH' GK !+

M!! N' JN79T' J ' MLL PHP!G !G+

JKH' MNN AJNP' HP' HMNH8 M!O' I JKH' NHP' PMG !'

X HT' P' MGK AP' N' N ' H I ' ' TPN' M99' H G' NJPG+

N' NJ JG9T' 7' H G' !' LM N' APHP9O

;5 ' !' J ' PTPG ' APQ !' N ' 9 GP' NHP ' Q9 GG' 8

4PM ' 9 UP' 7M ' 7 J N' !' M!' J! H 9PG I P' O GH+

P' 9 UP' N ' N' J!NMGNPO+ : ' M!O' NP99' H I '

X P' K I P' N ' GLPMU' NH' H I ' ' #!O$T J' GHM99' ! N' G !

27' T J' O ' GMT SD P' NH !U' H I ' P L JO+

#!O' J!OP H !PGN8 !' GP97 MGGJ I LN !' Q PMNP

HM!' !' NHP' ! NP' 7' EJOQ I P!N8 M!O' NH P ' NHM!' H I GP97

" P P' NP!O' NHP' GM MQP' GN M!QP!PGG' HP' LJNG' ! 8

5 GQJ GP' NHP' H 9T' GN P!QNH' 7' NHP ' K I I M!O+

#!O' J!OP NP' !' M!' AGP !Q' U !O'

" G' HJ I JG' L PO I !M!KP8' TPM ' MNKH'

" G' LPNN GH' 9 !PG D' H G' PAAG ' H G' 79 G ' MG' 7' Y

HP' LMGGMQP' M!O' H 9P' KM MQP' 7' NH G' MKN !'

& OP' !' H G' N OP+ : ' NP99' H I ' NH G' 8 M!O' MOO

HMN ' 7' HP' P H 9O' H G' L KP' G ' I JKH+

X P%99' ! !P' 7' H I ' 8 AJN' 9PN' H I ' 9 UP' M!' P!Q !P'

N' L NMA9P ' 9 P' J!OP ' NH G' PL N S

!Q' MKN !' H NHP ' NH G' KM!! N' Q ' N ' M

' %' !' NHP' 7 9 + " M! I P ' KHM!QPO' NHP' O ' NHP' I PM! !Q' 7' H KH' G' K9PM ' P! JQH' !N ' ' %

#'GN iQ'O M 7 P O 'M99 MiKP'Q P
P7 P'M' G9PPL iQ'Q M NN P99'H I'G +
;' '2'GHM998 MiO'A iQ'H G'MiG P'L PGPiN9T+' ‡ 9 4
3 '2i'GPK iO' KP P%99 i N'AP'GMN G7 PO
X P'K lP'N 'GLPMU' NF'H l+S 9TGGPG'piNP'T J+
789 5' (%
6 4', XHMN' G'HP' l P'NMHi'Mi NHP'\
3 . ' 'l P'NMHi' HMN'HP'NH iUG'HP' G+
6 4',2G' HP' G ' lJKF'\ 5 'T J' i N' NH iU' HP' NH iUG'
H l GP97'M'APNP'lMi'NMHi'2'Ml'\
3 ']JPGN i+
6 4', X 99'T J'GJAGK AP'H G'NH JQHN'MiO'GMT'HP' G 9
3 ' 'i A9P'#EMW8 T J'M P'MG'GN iQ'MG M9 MiN'MG
GP' i ' 9PGG i A9P' lJKF l P'QpiN9P' MiO' M9N QPNHP'
l P'N MKNMA9P+
6 4', XHT'GH J9O'M' lMi'AP'L JO' " 'O NF'L OP'
Q '\'2'Ui 'i N' HMN'L OP' G+
3 ' 4 J'l iO%G NHP'K9PM P '#EMW'MiO'T J' NJPG'
NHP'7M P ‡' "P'NHMN' G L JO'PMNG'JL'H l GP978 L OP' G H G'
i'Q9MGG'H G' i'N J1LPN'H G' i'KH i K9P8 MiO' HMN'
P P'L M GPG' NGP97'AJN' i'NHP'OPPO'OPP J G'NHP'OPPO' i'NHP'
L M GP+
6 4',2'O 'HMNP'M'L JO' l MI'MG'2'HMNP'NHP'piQPiOP iQ'
'N MOG+
- ' 4PN'HP'9 PG H l GP97',2G%'i N'GN MiQP'\ 9 - "

B ' (%

5--' #KH 99PG 99'i N'N 'NHP'7P9ON l +
3 ' X HMN%G H G'PWKJGP'\
J5--' "P'O NF' P9T' i'i ip
JN'KM PG' i'NHP'GN PM l' 7H G'O GL GP+
X NH JN' AGP MiKP' 'PGLPKN' 7MiT+
2i' 99'LPKJ9 M 'MiO' i'GP97 MO l GG i+
OPMNH N UPiG+R
AF6

2$H7G'9 O'3i'N'H l'[?JL NP'7 A O8
#iO'GMT' i'NHJiOP S6'#KH 99PG'Q 'N'H l+R
.- ',1'NH G G P99ß HP' JAG'NHP' p i' 7H l ‡' = - " '
i',#iO'H 'H G G 9PiKP'O iUG'JL'NH G'ML L9MJGP[= - "
6 4',27'2'Q 'N 'H l ' NF'l T'M l %O'7 GN'2%9ß LMGH'H l'
1 P'NHP'7MKP+
3 ' 1'i 'T J'GHM99'i N'Q
6 4',#i'%M'AP'L JO' NH' lP‡'2%9ß'LHPPCP'H G'L OP
/PN'lP'3i'N'H l+
5--' N'7 'NHP' NH'NHMN'HMiQG'JL i' J']JM P9‡'
6 4',#'LM9N T' iG 9piN'7P99 '[
- ' " 'HP'OPGK APG'H l GP97[= - "
6 4', Mi'HP'i N'AP'G K MA9P'\
5--' HP' M PI'KH OPG'A9MKUIPGG‡' = - "
6 4',2%9ß'9PN'H G'HJl J G'A9 O+
3 ' "P' 99' AP' NHP' LHTG K Mi 'NHMN' GH J9O' AP' NHP'
LMN PiN‡ = - "
6 4',#i'M99'lpi' p P' % l T l iO[
$ 5--' X N' J9O'AP' JN' 7'7MGH i‡' = - "
5--' "P' J9O'HM P'NPi'GHM PG‡ = - "
6 4',2',99'UipMO'H l ‡'2%9ß' lMUP'H l'GJLL9P+
- ' "P%G'i N'TPN'NH JQH' M l''7 KP'H l' NH'L M GP6ß
- J'i'L J' i8 H G'MlA N i'G O T‡' = - "
5--' T'9 O'T J'7PPO'N ' lJKH' i'NH G'O G9 UP+
= i' i
- ' 1J'i A9P'QPip M9'O'i N'O'G +
i' 4 J'l JGN'L PLM P'N '7 QHN' NH JN'#KH 99PG+
5--' XHT'%N G'NH G'iMl iQ' 7H l'O PG'H l'HM l ‡'
"P P' G'M' lMiS JN'%N G'AP7 P'H G'7MKP8
2' 99'AP'G 9piN+
- ' XHp P7 P'GH J9O'T J'G '\

'KM99N QPNHP'M99'H G'GNMNP' 7 M 8
O PGH'U I QG'M P'K IP'N ' T' I
XP'1JGN' NH'M99' J'1M i' 7L p'GNMIO'7MGN'
#iO'HP P%G'M'9 O SK IP'UI QHNG'7 I'PMGN'N ' PGN
#iO'KJ99'NHP '79 p '#EMW'GHM99'K LP'NHP'APGN+
3 ' :' P'N 'K JiK 9#' /PN'#KH 99PG'G9PPL'
/ QHN'A MNG'GM 9'G 7N'NH JQH'Q PMNP'HJ9UG'O M 'OPPL+
9: 4 & $

3 3'2+S T+' ' ii ' -' M I %G
'
(' "' ' p MIN+
'
'O pio[T J[L MT'T J'M' O'5 'i N'T J'7 99 '
NHP'T JIQ'9 O'-M G'\
7 1' #T'G ' HPi'HP'Q PG'AP7 P'lP+
' 4 J'OPLPIO'JL i'H I '2' lPMi+
7 1' '2'O 'OPLPIO'JL i'NHP'9 O+
' 4 J'OPLPIO'JL i'M'i A9P'QPiN9P l Mi8 2' l JGN'ippOG'
L M GP'H I+
7 1' HP'9 O'AP'L M GPO'[
' 4 JUi 'lP'O'T J'i N'\
7 1' %OM NH'G 'GJLP 7 K M99T+
'O pio'Ui 'lP'APNNP 8'2'MI'NHP'9 O'-MiOM JG+
7 1'2'H LP'2'GHM99'Ui 'T J'H i J'APNNP +
' 2'O 'OPG P'N+
7 1' 4 J'M P'i'NHP'GNMNP' 7'Q MKP+ 9E&- '2
' : MKP[i N'G '7 pIO8 H i J'Mi0'9 OGH L'M P'lT
N N9PG SDXHMN' l JG K' G'NH G'\
'7 1'2'O 'AJN'LM N9T'Ui 'G N' G l JG K' i'LM NG+
' i 'T J'NHP' l JG K MIG'\
7 1' XH 99T'G +
' XH 'L9MT'NHPT'N '\
7 1' 'NHP'HPM P G'G +
'#N' H GP'L9PMGJ P'7 pIO'\
7 1' #N' l ip'G 'MiO'NHP G'NHMN'9 P' l JG K+
' l lMIO'2' lPMi'7 pIO+
7 1' XH 'GHM99'2'K l lMIO'G '\
'O pIO' P'JIOP GNMIO'i N' ip'Mi NHP'8'2'MI'N '
K J N9T'MiO'NH J'M N'N 'KJii iQ' #N' H GP' p]JPGN' O '
NHPGP' lPi'L9MT'9
7 1' HMN%G'N %'iOPPO'G '' M T'G 'MN'NHP' p]JPGN'
7 -M G' lT'9 O' H %G NHP P' i'LP G i8 NH'H I 'NHP'
l NM9' piJG'NHP'HPM N A9 O' 7'APMJNT'9 P%G i G A9P'
G J9 S
'XH 'lT'K JG i' PGG OM'\
7 1' 'G '"p9pi8 K J9O'T J'i N'7 iO' JN'NHMN'AT'HP'
MNN AJNPG'\
'2N'GH J9O'GPPI'7P99 'NHMN'NH J'HMGN'i N'GPPi'NHP'
9MOT' PGG OM?' 2'K lP'N 'GLPMU' NH-M G'7 I'NHP'L iKP'
l NM9' piJG'NHP'HPM N A9 O' 7'APMJNT'9 P%G i G A9P'
G J9 S
'XH 'lT'K JG i' PGG OM'\
7 1' 'G '"p9pi8 K J9O'T J'i N'7 iO' JN'NHMN'AT'HP'
MNN AJNPG'\
'2N'GH J9O'GPPI'7P99 'NHMN'NH J'HMGN'i N'GPPi'NHP'
9MOT' PGG OM?' 2'K lP'N 'GLPMU' NH-M G'7 I'NHP'L iKP'
9JG'2' 99'lMUP'M'K IL9 lPiNM9#'MGGMJ9N'JL i'H I '7 '
lT'AJG iPGG'GPPNHG+
7 1' OOPi'AJG iPGG[NHP P%G'M'GNP PO'LH MGP' iOPPO[
'
'OM 'AP'N 'T J'lT9 O'MiO'N 'M99'NH G'7M 'K I
LMIT'[7M 'OPG PG' i'M99'7M 'lPMGJ P$'7M 9T'QJ O P'NHPI'[
PGLPK M99T'N 'T J'7M 'JPPi[' 7M 'NH JQHNG'AP'T J'7M '
L 99 '(
'5PM'9 O'T J'M P'7J99' 77M ' OD+
' 4 J'GLPMU'T J'7M 'L9PMGJ P'G PPN']JPPi+ OM '
L iKP'HP P'G'Q O'A UPi' lJG K+
@ ' 4 J'HM P'A UP' N'K JG i'MiO'AT' lT'9 7P'T J'
GHM99' lMUP' N' H 9P'MQM i'8 T J'GHM99'L PKP' N' JN' NH'M
L PKP' 7T J'LP7 lMiKP' S P99'HP'G7J99' 7HM l iT+
' J9T'9MOT'i +
' 1'G S
' &JJOP'i'G NH'8 i'Q O'G NH' P T' JOP+

' HP' OG i'A MKUPMG'M P'i N' i'NHP'7 9 ' 33
1/'+ "+ M'O

'XP99'GM O'lT9 O'/ P99'T J'GMT'G 'i'7NG+
'2'HM P'AJG ipGG'N 'lT9 O '0PM']JPPi S T9 O'
99T J' JKHGM7P lP'M' O'\
' MT'NH G'GHM99' i N'HPOQP'JG' JN' P%99'HPM'T J'
G i Q'KP NM i9T+
'XP99'G ppN']JPPi'T J'M P'L9PMGMiN' NH'lP+D JN'
lM T'NHJG' lT9 O S%2T'OPM'9 O'Mi0' l GN' pGNPPlPO'
7 pIO'T J'A NHP' 9JG S
' T9 O'-MiOM JG'8 H ipT G ppN'9 O S
' :'N 'G ppN']JPPi'Q 'N SK llpiOG' H lGP9'
l GN'M77PKN iMNP9T'N 'T J+
' 4 J'GHM99' i N'A A'JG' JN' 7 J'lP9 OT''27'T J'
O ' J'lP9MiKH 9T'JL i'T J'HPMO[
' ppN']JPPi'G ppN']JPPi8'NHMN%G M'G ppN']JPPi'
%7M NH+
'#iO'N 'lMUP'M'G ppN'9MOT'GMO' G'M'G J' 77PiKP+
' MT'NHMN'GHM99' i N'GP P'T J'NJ i8 NHMN'GHM99' N'
i N' i'N JNH'9M+' MT'2'KM P' i N'7 'GJKH' OG' i 'i ‡
SD#iO'lT'9 O'HP'OPG PG'T J'NHMN' 7'NHP'U i Q' KM99'7 '
H I'MN'GJLLP'T J' 99'lMUP'H G'PWKJGP+
' T9 O'-MiOM JG S
' X HMN'GMTG' lT'G ppN']JPPi S lT' p T' p T'G ppN'
]JPPi'\
' X HMN'PWL9 N%G i'HMiO'\ HP P'GJLG'HP'N i QHN'\
' MT'AJN' lT'9 O
' X HMN'GMTG' lT'G ppN']JPPi' S T'K JG i' 99'7M99'
JN' NH'T J+' 4 J'lJGN' i N'UI ' HP P'HP'GJLG+
'^2%99'9MT' lT'9 7P%'' NH' lT'O GL GP' PGG OM+
' 'i 'i 'GJKH' lMNNP 'T J'M P' OP8 K lP'T J'
O GL GP 'G G KU+
' X P99'2%99' lMUP'PWKJGP+
' #T'Q O'lT'9 O+' XHT'GH J9O'T J'GMT' PGG OM'\
i 'T J'L 'O GL GP %G G KU+
$ 2'GLT+
' 4 J'GLT[HMN' O'T J'GLT'\S lP'Q P' lP'Mi'
iGN J lPiN+S 'G ppN']JPPi+
'XHT'NH G'G U iO9T'O ip+
' T'ipKP'G'H A9T'i'9 P' NH'M'NH iQ'T J'HM P'
G ppN']JPPi+
' HP'GHM99'HM P' N'lT9 O'7 N'APi N' lT9 O'
'-M G+
‡ ' "P'[i 'GHP%99'i ip'7H l8 NHPT'N 'M P'N M i+
' OM99 iQ' i'M7NP'7M99 iQ' JN' lMT' lMUP' NHPDi'
NH pp+
' lP'K lP‡ 2%99+HPM'i 'l P' 7NH G8' 2%99' G iQ'
T J'M'G iQ'i +
' #T'MT'L NHPP'i ‡' T' lT'N NH'G ppN' 9 O&'
NH J'HMGN'M'7 ip'7 PHPMO+
' /PN'NHT'G iQ'AP'9 P'NH G'9 P' 99'JiO 'JG'M99+'
1' JL O' JL O' JL O'
' / P'MT'NHMN' N'GHM99' %7M NH+
' #T'Q O'i '9 P'9 P'i NH iQ'AJN'9 P+
'2i'Q O'N NH' N'APO iG'G '
/ P'9 P'i NH iQ'AJN'9 P'GN 'l P[
O ' H'9 P%G A '
H NG'AJKU'MiO'O P8
HP'GHM7N'K i7 JiOG+
N'NHMN' N' JiOG+
JN'N K9OPG'GN 99'NHP'G P+

HPGP'9 P G'K TS1H[H[NPT'O P[
4PN'NHMN' H KH'GPPIG'NHP' JiO'N 'U
5 NH'NJ i' H[H[N 'HM[HM[HP[
'OTiQ'9 P 9 PG'GN 99
1H[H'ć M' H 9P'AJN'HM'[HM'[HM[
1H[H'[Q MiG' JN'7 'HM[HM[HM'[

"PT'H [
'2i'9 P' %7MNHD'N 'NHP' PT'N L' 7'NHP'i GP+
' "P'PMNG'i NH iQ'AJN'O PG'9 P8 MiO'NHMN'Q PPOG
H N'A9 O' MiO'H N'A9 O' APQPNG'H N'NH JQHNG' MiO'H N'
NH JQHNG'APQPN'H N'OPPOG'MiO'H N'OPPOG'G 9 <+

W. W. BROMLEY. PINXT

J. C. ARMYTAGE. SCULPT

TROILUS AND CRESSIDA.

LONDON. VIRTUE & Cº

B ', #

'XHM7'A9JGH iQ' GN 99'\HM P'T J'i N'O iP' NM9U iQ' TPN\' ,
-' XP99'JiK9P' HMN'7 99T2'2'K I I N'2' OPO KMN P' N ' T J+
'2'NHMiU'T J'7 'NHMN8 7 IT'9 O'QPN'M'A T' 7T J' T J99'Q P'H I'I P' P'N JP'N 'IT'9 O' 7HP'79 iKH'KH OP' IP'7 'N+
i'#iO'GHM99'M9AP N'G ppN' I JG K' GGJPG'NHPiKP+
'-PNNT' %7M NH+
i'4 J'9PM P'G ppN' pGG O'\
i'4 J'9PM P'G ppN' pGG O'\S
O 'NH'G N I P' 99'2'NMUP' IT'9PM P'IT'9 O+
2'M I'MGHM I'O8S1'HPM piG[HMN'HM P'2'O iP'\S
% MG'i N'I'TLJ L GP'NHJG'N 'APQ'M'U GG
T J+
-' T'9 O'2'O 'APGPPKH'T J'LM O i'I P
'- PNNT' %7M NH+
TPN\' ,
-' XP99'JiK9P' HMN'7 99T2'2'K I I N'2' OPO KMN P' N '
T J+
'2'NHMiU'T J'7 'NHMN8 7 IT'9 O'QPN'M'A T' 7T J'
T J99'Q P'H I'I P' P'N JP'N 'IT'9 O' 7HP'79 iKH'KH OP'
IP'7 'N+
i'4 J'9PM P'G ppN' pGG O'\
O 'NH'G N I P' 99'2'NMUP' IT'9PM P'IT'9 O+
2'M I'MGHM I'O8S1'HPM piG[HMN'HM P'2'O iP'\S
% MG'i N'I'TLJ L GP'NHJG'N 'APQ'M'U GG
T J+
-' T'9 O'2'O 'APGPPKH'T J'LM O i'I P
'- PNNT' %7M NH+
i'#iO'GHM99'M9AP N'G ppN' I JG K' GGJPG'NHPiKP+
'-PNNT' %7M NH+
i'4 J'9PM P'G ppN' pGG O'\
i'4 J'9PM P'G ppN' pGG O'\
'2'NHMiU'T J'7 'NHMN8 7 IT'9 O'QPN'M'A T' 7T J'
T J99'Q P'H I'I P' P'N JP'N 'IT'9 O' 7HP'79 iKH'KH OP'
IP'7 'N+
i'4 J'9PM P'G ppN' pGG O'\
i'4 J'9PM P'G ppN' pGG O'\
'2'NHMiU'T J'7 'NHMN8 7 IT'9 O'QPN'M'A T' 7T J'
T J99'Q P'H I'I P' P'N JP'N 'IT'9 O' 7HP'79 iKH'KH OP'
IP'7 'N+
i'#iO'GHM99'M9AP N'G ppN' I JG K' GGJPG'NHPiKP+
'-PNNT' %7M NH+
TPN\' ,
-' XP99'JiK9P' HMN'7 99T2'2'K I I N'2' OPO KMN P' N '
T J+
'2'NHMiU'T J'7 'NHMN8 7 IT'9 O'QPN'M'A T' 7T J'
T J99'Q P'H I'I P' P'N JP'N 'IT'9 O' 7HP'79 iKH'KH OP'
IP'7 'N+
i'4 J'9PM P'G ppN' pGG O'\
O 'NH'G N I P' 99'2'NMUP' IT'9PM P'N 99'N I ' I i_
iQ S
-$ - MT'T J'K iNPiN'T J+
i' X HMN' 77PiOG T J'9MOT'\
-' ' I iP' i'K ILMiT+
i' 4'KMii N'GHJi
4 J GP97+
-' /PN'I P'Q 'MiO'N T
2'HM P'M'U iO' 7'GP97' PG OPG' NH'T J
JN'Mi'JiU iO'GP97'NHMN'NGP97' 99'9PM P+
'AP'Mi NHP %G'7 9#' XHP P'G IT' N'\
2' J90'AP'Q ip S2'GLPMU'2'Ui 'i N' HMN+D
i' X P99'Ui 'NHPT' HMN'NHPT' GLPMU'NHMN' GLPMU'G '
GP9T+
-' -P'KHMiKP'IT'9 O'2'GH 'I P'K M7N'NHMI'9 P'
#iO'7P99'G ' JiO9T'N 'N'9M QP'K i7PGG i+
'MiQ9P'7 'T J'NH JQHNG' JN'T J'M P' GP8
1'P96P'T J'9 P'i N'O 'N 'AP' GP'MiO'9 P+
3WKPPOG'IMi%G I QHN8 NHMN'O P99G' NH'Q OG'MA P+
i'1'NHMN'2'NH'JQHN' N'K J9O'AP' i'M' IMi
@#G'7'7'KMI'2' 99'L PGJIP' i'T J
'7PPO'7 'MTP'HP'9MIL'MiO'79Mi PG 7'9 P'8
'UPPL'HP'K iGNMiKT' i'L9 QHN'MiO'T JNH+
1JN9 iQ'APMJNT%G' JN M O' NH'M' I iO'
HMN'O NH' pip 'G 7NP'NHMI'A9 O'OPKMTG[
D 'NHP'7 9 8'NHP']JM N ' 2'B 2'% " '(% '
,' XP'7 99 'NHP' PMO iQ' 7'NHP'7 9 ‡ HP'GPiNPiKPG M P'N MiGL GPO' i'NHP'
]JM N +
' HP' IPMi iQ' MLLPM G'N ' JG' GJ7 KPiN9T K9PM SNH JQH' IT'L PGK piKP' i

1 'NHMN'LP GJMG i'K J9O'AJN'NHJG'K i iKP'IP
HMN'IT' iNPQ NT'MiO'N JNH'N 'T J
QHN'AP'M77 iNPO' NH'NHP'IMNK'MiO' PQHN
1 7'GJKH'M' ii PO'LJ NT' i'9 P8
" ' P P2'NHPi'JL9 7NPO'[AJN'M9MG
2'MI'MG'N JP'MG'N JNH%G'G IL9 K NT+
#iO'G IL9P'NHMI'NHP'i7MiKT' 7'N JNH+
-' 2i'NHMN'2%99' M' NH'T J+
i' 1' NJ JG+7QHN+
XHPi'QHN% NH' QHN' M G H'GHM99'APi GN' QHN[
JP'G M iG i'9 P'GHM99'i'NHP' 9O'N'K IP+
#LL P'NHP 'N JNHG'AT' 9JG' HPi'NHP 'HTIPG
OJ99' 7L NPGN' 7 MNH'MiO'A Q'K ILM P+
XMiN'G I 9PG'N JNH'N %O' NH'NP MN i S
#G'N JP'MG'GNPP9'MG'L9MiNMQP'N 'NHP' I i+
#G'GJi'N 'OMT'MG'NJ N9P'N 'HP 'IMNP
#G i'N 'MOMIMiN'MG'PM NH'N 'NHP'KPiN P S
4PN'M7NP'M99'K ILM G iG 7N JNH+
#G'N JNH%G'MJNHPiN K'MJNH 'N 'AP'K NPO+
#G'N JP'MG 9JG'GHM99'K i'JL'NHP' P GP+
#iO'GMiKN 7T'NHP'iJIAP G+
-' LHPN'IMT'T J'AP[
27'2'AP'7M9GP' 'G P P'M'HM '7 I'N JNH+
XHPi'N IP' G 9O'MiO'HMNH'7 Q N' NGP97+
XHPi' MNP O LG'HM P' i'NHP'GN iPG' 7 T
#iO'A9 iO' A9 i'G M99 %O'K N PG JL $
#iO'I QHNT'GNMNPG'KHM MKNP 9PGG'M P'Q MNPO
'OJJGNT'i NH Q8 TPN'9PN'IPI T
O I'7M9GP'N '7M9GP'MI iQ'7M9GP'IM OG'i'9 P+
LA M O'IT'7M9GPH O[HPi'NHPT'HM P'GM O'MG'7M9GP'
#G M 'MG' MNP ' iO' 'GMiOT'PM NH+
#G7 W'N '9MIA' ' 97N 'HP 7P %G'KM97
-M O'N 'NHP'H iO' 'GNPLOMIP'N 'HP 'G i8
4PM'9PN'NHPI'GMT'N 'GN KU'NHP'HPM N' 7'7M9GPH O+
#G'7M9GP'MG' PGG O+
' : 'N 'N'AM QM i' IMOP' GPM9' N'GPM9' N8 2%99' AP'NHP'
IP'P'T J'L P'7M9GP' iP'N 'MI NHP 'G iKP'2'HM P'NMUPi'
GJKH'LM iG'N 'A iQ'T J'N QPNHP '9PN'M99'L N 7J9' Q P G'
APN PPi'AP'KM99PO'N 'NHP' 9O%G piO'M7NP 'IT'iMIP'KM99'
NHPI'M99SD-MiOM G8 9PN'M99'K iGNMiN'IPi'AP' 9JGPG'M99'
7M9GP' IPi' PGG OG'MiO'M99'A UP G APN PPi'-MiOM G[
GMT'MIPi' g
i'#IPi+
-'#IPi+
'#IPi+ XHP PJL i'2' 99'GH 'T J'M'KMIAP'
H KH' APO' APKMJGP' N' GHM99'i N' GLPMU' 7'T J'L PNNT'
piK JiNP G'L PGG'N'N 'OPMNH'M MT+
#iO' JL O'Q MiN'M99'N iQJP N PO'IM OPiG'HP P+
PO'KMIAP 'MiO'-MiOM'N 'L OP'NH G'QPM [
= 4 &

3 3'222+S ' ' ,
' 1 ' ' 2 '
= 6 ' (' "'
' 'L iKPG'7 'NHP'GP KP'2'HM P'O iP'T J+
HP'MO MiNMQP' 7'NHP'N IP'L ILNG' IP'M9 JO'
'KM99'7 ' PK ILPiGP+ #LLPM'N'N 'T J'I iO+
HMN'NH JQH'NHP'G QHN'2'APM'i'N 9 iQG'N '9 PF
2'HM P'MAMiO i%' T'9P7N'IT'L GGPGG i
2iKJ %O'M'N M N %G'iMIP8 PWL G%O'ITGP97+
O I'KP NM i'MiO'L GGPGG%O'K i piPiKPG+
'O JAN7J97 NJIPGGP]JPG%'iQ'7 I'IP'M99'
HMN'N IP'MK]JM iNMiKP'KJGN I'MiO'K iON i
MOP'NMIP'MiO'I GN'7MI 9M'N 'IT'iMNJ P8
#iO'HP P'N 'O'T J'GP KP'MI'APK IP

Ui iQ'HMN'NH iQG2'GH J9O'9 P+ HP'K iEPKNJ M9'PMO iQ'JiGJLL NPO'AT'MiT'
MJNH NT'GS
6' HMN'NH JQH'N P'G QHN'2'APM'i'NH iQG'N'?' P'
2'HM P'MAMiO i%O' T+R
H G G'NHP'7M J NP'PMO iQ'7 +'5TKP+

' ip ' iN 'NHP' 9O'GN MiQP'JiMK]JM iNPO
2'O 'APGPPKH'T J'MG'i' MT' 7NMGNP+
'Q P'P'i 'M'9 NN9P'APip7N+
1JN' 7NH GP'IMiT' PQ GNP %O' i'L I GP
2N' IMT'O 'Q O'L OP'HMNH'i ' NHP'Q9MGG'
XHKH'H G' i' 99'GHM99'HM P'OPG P'N 'O iU8
27'G '2'HM P'OP G i'lPO K iMA9P+
'JGP'APN PPi'T J'GN MiQPipGG'MiO'H G'L OP+
XH KH'T J'GMT'9 P'N 'K lP'i'lT'APHM97+
'GH ' NGP97'AJN'L OP'8 7 'GJLL9P'UippG'
OPPO'M QMiKP'MiO'M P'NHP'L JO'IMi%G 7PPG+
3 ' X PN99'PWPKJNP'T J'LJ L GP'MiO'LJN' i'
#'7 I' 7GN MiQPipGG'MG P'LMGG'M9 iQ8S
'O 'PMKH'9 O'8 MiO'p NHP'Q ppN'H I'i N+
1 'P9GP'O GOM i7J99T' H KH'GHM99'GHMUP'H I'I P'
HMi''7i N'9 UN'O' i+ 2' 99'9PMO'NHP' MT+
'XHMN'K lPG'NHP'QPip M9'N 'GLPMU' NH'lP\
4 JUi 'lT'I iO+2N99'7QHN'i 'I P'%QM iGN T+
3 'XHMN'GMTG'#KH 99PG\' J9O'HP'MJQHN' NH'JG\
-'X J9O'T J'lT'9 O'MJQHN' NH'NHP'QPip M9'\
' +
-' NH iQ'lT'9 O+
3 ' HP'APNNP+' 2
'; O'OMT'Q O'OMT+
E ' "'O'T J'\H 'O'T J'\ + 4 ' (
'X HMN'O PG'NHP'KJKU 9O'GK i'lP'\
6 4'" ' i '-MN K9JG'\
'; O'I '#EMW+
6 4'"M'\S
'; O'I +
6 4'#'T'MiO'Q O'ipW'OMT'N +' + 4 '= F
' XHMN' lPMi'NHPGP'7P99 G'\ i 'NHPT'i N'
#KH 99PG'\
' HPT'LMGG'AT'GN MiQP9T8 NHPT' p P'JGPO'N 'APiO+'
'GPiO'NHP 'Gl 9PG'AP7 P'NHPl'N '#KH 99PG8
'K lP'MG'HJlA9T'MG'NHPT'JGPO'N 'K PPL'
'H 9T'M9NM G+

' Spio PO' NH'LM NG'MM9piNG+
' HP'9 ipG i'A MKUPNG'M P'i N' i'NHP'7 9 +
)

2' 99'K lP'9MGN8 % G'9UP'HP%9Y']JPGN i'lp
X HT'GJKH'JiL9MJG P'PTPG'M P'APiN' HT'NJ i%O' i'H l'
27'G '2'HM P'OP G i'lPO K iMA9P+
'JGP'APN PPi'T J'GN MiQPipGG'MiO'H G'L OP+
XH KH'H G' i' 99'GHM99'HM P'OPG P'N 'O iU8
2N' IMT'O'Q O'L OP'HMNH'i ' NHP'Q9MGG'
'GH ' NGP97'AJN'L OP'8 7 'GJLL9P'UippG'
OPPO'M QMiKP'MiO'M P'NHP'L JO'IMi%G 7PPG+
3 ' X PN99'PWPKJNP'T J'LJ L GP'MiO'LJN' i'
#'7 I' 7GN MiQPipGG'MG P'LMGG'M9 iQ8S
'O 'PMKH'9 O'8 MiO'p NHP'Q ppN'H I'i N+
1 'P9GP'O GOM i7J99T' H KH'GHM99'GHMUP'H I'I P'
HMi''7i N'9 UN'O' i+ 2' 99'9PMO'NHP' MT+
'XHMN'K lPG'NHP'QPip M9'N 'GLPMU' NH'lP\
4 JUi 'lT'I iO+2N99'7QHN'i 'I P'%QM iGN T+
3 'XHMN'GMTG'#KH 99PG\' J9O'HP'MJQHN' NH'JG\
-'X J9O'T J'lT'9 O'MJQHN' NH'NHP'QPip M9'\
' +
-' NH iQ'lT'9 O+
3 ' HP'APNNP+' 2
'; O'OMT'Q O'OMT+
E ' "'O'T J'\H 'O'T J'\ + 4 ' (
'X HMN'O PG'NHP'KJKU 9O'GK i'lP'\
6 4'" ' i '-MN K9JG'\
'; O'I '#EMW+
6 4'"M'\S
'; O'I +
6 4'#'T'MiO'Q O'ipW'OMT'N +' + 4 '= F
' XHMN' lPMi'NHPGP'7P99 G'\ i 'NHPT'i N'
#KH 99PG'\
' HPT'LMGG'AT'GN MiQP9T8 NHPT' p P'JGPO'N 'APiO+'
'GPiO'NHP 'Gl 9PG'AP7 P'NHPl'N '#KH 99PG8
'K lP'MG'HJlA9T'MG'NHPT'JGPO'N 'K PPL'
'H 9T'M9NM G+

' Spio PO' NH'LM NG'MM9piNG+
' HP'9 ipG i'A MKUPNG'M P'i N' i'NHP'7 9 +
)

5--' #KH 99PG'GNMiOG' %NH*'piN MiKP' 7H G'NPiN S'
-9PMGP' N' J'QPip MG'N 'LMGG'GN MiQP9T'AT'H I+
#G'7HP' p P'7 Q N8 MiO'L iKPG'M99
/MT'iPQ9'QPiN'MiO'9 GP' PQM O'JL i'H I'
'GPP'NHPGP' : pK Mi'9 OG[S HT'P Pi'M9 PMOT
'NHP'7 GN'Q P+
' H G G i N'GN MiQP' 9TGGPG+
HP'APMJNT'NHMN' G'A iP'HP P' 'NHP'7MKP'
HP'APM P'UI G i N'AJN'K lIPiOG' NGP97'
^ ' NHP G%'PTPG'i 'O NH'NHP'PTP' NGP97'
' XHMN'M I'2'L ' 79MNP'\
% G'KP NM i'Q PMNIPGG' iKP'7M99Pi'QJN' NH'7 NJip'
H9JGN'7M99' JN' NH' Ipi'N ' XHMN'NHP'OPK9 i%O' G+
"P'GHM99'MG G i' PMO' i'NHP'PTPG' 7 NHP G
'G7PP'i'H G' i'7M99'7 ' Ipi'9 UP'AJNNP 79 PG+
H ' i N'NHP ' IPM9T' iQG'AJN'N 'NHP'GJl I P 8
#iO'i N'M IMi'7 'APiQ'G lL9T' IMi+
"MNH'MiT'H i J 8 AJN'H i J'7 'NH GP'H i J G'
HMN'M P' NH JN'H I 'MG'L9MKP' KHPG'MiO'7M J +
- CPG' 7MKK OPiN'MG' 7N'MG I P N
XH KH' HPi'NHPT'7M99'MG'APiQ'G9 LLP T'GNMiOP G
+' HP'9 P'NHMN'9PMi%O' i'NHPI'MG'G9 LLP T'N +
5 ' ipL9JKUO i'Mi NHP 'MiO'N QPNHP'
5 P' i'NHP'7M99+' JN'%G i N'G ' NF'IP'
O NJip'MiO'2'M P'7 piOG8 2'O'piE T
#N'MILGP'L iN'M99'NHMN'2'O O'L GGPGG+
M P'NHPGP'Ipi%G'9 UG'8 H'O 'IPNH iUG'7iO' JN'
IPNH iQ'NHP' NF' i'IP'GJKH' KH'APH 9O iQ'
#G'NHPT'HM P' 7Npi'Q pi+' "P P' G' 9TGGPG8
2%9Y iNP JL'H G PMO iQ+S
" 'i ' 9TGGPG\
5--' 'Q PMN' HPN G% G i'
' XHMN'M P'T J' PMO iQ\
5--' #'GN MiQP'7P99 'HP P
X NPG'IP+ HMN'IMi'H 'OPM 9T'P P'LM NPO D
" 'IJKH'i'HM iQ' ' NH JN' ' i+
Mii N'I MUP'A MGN'N 'HM P'NHMN' H KH'HP'HMNH+
'7PP9G i N' HMN'HP' PG'AJN'AT' P79PKN i8
#G' HPi'H G' NJPG'GH i iQ'JL i' NHP G
"PMN'NHPI'MiO'NHPT' PN N'NHMN'HPMN'MQM i'
'NHP'7 GN'Q P+
' H G G i N'GN MiQP' 9TGGPG+
HP'APMJNT'NHMN' G'A iP'HP P' 'NHP'7MKP'
HP'APM P'UI G i N'AJN'K lIPiOG' NGP97'
^ ' NHP G%'PTPG'i 'O NH'NHP'PTP' NGP97'
' XHMN'M I'2'L ' 79MNP'\
% G'KP NM i'Q PMNIPGG' iKP'7M99Pi'QJN' NH'7 NJip'
H9JGN'7M99' JN' NH' Ipi'N ' XHMN'NHP'OPK9 i%O' G+
"P'GHM99'MG G i' PMO' i'NHP'PTPG' 7 NHP G
'G7PP'i'H G' i'7M99'7 ' Ipi'9 UP'AJNNP 79 PG+
H ' i N'NHP ' IPM9T' iQG'AJN'N 'NHP'GJl I P 8
#iO'i N'M IMi'7 'APiQ'G lL9T' IMi+
"MNH'MiT'H i J 8 AJN'H i J'7 'NH GP'H i J G'
HMN'M P' NH JN'H I 'MG'L9MKP' KHPG'MiO'7M J +
- CPG' 7MKK OPiN'MG' 7N'MG I P N
XH KH' HPi'NHPT'7M99'MG'APiQ'G9 LLP T'GNMiOP G
+' HP'9 P'NHMN'9PMi%O' i'NHPI'MG'G9 LLP T'N +
5 ' ipL9JKUO i'Mi NHP 'MiO'N QPNHP'
5 P' i'NHP'7M99+' JN'%G i N'G ' NF'IP'
O NJip'MiO'2'M P'7 piOG8 2'O'piE T
#N'MILGP'L iN'M99'NHMN'2'O O'L GGPGG+
M P'NHPGP'Ipi%G'9 UG'8 H'O 'IPNH iUG'7iO' JN'
IPNH iQ'NHP' NF' i'IP'GJKH' KH'APH 9O iQ'
#G'NHPT'HM P' 7Npi'Q pi+' "P P' G' 9TGGPG8
2%9Y iNP JL'H G PMO iQ+S
" 'i ' 9TGGPG\
5--' 'Q PMN' HPN G% G i'
' XHMN'M P'T J' PMO iQ\
5--' #'GN MiQP'7P99 'HP P
X NPG'IP+ HMN'IMi'H 'OPM 9T'P P'LM NPO D
" 'IJKH'i'HM iQ' ' NH JN' ' i+
Mii N'I MUP'A MGN'N 'HM P'NHMN' H KH'HP'HMNH+
'7PP9G i N' HMN'HP' PG'AJN'AT' P79PKN i8
#G' HPi'H G' NJPG'GH i iQ'JL i' NHP G
"PMN'NHPI'MiO'NHPT' PN N'NHMN'HPMN'MQM i'
'NHP'7 GN'Q P+
' H G G i N'GN MiQP' 9TGGPG+
HP'APMJNT'NHMN' G'A iP'HP P' 'NHP'7MKP'
HP'APM P'UI G i N'AJN'K lIPiOG' NGP97'
^ ' NHP G%'PTPG'i 'O NH'NHP'PTP' NGP97'
' XHMN'M I'2'L ' 79MNP'\

HPT'K9ML'NHP'9JAAP'#EMW' i'NHP'GH J9OP 8
#G'7H G'7 N' p p' i'A M p' "HKN %G A PMGN+
#iO'Q PMN' T'GH iU iQ+
1ip'N JKH' 7'IMNJ p'IMUPG'NHP' H 9P' 9O'U i S
HMN'M99' NH' ip'K iGpiN'L M GP'ip A i'QM OG'
H JQH'NHPT'M p'IMOP'MiO'I J9OPO' 7'NH iQG'LMGN8
#iO'Q p'N '0JGN'NHMN' G'M 9 NN9P'Q 9N+
p'9MJO'NHMi'Q 9N' %p OJGNPO+
HP'L pGpiN'DTP'L M GPG'NHP'L pGpiN' AEPKN
HPi'IM pgi N'NH J'Q PMN'MiO'K ILL9PNP' IMi+
HMN'M99'NHP: ppUG APQ i'N ' GH L'#EMW8
iKP'NH iQG'i'I N i'G ip'KMNKH'NHP'PTP
HMi' HMNi N'GN G+ HP'K T' piN' iKP' i'NHPP+
#iO'GN 99' N'I QHN8 MiO'TPN' N I MT'MQM i+
27'NH J' J9OGN'i N'pin IA'NHTGP97'M9 p
#iO'KMGP'NHT' pLJNMN i' i'NHT'MPi N8
XH GP'Q9 JG'OPPOG'AJN' i'NHPGP'7 P9OG' 79MNP+
MOP'pIJ9 JG I GG iG%I iQGN'NHP'Q OG'NHPIGP9 PG+
#iO'O M P'Q PMN' M G'N '7MKN i+
1 7'NH G I T'L MKT
2'HM P'GN iQ' PMG i G+
5--' JN'%QM iGN'T J'L MKT
HP'PMG iG'M P'I pL NPiN'MiO'HP KMQ'
% G'UI i'#KH 99PG'NHMN'T J'M P' i'9 P'
X NH' iP' 7- MI%G'OMJQHNP G+
'M[' Ui i\
', 5--'2G'NHMN'M iOP'\
HP'L OPiKP'NHMN%G i'M' MNKH7JQ'GNMNP'
i G'M9I GN'P pT'Q M i' 7-9JNJG%Q 9O'8
O iOG'A NN I' i'NHP'JiK IL PHPiG P'OPPLG'8
ppLG'L9MKP' NH'NH JQHN'MiO'M9I GN'9 UP'NHP'Q OG'
5 PG'NH JQHNG'Ji p g'i'NHP 'OJIA'K M9PG+
HP P'G'M I TGNP T'@ NH' H I' P9MN i'
5J GN'ip p 'IPOO9P' i'NHP'G JQ' 7'GNMNP8
XH KH'HMNH'MI' LP MN i'I P'O ip'
HMI'A PMNH' 'LPi'KMi'Q P'PWL PGGJ P'N '
#99'NHP'K I I P KP'NHMN'T J'HM P'HMO' NH' T
#G'LP 7PKN9T' G J G'MGT J G' IT'9 O'8
#iO'APNNP' J9O' N'7 N'#KH 99PG I JKH+

'pi JG'MiO'KM9JI MN iQ'N Ip+
1ip'N JKH' 7'IMNJ p'IMUPG'NHP' H 9P' 9O'U i S
HMN'M99' NH' ip'K iGpiN'L M GP'ip A i'QM OG'
H JQH'NHPT'M p'IMOP'MiO'I J9OPO' 7'NH iQG'LMGN8
#iO'Q p'N '0JGN'NHMN' G'M 9 NN9P'Q 9N+
p'9MJO'NHMi'Q 9N' %p OJGNPO+
HP'L pGpiN'DTP'L M GPG'NHP'L pGpiN' AEPKN
HPi'IM pgi N'NH J'Q PMN'MiO'K ILL9PNP' IMi+
HMN'M99' NHP: ppUG APQ i'N ' GH L'#EMW8
iKP'NH iQG'i'I N i'G ip'KMNKH'NHP'PTP
HMi' HMNi N'GN G+ HP'K T' piN' iKP' i'NHPP+
#iO'GN 99' N'I QHN8 MiO'TPN' N I MT'MQM i+
27'NH J' J9OGN'i N'pin IA'NHTGP97'M9 p
#iO'KMGP'NHT' pLJNMN i' i'NHT'MPi N8
XHP P'Q9 JG'OPPOG'AJN' i'NHPGP'7 P9OG' 79MNP+
MOP'pIJ9 JG I GG iG%I iQGN'NHP'Q OG'NHPIGP9 PG+
#iO'O M P'Q PMN' M G'N '7MKN i+
1 7'NH G I T'L MKT
2'HM P'GN iQ' PMG i G+
5--' JN'%QM iGN'T J'L MKT
HP'PMG iG'M P'I pL NPiN'MiO'HP KMQ'
% G'UI i'#KH 99PG'NHMN'T J'M P' i'9 P'
X NH' iP' 7- MI%G'OMJQHNP G+
'M[' Ui i\
', 5--'2G'NHMN'M iOP'\
HP'L OPiKP'NHMN%G i'M' MNKH7JQ'GNMNP'
i G'M9I GN'P pT'Q M i' 7-9JNJG%Q 9O'8
O iOG'A NN I' i'NHP'JiK IL PHPiG P'OPPLG'8
ppLG'L9MKP' NH'NH JQHN'MiO'M9I GN'9 UP'NHP'Q OG'
5 PG'NH JQHNG'Ji p g'i'NHP 'OJIA'K M9PG+
HP P'G'M I TGNP T'@ NH' H I' P9MN i'
5J GN'ip p 'IPOO9P' i'NHP'G JQ' 7'GNMNP8
XH KH'HMNH'MI' LP MN i'I P'O ip'
HMI'A PMNH' 'LPi'KMi'Q P'PWL PGGJ P'N '
#99'NHP'K I I P KP'NHMN'T J'HM P'HMO' NH' T
#G'LP 7PKN9T' G J G'MGT J G' IT'9 O'8
#iO'APNNP' J9O' N'7 N'#KH 99PG I JKH+

'pi JG'MiO'KM9JI MN iQ'N Ip+
1ip'N JKH' 7'IMNJ p'IMUPG'NHP' H 9P' 9O'U i S
HMN'M99' NH' ip'K iGpiN'L M GP'ip A i'QM OG'
H JQH'NHPT'M p'IMOP'MiO'I J9OPO' 7'NH iQG'LMGN8
#iO'Q p'N '0JGN'NHMN' G'M 9 NN9P'Q 9N+
p'9MJO'NHMi'Q 9N' %p OJGNPO+
HP'L pGpiN'DTP'L M GPG'NHP'L pGpiN' AEPKN
HPi'IM pgi N'NH J'Q PMN'MiO'K ILL9PNP' IMi+
HMN'M99' NHP: ppUG APQ i'N ' GH L'#EMW8
iKP'NH iQG'i'I N i'G ip'KMNKH'NHP'PTP
HMi' HMNi N'GN G+ HP'K T' piN' iKP' i'NHPP+
#iO'GN 99' N'I QHN8 MiO'TPN' N I MT'MQM i+
27'NH J' J9OGN'i N'pin IA'NHTGP97'M9 p
#iO'KMGP'NHT' pLJNMN i' i'NHT'MPi N8
XHP P'Q9 JG'OPPOG'AJN' i'NHPGP'7 P9OG' 79MNP+
MOP'pIJ9 JG I GG iG%I iQGN'NHP'Q OG'NHPIGP9 PG+
#iO'O M P'Q PMN' M G'N '7MKN i+
1 7'NH G I T'L MKT
2'HM P'GN iQ' PMG i G+
5--' JN'%QM iGN'T J'L MKT
HP'PMG iG'M P'I pL NPiN'MiO'HP KMQ'
% G'UI i'#KH 99PG'NHMN'T J'M P' i'9 P'
X NH' iP' 7- MI%G'OMJQHNP G+
'M[' Ui i\
', 5--'2G'NHMN'M iOP'\
HP'L OPiKP'NHMN%G i'M' MNKH7JQ'GNMNP'
i G'M9I GN'P pT'Q M i' 7-9JNJG%Q 9O'8
O iOG'A NN I' i'NHP'JiK IL PHPiG P'OPPLG'8
ppLG'L9MKP' NH'NH JQHN'MiO'M9I GN'9 UP'NHP'Q OG'
5 PG'NH JQHNG'Ji p g'i'NHP 'OJIA'K M9PG+
HP P'G'M I TGNP T'@ NH' H I' P9MN i'
5J GN'ip p 'IPOO9P' i'NHP'G JQ' 7'GNMNP8
XH KH'HMNH'MI' LP MN i'I P'O ip'
HMI'A PMNH' 'LPi'KMi'Q P'PWL PGGJ P'N '
#99'NHP'K I I P KP'NHMN'T J'HM P'HMO' NH' T
#G'LP 7PKN9T' G J G'MGT J G' IT'9 O'8
#iO'APNNP' J9O' N'7 N'#KH 99PG I JKH+

'NH 'O I'"PKN 'NHMI'- 9TWPIM'
JN'N'I JGN'Q P P'T J1G'-T HJG'i 'MN'H Ip
XHPi'7MIP'GHM99' i' J' G9MiOG'G J1O'HP'N J1L8
#iO'M99'NHP: ppU GH'Q 9G'GHM99'N LL iQ'G iQ S
6' : PMN' "PKN %G'G GNP'O O'#KH 99PG' i'8
JN' J'Q PMN'#EMW'A M P9T'APMN'O i'H I+R
OM P P99'IT'9 O'8 2'MG'T J'9 P'GLPMU'8
HP'7 9'G9 OPG' %P'NHP' KP'NHMN'T J'GH J9O'A PMU+ 9 4
'NH G P77PKN'#KH 99PG'HM P'2'I %O'T J
#' 'IMI' ILJOPIN'MiO'IMii GH'Q i'
2G'i N'I P'9 MNH%O'NHMI'Mi'P77PI iMNP'IMi'
2i'N Ip'7MKN i+'2'GNMiO'K iOPIi%O'7 'NH G8
HPT'NH iU'I'9 NN9P'GN IMKH'N'NHP' M +
#iO'T J'Q PMN'9 P'N 'IP'PGN M iG'T J'NHJG
PPN' JGP'T J GP978 MiO'NHP' PMU' MiN i' JL O'
HM99'7 I'T J'ipKU'JI9 GP'H G'MI JG'7 9O+
#iO'9 UP'M'OP O L'7 I'NHP'9 i%G IMIP+
P'GH U'N'M T'M +D'
HM99'#EMW'7 QHN' NH'"PKN '\
'#T8 MiO'LP HMLG'PKP P'IJKH'H i J'AT'H I+
'2'GPP'IT' PLJNMN i' G'MN'GNMUP8
T'7MIP'G GH P O9T'Q %O+
1'NHPi'AP M P8
H GP' JiOG'HPM9'99'NHMN'IPiO'Q P'NHPIGP9 PG
1I GG i'N'O ' HMN'G ipKPGGM T
PM9G'M'K II GG i'N'M'A9MiU'7OMiQP 8
#iO'OMiQP '9 UP'Mi'MQJP'GJAN9T'NM iNG'
3 PI'NHPi' HPi' P'G N'O9T' i'NHP'GJi+
': 'KM99' HP G NPG'H NHP 'G PPN'-MN K9JG'
2%99'GPiO'NHP'7 9'N '#EMW'MiO'OPG P'H I'
' NP'NHP' EMi'9 OG'M7NP'NHP'K IAMN+
'GPP'JG'HP P'JiM I%O' 2'HM P'M' IMi%G 9 iQ iQ+
#i'MLLPN NP'NHMN'2'MI'G kU' NHM9+
'GPP'Q PM' "PKN ' i'H G' ppOG' 7LPMKP8%
'NM9U' NH'H I'MiO'N 'APH 9O'H G' GMQP+

JN HP!'K !NP!N !'M!O' KKMG !' IPPN+
T' ? P' 2%99 L9MT' NHP' HJ!NP 7 'NHT' 9 7P
X NH' M99 I T'7 KP' LJ GJ N' M!O'L 9 KT+' D
: '# !O' NH J' GHM9N' HJ!N' M' 9 !' NHMN' 99' 79T
X NH' H G'7MKP' AMKU M O+S2!'HJ I M!P' QP!P PGG
X P9K I P' TT' ! 'AT' # !KH GPG% 9 7P+
X P9K I P' !OPPO'[T' P!JG% HM!O'2'G PM +
'I M!'M9 P' KM!'9 P' !'GJKH' M' G N
HP' NH !Q'HP' I PM!G N' U 99' I P' PWKP99P!N9T+
! ' X P' GT I LMNH CP SD? P' 9PN' C3!PMG' 9 P
27' N ' I T' G O' H G'7MNP' AP' ! N' NHP' Q9 T
#' NH JGM!O' K I L9PNP' K J GPG' 7'NHP' GJ!'[
JN' !' I !P' P I J9 JG' H ! J D' 9PN' H I' O P+
X NH' P P T'E !N' M' JI O' 8 M!O' NHMN' N I [
' X P' U! ' PMKH' NHP' P99+
! ' X P' O' 8 M!O' 9 !Q' N ' U! ' PMKH' NHP ' GP+$
' H G' G' NHP' I GN' OPGL NP7J99%GND' QP!N9P' Q PPN !Q+
HP' ! A9PGN' HMNP7J9' 9 P' NHMN' P%P ' 2' HPM O' 7+S
X HMN' AJG !PGG' 9 O' G ' PM 9T'\
: 2' MG' GP!N'7 ' N ' NHP' U !Q8 AJN' HT' 2' U! ' ! N'
' " G' LJ L GP' I PPNG' T1J' % MG' N ' A !Q' NH G' : PPU'
' M9KHM %H JGP8 M!O' NHP P' N ' P!OP ' H I
O ' NHP' P!7 PPO' # !NP! ' NHP' 7M ' PGG O
/ P N%G' HM P' T J' K I LM!T8 ' 7T J' L9PMGP+
" MGN' NHP P' AP7 P' JG' 2' K !GNM!N9T' O ' NH !U
@1 ' MNHP ' KM99' I T' NH JQH N' KP NM !' U! 9POQP`
T' A NHP ' 9JG' 9 QQPG' NHP P' N ! QHN8
& JGP' H I ' M!O' Q P' H I' ! NP' 7' J ' MLL MKH+
X NH' NHP' H 9P']JM9 NT' HP P 78 2' 7PM +
X P' GHM99' AP' I JKH' J! P9K I P+'
E HMN' 2' MGGJ P' T J8
9JG' HMO' MNHP ' T' P P' A !P' N ' : PPKP
HM!' PGG O' A !P' 7 1!' 9 O8 P%99' 7 99 ' T J+'
HP' 7 99 ' T J+'
& ' : O' I ' M99+' + 4
' # !O' NP99' I P' ! A9P' 5 I PO8 %7M NH' NP99' I P' N JP'
3 P!' !' NHP' G J9' 7'G J!O' Q O 7P99 GH L S
XH ' !' T J' NH JQHNG' I P NG' 7M ' " P9P!' I GN F
TGP97' ' P!P9MJG'\
!' NH' M9 UP
" P' I P NG' P99' N ' HM P' HP ' NHMN' O NH' GPPU' HP '
@ N' I MU !Q' M!T' GK JL9P' 7HP ' G 9J P
X NH' GJKH' M' HP99' 7'LM ! ' M!O' 9O' 7'KHM QP8
!O' T J' MG' %99' N ' UPPL' HP ' NHMN' OP7P!O' HP '
@ N' LM9MN !Q' NHP' NMGNP' 7'HP ' O GH ! J
X NH' GJKH' M' K GN9T' 9 GG' 7' PM9NH' M!O'7 P!OG'
" P' 9 UP' M' LJ9 !Q' KJKU 9O ' J9O' O !U' JL'
HP' 9PPG' M!O' O PQG' 7'M' 79MN' NM I PO' L PKP8
4 J' 9 UP' M' 9PKHP ' JN' 7' H GH' 9 !G'
P' L9PMG%O' N ' A PPO' JN' T J ' !HP N G8
NH' I P NG' L G%O' PMKH' P QHG' ! ' 9PGG' ! ' I P8
JN' HP' MG' HP8 H KH' HPM P' 7 ' M' H P' ID
' 4 J' M P' N ' A NNP ' N ' T J ' K J!N T ' I M!+
! ' HPN%' A NNP ' N ' HP ' K J!N T ' " PM ' I P+' -M G+S
O ' P P T' 7M9GP O L' ! ' HP ' AM OT' P !G'
#' : PK M!%' 9 7P' HMNH' GJ!U8 7 ' P P T' GK JL9P'
17HP ' K ! NM I ! MNPO' KM ! ' XP QHN
#' EM!' HMNH' APP!' G9M ! 8 G !KP' GHP' K J9O' GLPMU+
HP' HMNH' ! N' Q P!' G ' I M!T Q O' OG' A PMNH+
#G' 7 ' HP ' : PPUG' M!O' EM!G' GJ77P %O' OPMNH+
' OM ' 5 I PO' T J' O ' MG' KHML I P!' O '+
5 GL M GP' NHP' NH !Q' NHMN' T J' OPG P' N ' AJT'
JN' P' !' G 9P!KP' H 9O' NH G' NJP' P99 S
X P%99' ! N' K I I P!O' HMN' P' !NP!O' N ' GP99F
"P P' 9 PG' J ' MT+' + 4 &

< ('+:%'2%-O ,'< * '+:% * *

P^) -29'2+*,' B2*B*(%'+*'2%-O' ' ; ; @:' ('%7 O%,+ 1'+:%', %-',-(:%(' * * %O%(',%-+:-'
+:%@ 1'*BB*(%O'+*' %@C -O' *((',' BB*2+' +:%'@:-<%' *'2%-@,' <',9','
'2 B2,'@ B%' ('+:%' 2%-O < '+:%' *#*' (' -'@* * ', @*,(+2'@+*'+':%'-<%* * ' -C-'
(B%2%' +:%& -2+*'2%-O <'(' +:%' * * *J +:%&'-2+*'$
X ' ('+:%' 2%-O ,'<* '+:%' * * *J +:%&'-2+*'$
) ' '

3 3 22+S J - !& (.! !&- !. -4 -4&-

. &19/

, ! 5PM N JA9P ! N T J GP978 NHP I ! G K 9O+
- HP! G PPN IT 9 O 2%99 KM99 I !P J!K9PO !8
$" P G DM99 J!A 9N NHP QMNPG+
! $ JA9P H I ! N8
APO N APO 9PPL U 99 NH GP L PNNT PTPG+
#!O Q P MG G 7N MNNMKH IP!N N NHT GP!GPG+
#G !7M!NG% P I LNT 7M99 NH JQHN
- : O I NHP!+
$,$!- NHPP! N APO+
- # P T J M PM T 7 IP\
T !1 PGG OM[AJN NHMN NHP 2LJGT OMT
X MU%O AT NHP 9M U HMNH JG%O NHP AM9O K G
$, #!O O PM I !Q ! QHN 99 H OP J E TG Đ! 9 !QP
2 J9O! N7 I NHPP+
- QHN HMNH APP! N A P7+
! PGH P NHP NKH[NH P! I JG QHNG GHP
GNMTG+
#G NPO JG9T ĐMG HP998 AJN 79 PG NHP Q MGLG 79 P $
X NH !QG I P I IP!NM T G 798 NHM! NH JQHN+
; 4 J 99 KMNKH K 9O M!O KJ GP IP+
- - NHPP NM T8ST J IP! 99 !P P NM T+S
1 7 9 GH PGG O[S2 I QHN HM P GN 99 HP9O 7+
#!O NHP! T J J9O HM P NM PO+ " M U[NHP P%G !P JL+
R8 9 X HMN M P M99 NHP O G LP! HP P\
! 2N G T J J!K9P+

(

- #LPGN 9P!KP !H I [! 99 HP AP I KU !Q8
2 GHM99 HM P GJKH M 9 7P S
; " ! H ! \H Q I M OP!HPMOG\ " P P
T J I M O[HP P%G IT K JG ! PGG O\
: HM!Q T J GP97 T J !MJQHNT I KU !Q J!K9P[
4 J A !Q IP N O M!O NHP! T J 79 JN IP N +
O HMN\SD9PN HP GMT HMN HMN
HM P 2 A JQHN T J N O \
- IP K IP8 APGH P T JN HPM N8 T J%99 !P%P AP
Q O ;
GJ77P NHP G+
" M HM^ #9MG L PNKH[M L KML KKH M[F
HMGN! N G9PLN N ! QHN\ J9O HP ! N M !MJQHNT IM! 9PN
N G9PPL\ M AJQAPM NMUP H I[= ! ' 3
- 5 O ! N2 NP99 T J\S% J9O HP P P U! KU%O %NHP
HPMO[
X H %G NHMN MN O \Q O J!K9P Q M!O GPP+S
T 9 O K IP T J MQM ! !N IT KHM I AP
4 J G I 9P M!O I KU IP MG 72 IPM!N !MJQHN 9T+
! " M HM
- IP T J M P OPKP %O 2 NH !U 7! GJKH NH !Q+S
= ! ' 3
" PM !PGN9T NHPT U! KU[L MT T J K IP ! 8
2 J9O! N7 HM97 T HM P T J GPP! HP P+
= 4 &) ('"
= ! 3 ! " !! 9 X H %G NHP P\ HMN%G NHP
IMNNP \ 99 T J APMN O !NHP O \ " ! \ HMN%G
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, +D 3# +

9 : O I 9 O Q O I +
X H %G NHP P\ IT 9 O +f3!PMG\ T IT N NH
2 U!P T J ! N HMN !P G NH T J G PM 9T\
; 2G ! N L !KP 9JG HP P\
, " P P[HMN GH J9O HP O HP P\
IP HP G HP P IT 9 O O ! N OP!TH I 8
N O NH IL N H I IJKH N GLPMU NH IP+

Đ 2% !NHP]JM N 8 NHP 7 9 2 %
%'2 !NHP]JM N 8 NHP 7 9 $ %'2

2G HP HP P GMT T J \ %N G I P NHM! 2 U! +2%99 AP
G ! SO IT !LM N 2 KM IP !9MNP X HMN GH J9O
HP O HP P\
E XH [S!MT NHP! S IP K IP T J%99 O H I
!Q P P T% M P % M P 4 J%99 AP G N JP N H I N AP
7M9GP N H I 5 ! N T J U! 7 H I AJN TPN Q 7PNKH
H I H NHP 8 Q +

- (-3! 3 !&$) (

! " ! \ HMN%G NHP I MNNP \
T 9 O 2 GKM KP HM P 9P GJ P N GM9JNP T J+
T I MNNP G G MGH HP P G MN HM!O
-M G T J A NHP M!O 5P LH A$JG
HP : PK M! 5 IPO M!O J #!NP!
5P9 P %O N JG8 M!O 7 H I 7 NH NH+
3 P NHP 7 GN GMK 7 KP NH ! NH G H J +
X P I JGN Q P JL N 5 IPOPG%HM!O
HP 9MOT PGG OM+
! ; 2G N K !K9JOPO G \
- T - M I M!O NHP QP! P M9 GNMNP 7 T8 ;
HPT M P MN HM!O M!O PMOT N P77PKN N+
! " IT MKH P P I P!NG I KU I P[
2 99 Q I PPN NHP I M!O IT 9 O + 3!PMG
X P I PN AT KHM!KP8 T J O O ! N7 !O IP HP P+
: O Q O IT 9 O8 NHP GPK PNG 7 !MNJ P
"M P ! N I P Q79 !NMK NJ ! NT+
, = 4 &) ('"
2G %N L GG A9P \ ! G !P Q N AJN 9 GN \ HP OP 9
NMUP # !NP! [NHP T J!Q L !KP 99 Q I MO+ #L9MQJP
JL !# !NP! [2 J9O NHPT HMO A UP%G !PKU+

- " ! \ HMN%G NHP I MNNP \ XH MG HP P\
#H MH [
- XHT G QH T J G L 7 J!O9T \ HP P%G IT 9 O
Q !P\ P99 IP G PPN J!K9P HMN%G NHP I MNNP \
%X J9O 2 P P MG OPPL J!OP NHP PM NH MG 2 M I
MA P[+
- 1 NHP Q OG[S HMN%G NHP I MNNP \
- NHPP QPN NHPP !+ X J9O NH J HMOGN !P P APP!
A ![2 U!P NH J J9OGN AP H G OPMNH D L QP!N9P_
IM!'[S#L9MQJP L !#!NP! [
- : O J!K9P 2 APGPPKH T J !IT U!PPG 2 APGPPKH
T J HMN%G NHP I MNNP \
H J IJGN AP Q !P P!KH NH J IJGN AP Q !P8
NH J M N KHM!QPO 7 #!NP! NH J.IJGN N NHT 7MNHP
M!O AP Q !P 7 I 9JG8 %N 99 AP H G OPMNH[%N 99 AP
H G AM!P 8 HP KM!! N APM N+
- 1 T J I I NM9 Q OG[S2 99 ! N Q +
H J IJGN+
- 99 ! N J!K9P 2 HM P 7 Q N IT 7MNHP 8
2 U! ! N JKH 7K !GM!QJ ! NT8
U ! ! 9 P ! A9 O ! G J9 G !PM IP+
#G NHP G PPN 9JG+S1 T J Q OG O !P[
MUP PGG O%G !M IP NHP P T K ! 7M9GPH O
27P P GHP 9PM PG 9JG[IP 7 KP M!O OPMNH+
5 N NH G A OT HMN PWN P I NT ĐT J KM!8
JN NHP GN !Q AMGP M!O AJ 9O !Q 7 IT 9 P
2G MG NHP P T KP!N P 7 NHP PM NH+
5 M !Q M99 NH !QG N N+S2; 99 Q ! M!O PPL 8S
5 O +
; - PM IT A QHN HM M!O GK MNKH IT L M GPO
KHPPUG8
MKU IT K9PM KP NH G AG M!O A PMU IT HPM N
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= 4 &

M ; O9 !H G 2NM9 M! 5 KN !M T PWL9M !G , ! !MG 6M
GHM99 GU !KP M 9 QQP HPMO+ %
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3 3' 222+ F ' - ' % .i ' -MiOM JG% i&-

' # ') ('G ' " $ ('

' 2N' G Q PM' I i iQ8 MiO'NHP'H J'L P7 W%O
17'HP'OP9 p T'N'NH G' M9 MiN' : ppU'
lPG'7MG'JL i S: O lT'A NHP' 9JG
P9g'T J'NHP'9MOT' HMN'GHP' G N'O +
#iO'HMGNP'HP'N'NHP'LJ L GP+
i' X M9U' i'N'HP'H JGP8
2%gA iQ'HP'N'NHP' : pK Mi'L pGpiN9T
#iO'N'H G'HMiO' HPi'2'OP9 p'HP+
H iU' N'Mi'M9NM 'MiO'NHT'A NHP' 9JG'
#'L PGN'NHP P' 77P iQ'N ' N'H G' i'HPM N+' + 4 $
'2'Ui ' HMN'%W G'N '9 P8
#iO'% JgO'MG'2'GHM99'L NT'2'K JgO'HP9L'[S
-9PMGP'T J' M9U' 8DlT'9 OG+ + 4 &

3 3'2 +S' '- ' ii 'CC-MiOM JG% i&-

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' p l OP MNP'AP' l OP MNP+
-' XHT'NP99'T J'lP' T l OP MN i'\
HP'Q p7 G7ip'7J99'LP 7PK\'NHMN'2'MMGNP+
#iO'i '9PGG i'M'GPiGP'MG GN iQ'MG'NHMN'
XH KH'KMJGPNH' N'D " X'KMi'2'l OP MNP' N'\
27?'K J9O'NPlL CP' NH' HT'M77PKN i+
1'A P ' N'N 'M' PMU'MiO'K 9OP'LM9MNP+
HP'9 UP'M99MT lPiN'K J9O'2'Q P'lTQ p&$
T'9 P'MOl NG'i ']JM9 7T iQ'K GG'D
' l P'lTQ p7' i'GJKH'M'L pK JG'9 GG+

') ' 1

1' HPM N'HPM T'HPM N
XHT'G QH%G'NH J' NH JN'A PMU iQ'\

HP P'HP'MiG P G MQM i+

' 2N' G Q PM' I i iQ8 MiO'NHP'H J'L P7 W%O
17'HP'OP9 P

JN G I PNH !Q I MT AP O !P NHMN P 99 ! N
! O G I PN I PG P M P OP 9G N J GP9 PG
X HP ! P 99 NP I LN NHP 7 M 9NT 7 J L P G
- PGJ I !Q !' NHP KHM ! QP7J9 L NP ! KT+
8 ;' MT Q O I T 9 O S
! I P U GG M ! O 9PN JG LM N+
95 9 NHP 9JG[
! +: O A NHP K I P T J H NHP 8
! O A !Q # N ! PMG M ! O NHP : PK M ! NH T J+
- T 9 O 99 T J AP N JP \
! X H 2 \ M9MG N G GH NH K M7N 7 Q PMN L ! !
2 NH Q PMN N JNH KMNKH I P P G I L9 K NT8
X H 9GN G I P NH KJ ! ! !Q Q 9O NHP K LLP K !G+
X NH N JNH M ! O L9M ! ! PGG 2 O PM I ! P AM P+
OPM ! N I T N JNH8 NHP I M9 7 I T N
2G SL9M ! M ! O N JP SNHP P%G M99 NHP PMKH 7 N+

G " $ (

XP9K I P G 5 I PO[HP P G NHP 9MOT+
X H KH 7 # ! NP ! P OP9 P T J
N NHP L N 9 O+ 2%99 Q P HP N NHT HM ! O8
! O AT NHP MT L GGPGG NHPP HMN GHP G+
3 ! N PMN HP 7M 8 M ! O AT I T G J9 7M : PPU
27 P%P NH J GNM ! O MN I P KT 7 I T G O+
M I P PGG O M ! O NHT 9 7P GHM99 AP MG GM7P
#G - M I G ! 29 !+
! OM 9MOT PGG O
L9PMGP T J GM P NHP NHM ! UG NH G L !KP PWLPKNG
HP 9JGN P ! T J PTP HPM P ! ! T J KHPPU+
-9PMOG T J 7M JGMQP8 M ! O N 5 I PO
4 J GHM99 AP I GN PGG M ! O K I I M ! O H I H 99T+
! : PK M ! NH J O GN ! N JGP I P K J NP JG9T+
GHM I P NHP GPM5 7 I T LPN N ! N NHPP+
2 ! L M G !Q HP 2 NP99 NHPP 9 O 7 : PPKP
HP G MG 7M H QH G M !Q %P NHT L M GPG+
#G NH J J ! NHT N AP KM99%O HP GP M ! N+
2 KHM QP NHPP JGP HP P99 P P ! 7 I T KHM QP 8
O AT NHP O PMO7J9 -9JN 7 NH J O GN ! N
H JQH NHP Q PMN AJ9U #KH 99PG AP NHT QJM O+
2%99 KJN NHT NH MN+
! 1 AP ! N I %O L !KP 9JG
/ PN I P AP L 9PQ%O AT I T L9MKP M ! O I PGGMQP+
AP M GLPMUP 7 PP8 HP ! 2 M I HP ! KP+
2%99 M ! G P N I T 9JGN # ! O U ! T J 9 O+
2%99 ! NH !Q O ! KHM QP HP ! NH
HP GHM99 AP L C%O 8 AJN NHMN T J GMT SDAP%N G +
2%99 GLPMU N ! I T GL N M ! O H ! J S ! ;
! I P N NHP L N+ S2%99 NP99 NHPP 5 I PO
H G A M P GHM99 7N I MUP NHPP N H OP NHT HPMO+ S
/ MOT Q P I P T J HM ! O8 M ! O MG P M9U
J ! GP9 PG AP ! O P J ! PPO7J9 NM9U+
+ 4 &) , 1 "
+ & , "
" M U[" PKN %G N J I LPN+ $
6 " HM P P GLP ! N NH G I ! !Q[
HP L !KP I JGN NH !U I P NM OT M ! O P I GG+
HMN G P N OP AP7 P H I ! NHP 7 P9O+
% G 9JG% 7MJ9N I P K I P N 7 P9O NH H I+
/ PN JG I MUP PMOT GN M QHN+$

4 G NHP PMO !Q 7 M99 NHP 9O K L PG+ X M AJ N ! KHM ! QPO NH G N D
H KH G K I I !9T MO LNPO HP GN !Q I PM ! !Q MNNMKHPO N % ! HMUGLP P%G
MQP G PWL PGGPO ! NHP9 !P 7 NHP P99 U ! G !Q S

PP4 '% 79 P AJN % '0 ! M !+R

1J NPWN G L !NPO MG NHP 7 GN 7 9 @ H KH G M9G NHP LJ ! KNJMN ! 7 NHP
]JM N H G G NHP I OP I LJ ! KNJMN ! S

/ " P P M N NH J ! MLL !N I P ! N 7 PGH M ! O 7M
! N K LMN !Q N I P NH GNM N !Q K J MQP+
: P NH NHT N J I LPN R BK+

HP M MN ! MG 7 GN !N OJKPO AT HP AM9O+

4 PM NH M A OPQ I %G 7 PGH M9MK NT+
/ PN JG MOO PGG N +NP ! O ! " PKN %G HPP9G +
HP Q9 T 7 J T O NH NH G OMT 9 P
1 ! H G 7M NH M ! O G !Q9P KH M9 T + 4 &

3 3 F , ? - - - !&
" # (1 2 " ! -

3 " P P M N NH J ! MLL !N I P ! N 7 PGH M ! O 7M +
! N K LMN !Q N I P+ X NH GNM N !Q K J MQP+
: P NH NHT N J I LPN M 9 JO ! NP N T
H J O PMO7J9 # EMW8 D NHMN NHP MLLM99PO M
MT L P KP NHP HPMO 7 NHP Q PMN K I AMNM ! N+
! O HM9P H I H NHP +
6 4 H J N J I LPN NHP P%G I T LJ GP+
K MKU NHT 9J ! QG M ! O GL9 N NHT A MCP ! L LP8
9 99M ! N 99 NHT GLHP PO A MG KHPPU
1JN G P99 NHP K 9 K 7 LJ77%O #] J 9 !
I P GN PNKH NHT KHPGN M ! O 9PN NHT PTPG GL JN A9 O8
H J A9 %GN 7 $ " PKN + & , -!& "-
5-- N J I LPN M ! G P G+
% G AJN PM 9T OMTG+
3 2G ! N T ! 5 I PO NH M9KHMG% OMJQHNP \
5-- % G HP 2 UP ! NHP I M ! ! P 7 H G QM N8
" P GPG ! NHP N P NHMN GL N 7 H G
2 ! MGL MN ! 9 7NG H I 7 I NHP PM NH+

2

3 2G NH G NHP 9MOT PGG O \
! 3 P ! GHP+
3 GN OPM 9T P9K I P N NHP : PPUG G PPN 9MOT+
- 1 J QP ! P M9 O NH GM9JNP T J NH M U GG+
5-7 4PN G NHP U ! O ! PGG AJN LM N KJ9M 8
% P P APNNP GHP P P U GG%O ! QP ! P M9+
- # ! O P T K J N9T K J ! GP9 2%99 APQ ! + S
I JKH 7 PGN +
2%99 NMUP NHMN ! NP 7 I T J 9 LG 7M 9MOT
#KH 99PG A OG T J P9K I P+
E 2 HMO Q O M QJ I P ! N 7 U GG ! Q ! KP+
J N NHMN%G ! M QJ I P ! N 7 U GG ! Q !
O NHJG L LL%O - M G ! H G HM O I P ! N8
^# ! O LM NPO NHJG T J M ! O T J M QJ I P ! N+F'
5-- 1 OPMO9T QM99 M ! O NHP I P 7+M99 J GK ! G[
O H KH P 9 GP J HPMOG N Q 9O H G H ! G+
HP 7 GN MG P ! P9MJG% U GG 8 SDNH G I ! P
-MN K9JG U GGPG T J+
E 1 NH G G N I [
- M G M ! O 2 U GG P P I P 7 H I +
E 2%99 HM P I T U GG G S / MOT AT T J 9PM P+
-! 2 ! U GG !Q O T J P ! OP PKP P \
NH NMUP M ! O Q P+
- 2%99 I MUP I T I MNKH N 9 P $
HP U GG T J NMUP G APNNP NHM ! T J Q P8
HP P7 P ! U GG+
E 2%99 Q P T J A N+ 2%99 Q P T J NH PP 7 !P+
- 4 J% P M ! OO I M ! 8 Q P P P ! Q P ! !P+
E # ! OO I M ! 9MOT \ P P T I M ! G OO+
- -M G G ! N8 7 T J U ! %N G N JP
HMN T J M P OO M ! O HP G P P ! NH T J+
E 4 J 7 99 L I P % NHP HPMO+
2%99 AP G !+
5-- 2N P P ! I MNKH T J ! M 9 MQM ! GN H G H !+S
MT 2 G PPN 9MOT APQ M U GG 7T J \
- 4 J I MT+
5-- 2 O OPG P N+
X HT APQ NHP !+

% HP 9 !P ! A MKUPNG G ! N ! NHP 7 H
1 / 22 G ")&(

5--ˢ XHTᶠNHP!ˢ7 ˢ P!JG%GMUPˢQ P ᶠIPᶠMᶠU GG+
XHP!ˢ"P9P!ˢGᶠMᶠIMO'MQM!ˢM!O'HG+
-ˢ2'MIˢTJˢOPAN ˢK9M Iᶠˢ Nᶠ HP!ˢ%WGᶠOJP+
5--ˢ P P %ᴳ ITᶠOMTˢM!O'NHP!ᶠMᶠUGGᴳ 7T J+
!ˢ /MOTˢMᶠ O8S2%9ᶠA !Q'TJᶠNˢTJˢ7MNHP +
ˢO Q!7PᴳMˢ!ˢILM FᶠNH JQHNᶠ NHᶠA PMNHᶠ8
M!9TᶠMᴳ "PKN ˢ AJNᶠI PᶠOM!QP Jᴳ8
O ˢ"PKN ˢ !ˢHGᶠA9MCPᶠ 7 MNHˢGJACK APᴳ
ˢNP!OPˢ AEPKNᴳ8 AJNᶠHPˢ !ˢHPMNᶠ 7MKN !+
2ᴳIP !O KMN PᶠNHM!ˢEPM9 JᴳᶠP
HPTᶠKM99ᶠHIˢ 9JᴳᶠMˢ!O' !ˢHIˢPPKNᶠ
#ˢGPK !O'H LPˢMᴳ7M 9TAJ 9NᶠMᴳ "PKN +
HJᴳGMTᴳ+D!PMG8 !PᶠNHMᶠU! GᶠNHPᶠT JNᶠ
3P!ᴺˢHGᶠ !KHPᴳˢM!Oˢ NHᶠL MNPᶠG J9+
5 Oˢ !ˢQ PMᶠ29 !ˢNHJᴳᴺM!G9MNPᶠH Iˢᴺˢ IP+
ˢ HPᶠ EM!G%ᴺJILPN+
3 ˢ HPTᶠMPᶠ !ᶠMKN !+
-ˢ ˢ #EMWˢH 9O'NH !Pᶠ !['' PKN ˢNH JᶠG9PPL%G N8
!ˢ
MUPᶠNHPP[
3 ˢ "ᴳA9 GᶠMPᶠ P99O GL G%O SNHP Pˢ#EMW[
!ˢ4 JᶠIJGNˢ!ˢI Pˢ =; & , -
5 ˢ - !KPGˢP! JQH'ᴳLᵠPMGPᶠT J+
6 4ˢ2'MIˢ!ˢ Mˢ MIˢTPNˢ9PNᶠJGᴳ7QHNᶠMQM !+
!ˢ#ᴳ"PKN ˢL9PMGPG
ˢ X HTᶠNHP!ˢ 99ᵠ2'!ˢIˢ PᶠS
H JᶠMᴺˢQ PMNᶠ9 O'ˢITᶠ7MNHP %ᴳGGNP %ᴳGI!F
#ˢK JG!QP IM!ᴺˢQ PMNᶠ- MI%ᴳGPPO8
HPᶠ A9QMN !ˢ 7 JᶠA9 O'7 AOᴳ
#ˢQ TᶠPIJ9MN !ˢ%N WNᶠJGᴳᴺM !ˢ
XPPᶠNHTᶠK III WN !ˢ: PPUᶠM!O' EM!ˢGˢ
HMNᶠNH JᶠKLJ9OGNᶠGMTS6ᴳ HGᶠHM!OᴳGˢ: PK M!ˢM99+
#!O'NHGᴳGˢ EM!8 NHPᶠG IP Gᴳ 7NHGᶠ9PQᴳ
#99ˢ: PPUˢM!O'NHGᶠM99ᵠ 1T8 ITᶠI NHP %ᴳA9 Oᶠ
&J!Gˢ !ˢNHPᶠOPWNPˢKHPPUˢM!O'NHGᴳGˢI GNPˢ
J!OGˢ !ˢITᶠ7MNHP %G8ℝATˢ? PᶠIJ9N L NP!N+
H JᶠGH J9OGNᶠ ! NᶠAPMˢ7 Iˢ IPᶠMᶠ: PPU GHᶠIPIAPˢ
XHP P !ˢITᴳG Oᶠ HMO'! Nᶠ IL PGGJPᶠIMOPᶠ
17 Jˢ M!UᶠPJO' JNᶠNHPᶠEJGNᶠQ OᴳQM !GMTᶠ
HMNᶠM!TO LˢNH JᶠA %OGNᶠ7 Iˢ NHTᶠI NHP +
TGMK POᶠMJ!Nˢ'GH J9O'ATᶠ MTᶠI NMᵠG Oᶠ
PᶠOM!%O [/PNᶠIᶠPIA MKPᶠNHPPˢ#EMWᶠ
TᶠHIˢNHMNᶠNHJ!OP Gˢ NH JᶠHMGNᶠ9JGNTᶠMI G8
"PKN ˢ J9O'HM PᶠNHPIˢ7M99ᴳJL !ˢHIˢNHJGᴳ
JG!ˢN99ᶠHIJˢNˢNHPPᶠ[
6 4ˢ 2'NHM!UᶠNHPP‡" PKN
H JᶠMNᶠˢQP!N9PˢM!O'N ˢ7 PPᶠMᶠIM!ˢ
2'KMIPᶠNˢU 99ᶠNHPPˢK JG!ˢM!O'9 O" !PMGᴳ
#ˢQ PMNᶠMOO N !ˢPM !PO'!ˢNHTᶠOPMNH+
*ᶠ P LN 9P IJGᴳGˢI MA9Pᶠ
@1!ˢ H GPᶠA QHNᶠK PGNᶠOMIPᶠ NᶠHP ˢ9 JO%GNᶠ1ˢTPGᴳ
PGˢ6 HGᴳGᶠHPRˢK J9O'L I GPᶠNˢHIGP97ᶠ
#ˢNH JQHNᶠ7MOOPO'H ! J ˢN !ˢ7 Iˢ"PKN +
ˢ HP Pᶠ GPWLPKNM!KPᶠHP Pᶠ7 IˢA NHᶠNHPᶠGOPGᶠ
XHMNᶠ7J NHPˢT Jᶠ ˢO X P% ˢM!G P ˢ N8
HPᶠ GGJPᶠ GᶠPIA MKP IP!NS#EMWˢ7M P P99+
6 4ˢ27'2ˢI QHNᶠ !ˢP!N PMN PGˢ7!OᴳGJKKPGG
@#GᶠGP9O%2'HM PᶠNHPᶠKHM!KP ˢ2' J9O'OPG Pᶠ
T7MI JGᶠK JGˢ!ˢNˢ Jˢ: PK M!ˢNP!NG+
!ˢ % GᶠA QHNᶠK PGNᶠOMIPᶠ !%Gᴳ GH'M!O'Q PMNᶠ#KH 99PGᴳ
5 NHᶠ9 !Q'Nˢ GPPᶠJ!M I%O'NHPᶠ M9 M!Nᶠ"PKN +
ˢ +D!PMGˢKM99ᶠ ITᶠA NHP ˢ 9JGᴳNˢI P
#!O'GQ!7T$NH Gᶠ9 !Q' !NP P ˢ
ˢNHPᶠPWLPKNP Gᶠ 7 Jᶠ EM!ˢLM N8
5PG PᶠNHP I'H IP+S: PᶠIPᶠNHTᶠHM!O'ˢITK JG !8
2' 99ᵠQˢPMNᶠ NᶠNHPPˢM!O'GPPᶠT J'U! QHNG+
6 4ˢ: PMNᶠ#QMIPI! !ˢK IPGᴺˢ IPPNᶠJGᶠHP P+
ˢ HPᶠ NH PGNᶠ 7'NHP I'NP99ᶠ IPᶠ!M IPᶠAT+!M IPᶠ8

HPGP OGˢ6'NHPTᶠKM99ᶠH I' 9JGR'MP 7 J!O'AP9 8 M!O'NHP ˢ !N OJK\ !'
HPPᶠGˢL AMAGTᶠMᶠK9P KMᵠ ˢNTL Q MLH KM9ᵠP +
)&%

ˢ ˢ ˢ

JN'7 '#KH 99PG'I ip i'GPM KH iQ'PTPG
HM99'7 iO'H i'AT'H G 3'MiO'L N9T'G CP+
JN'NH G'HT'K JiNPiMiKP'GN 99'9 KU%O' i'GNPP9
2'ip p'GM 'N 99'i +' 2'UiP 'NHT'Q MiOG p+
#iO' iKP'7 JQHN' NH'H I ' HP' MG'M'G 9O p'Q O8
JN'AT'Q PMN' M G'NHP'KMLNM i' 7JG'M99+
p p'9 UP'NHPP' /PN'Mi' 9O' I Mi'pI A MKP'NHP8
#iO' NHT' M ' p9K lP'N ' J'NPiNG+';
E ' % G'NHP' 9O' PGNA +
' /PN' lP'pI A MKP'NHPP'Q O' 9O'KH i K9p
HMN'HMGN'G '9 iQ' M9U%O'HMiO' i'HMiO' NH'N lP' S
GN' p p piO' PGN '2' MI'Q9MO'N 'K9MGL'NHPP+
- '2' J9O' lT'M I G+K J9O' I MNKH'NHPP' i'K iNPiN i'
#G'NHPT'K iNPiO' NH'NHPP' i'K J NPGT+
' 2' J9O'NHPT'K J9O+
- ' M [
T'NH G' H N'P'APM O+' 2%O'7 QHN' NH'NHPP'N I +
XP99' p9K lP' p9K lP[2'HM P'GPPi'NHP'N I P+
5--' 2' iOP'i 'H 'T iOP'K NT'GNMiOG+
XHPi' P'HM P'HP P'HP 'AMGP'MiO'L 99M 'AT'JG'
'2'Ui 'T J'7M J '9 O' 9TGGPG' P99+
#H'G 'NHP P%G' IMiT'M' : ppU'MiO' EMi'OPMO+
iKP'7 GN'2'GM 'T J GP97'MiO'5 lPO'
2i'29 i' i'T J': ppU GH'PlAMGGT+
5--' '2'7 PN 9O'T J'NHPi' HM' J9O'PiGJP'
T'L LHPKT' G'AJN'HM97'H G'E J IPT'TPN8
O 'T iOP' M99G'NHMN'LP N9T'7 iN'T J'N i+
4 i'N P G' H GP' MiN i'N LG'O 'AJGG'NHP'K9 JOG+
JGN'U GG'NHP ' i'7PPN+
' $ 2' IJGN'i N'AP9 P P'T J
HP'NHPT'GNMiO'TPN8 MiO'I OPGN9T'2'NH iU+
HP'7M99' 7P P T'-H TQ Mi'GN iP' 99'K GN

$' HP']JM N 'HMG' i9T'NHP'7 GN'N '9 ipG'MiO'NHP'9MG'9 iP' 7'NH G i A9P'MOO PGG'8
MiO'TPN' NPP PHG'MiO' M9 iP'NM9U'MA JN'NHP'MOO N iG'MiO'GJAGN'NJN iG 7 6'NHP'
L9MTP PO N G+R
2i'NHP']JM N 'MiO'NHP'7 9 '9H' NHP']JPGN i' 7'"PKN ' G'Q pi'AT'
%;' i'JM N 'HP' M J1'PO N iG N' G MG QiPO' N ' ' %;' MiO'HPi' NH JN'
9 U iG' MN' NHP' Q i M9G'&PPO'MiO' 4 MG i'O GKJGG' HPNHP' N' G' L LP'7 '
pip9MJG N 'KM99'H 1GP97'6'i A9+R
%' 6 SJ1JGPO'JiK I I 'i+

' 'NHP'7 9 '8 NHP']JM N S

6'5PGL G iQ' IMiT'7 7P NG'MiO'GJAOJP IpNG+R

F ' SLPMT+
6 I ' i'NHP'7 9 '8 NHP']JM N '
@ 'NHP'7 9 8 NHP']JM N S

'X H 'ip NHP'9 AUG'JL i'NHP'HPM pi'i 'PM NH+$

T' I ME ' '9 PG HP P';NH G 2%9$ APT+
IP'K IP' HP G NPG';HP9L'N 'N I'I'T'NPIN8
H G'i QHN' i'AMi]JPN i'Q' I JGN'M99'AP'GLPIN+
MT'-MN K9JG‡ = 4 & ' '-# &1 / +
' X NH'N ' IJKH'A9 O'MiO'N '9NN9P'A M i'NHPGP'
N ' IMT' Ji' IMO8 AJN' 7' NH'N ' IJKH'A M i'MiO'N '
9 NN9P'A9 O'NHPT'O ‡ 2%9$'AP'M'KJ p' 7' IMOIpi‡ "p p%G
#QMIPli i SMi'H ipGN'7P99 ' pi JQH' Mio' ip' NHMN'
9 PG]JM 9G8 AJN'HP'HMG'i N'G ' IJKH'A M i'MG PM MW'
#io'NHP'Q O9T'N MiG7 IMN i'7?JL NP'NHP p'H G'A NHP '
NHP'AJ99 SNHP'L I N P'GNMNJP'MiO' A9]JP' IPI M9' 7
KJKU 9OG8 M'NH 7NT'GH piQ H i'M'KHM i'HMiQ iQ'MN'H G'
A NHP %G 9PQ SN' HMN'7 I'AJN'NHMN'HP' G' GH J9O' N'
9M OPO' NH' IM9 KP'MiO' IM9 KP'7 KPO' NH' N'NJ i'H I'
N'\ 'Mi'MGG pP'i NH iQ8 HP' G A NH'MGG MiO' W'N'Mi'
W' pPi NH iQ8 HP' G A NH' W'MiO'MGG‡ 'AP'M'O Q'M'
lJ9P'M'KMN'M'7NKHP 'M'N MO'M'9 CM O'Mi' 9'M'LJNN KU'
'M'HP iQ' NH JN'M' p'2' J9O' i N'KM P' AJN'N 'AP'
pIP9MJG'2' J9O'K iGL P'MQM iGN'OPGN iT‡ #GU' IP'i N'
HMN'2' J9O'AP'7'2' p P'i N' HP G NPG8 7 '2' KM P'i N'N '
AP'NHP'9 JGP' 7M'9MCM 'G'2' p P'i N' pIP9MJG+S "pT OMT[
GL NG'MiO'7 PG[

' 77 3 3' 2+

JN'Q PG'M99'QMCP'MiO'API N' 7MI JG' p '
1i'NH'7M ' PGG O+
' HM99'2'G ppN'9 O'HP'A JiO'N 'NHPP'G ' IJKH‡
#7NP ' P'LM N'7 I'#QMIPli i%G'NPiN+
' XH 'UPPLG'NHP'NPiN'i '\
' HP'GJ QP i%G A W' 'NHP'LMN piN%G X JiO+
' X P99'GM O‡ #O P G NT[MiO' HMN'ippO'NHPGP'N KUG'\
' - NHPP'AP'G 9PiN'A T8 2'L 7N i N'AT'NHT'NM9U'
NH J'M N'NH JQHN'N 'AP'#KH 99P9% IM9P' M 9PN+
' M9P' M 9PN %T J' QJP[HMN%G NHMN'\
' XHT' H G' IMGKJ9 ip' H P‡ ' NHP' NNPi'
O GPMGPG' 7 NHP' G JNH' QJNG Q L iQ' JLNJ PG' KMNM HG'
9 MOG' % Q M P9' % NHP' AMKU' 9PNHM Q PG' K 9O' LM9G PG' M '
pTPG' O N NNPi' 9 P G' HPPV iQ' 9JiQG' A9MOOP G' 7J99' 7
IL GNHJ IP' GK MN KMG' 9 IP U 9iG' % NHP' LM9 I' iKJ MA9P'
A ip MKHP' MiO' NHP' P99PO' 7PP G IL9P' 7' NHP' NPNNP ' NMUP'
MiO' NMUP'MQM i'GJKH'L PL GNP JG O GK P PG'[D
' XHT' +NH J' OM I MA9P' A W' 7 pi T' NH J' HMN'
I PMIPGN'NH JN 'KJ GP'NHJG'\$
' 5 '2'KJ GP'NHPP'\
N iQJ GHMA9P'KJ 'i +
' XHT'i 'T J',J i JG AJNN8 T J' H PG i' iO G_
' '\ HT'M N' NH J' NHPi'PWMGLP MNP'NH J' O9P' I
I MNP M9 GUP i' 7G9PTO' G 9U'NH J'Q PPi' GM KPipN'79ML'7 'M
G P'PTP'NH J'NMGGP9' 7M'L O QM9%G LJ GP'NH J'\ #H'H '
NHP'L ' 9O' G LPGNP PO' NH' GJKH' MNP 79 PG8 O I iJ_
N PG' 7'IMNJ P[
' 1JN'QM99[
'O iKH'PQQ[
' T G PPN'-MN K9JG'2'M I'NH M NPO']J NP'
O I'I T Q PMN'LJ L GP' i'N I %G AMNN9P+
"p P' G M' 9PNNP'7 I']JPPi'"PKJAM8
#'N UPi'7 I'HP'OMJQHNP 'IT7M'9 P8
NH'NMW iQ' IP'MiO'QMQ iQ' IP'N 'UPPL'
#i' MNH'NHMN'2'HM P'G i‡' 2' 99'i N'A PMU' N
OM99': PPUG8 7M 9'7M I P8 H i J ' 'Q ' 'GNMT'8

' H G G NHP' PMO iQ' 7'NHP']JM N ‡ HP'7 9 'GH NPiG'NHP' piJ I P MN i' 7
9 MNHG I P'O GPMGPG NH' 6'MiO'NHP'9 UP+%
=

3 3 22+ S L - % .! M9KHMG%

! X HMN M P T J JL HP P H \ GLPMU+
^8 g XH KM99G\
! 5 IPO+ S M9KHMG 2 NH !U+ S X HP P%G T J OMJQH_
NP \
98 g HP K IPG N T J+

) ("1 # . .

5-- NM!O HP P NHP N KH IMT ! N O GK P JG+

! PGG O K IPG 7 NH N H I+
! " ! IT KHM QP \
- IT G PPN QJM O M![S " M U[M O NH
T J+ $ ^8 -, -
! 4PM G 7M I 9 M [
5-- HP 99G G !Q M!T IM!MN 7 GN G QHN+
!O 9PN+T J I !O AP K JL9PO NH T J OG+
!O M!T IM! IMT G !Q HP 7 HP KM! NMUP HP K9 978 GHP%G ! NPO+
! X 99 T J P I P I AP \
- &P I P I AP \ TPG+
! MT AJN O NHP!8
! X HMN GH J9O GHP P I P I AP \
5-- / GN[
- PPN H !PT : PPU NP I LN IP! I P N 7 99T
& QJP T
! MT NHP! S
- 2%99 NP99 T J HMN S
! -H [LH K IP NP99 M L ! 4 J M P M 7 G ! S
- 2!7M NH 2 KM!! N X HMN J9O T J HM P IP O \
EJQQ9 !Q N KU N AP GPK PN9T LP!+
! X HMN O O T J G PM T J J9O APGN ! IP \
- 2 L NHPP O ! N H 9O IP N I !P MNH8
O IP O M!TNH !Q AJN NHMN G PPN : PPU+
! : O ! QHN+
! " 9O LMN P!KP 2
5-- + " ! EM! \
- 5 IPO S
! ! Q O ! QHN 2%99 AP T J 7 g ! I P+
! HT APNNP I JGN+
- " M U[!P O ! T J PM +
! 1 L9MQJP M!O IMO!PGG 2
5-- 4 J M P I %O L !KP8 9PN JG OPLM N 2 L MT T J+
/PGN T J O GL9PMGJ P GH J9O P!9M QP NGP97
MNH7J9 NP IG8 NH G L9MKP G OM!QP JG 8
HP N IP QHN OPMO9T8 2 APGPPKH T J Q +
! PH 9O 2 L MT T J
5-- MT Q O IT 9 O Q 77
4 J 79 N Q PMN O GN MKN !8 K IP IT 9 O+
! 2 L MT NHPP GNMT+
5-- 4 J HM P ! N LMN P!KP8 K IP+
! 2 L MT T J GNMT8 AT HP99 M!O M99 HP99 N IP!NG
2 99 ! N GLPMU M O+
! #!O G Q O ! QHN+
- MT AJN T J LM N !M!QP +
! 5 NH NHMN Q P P NHPP \
NHP %O N JNH[
5-- XHT H ! 9 O\
! T? P
99 AP LMN P!N+
- : JM O M![SD HT : PPU[
! -H LH [MO PJ8 T J LM9NP +
- 2!7M NH 2 O ! N8 K IP H NHP !KP MQM !+
5-- 4 J GHMUP IT 9 O MN G IPNH !Q8 99 T J Q \
4 J 99 A PMU JN+
! HP GN UPG H G KHPPU[
5-- IP K IP+

! MT GNMT 8 AT ? P 2 99 ! N GLPMU M O
HP P G APN PP!8 IT 99 M!O M99 77P!KPG
QJM O 7 LMN P!KP SGNMT M 9 NN9P H 9P+
" NHP OP 9 9JWJ T NH H G 7MN JIL M!O
L NMN 7 !QP N KU9PG NHPGP N QPNHP [O T 9PKHP T 7 T[
! JN 99 T J NHP!\
- 2!7M NH 2 99 9M ! P N JGN IP P9GP+
! : P IP G IP N UP!7 NHP GJ PNT 7 N+
- 2%99 7PNKH T J !P 9 4
5-- 4 J HM P G !LMN P!KP+
! OPM IP ! N G PPN9 O8
2 99 ! N AP ITGP97 ! HM P K Q! N !
17 HMN 2 7PP98 2 M I M99 LMN P!KP+

B

NHP L9POQP 8 ! ! !
- "P P 5 IPO UPPL NH G G9PP P+F
! APMJNT [HP P%G NHT 7M NH\
5-- T9 O S
! 2 99 AP LMN P!N8 JN M O9T 2 99+
- 4 J9 U JL !NHMN G9PP P PH 9O N P99+S
"P9 %O IPS1 7M9GP P!KH[S : P%N IP MQM !+
! XH GP MG%N\
- ; 2N G ! I MNNP ! 2 HM P%N MQM !+
2 99 ! N IPPN NH T J N I ! QHN
2 L NHPP 5 IPO G N IP ! I P+
GHP GHM LP!G SDXP99 GM O HPNGN !P+
! 2 GHM99 HM P N+
- XHMN NH G \
! #T NHMN+
- 1 M99 T J Q OG[S1 L PNNT L PNNT L9POQP [
HT IMGNP ! 9 PG NH !U !Q !H G APO
17 NHPP M!O IP8 M!O G QHG M!O NMUPG IT Q9 P+
#!O Q PG IPI M9 OM !NT U GGPG N N+
#G 2 U GG NHPP+SD MT O ! N G!MNKH N 7 I IP 8
" P NHMN NMUPG NHMN O NH NMUP IT HPM N NHM9+D
! 2 HMO T J HPM N AP7 P NH G 7 99 G N+
! 2 O O G PM LMN P!KP+
- 4 J GHM99 ! N HM P N 5 IPO8 %7M NH T J GHM99 ! N8
2%99 Q P T J G IPNH !Q P9GP+
! 2 99 HM P NH G H GP MG N\
- % G ! I MNNP +
!$ IP NP99 IP H GP N MG+
- % MG !P%G NHMN 9 %O IP APNNP NHM!T J 99+
JN ! T J HM P N NMUP N+
! XH GP MG N\
- T M99 5 M!M%G M N !Q IP!T !O+
#!O AT HP P97 2 99 !PN NP99 T J H GP+
! I 99 2 PM N !IT HP9I 8
#!O Q P P H G GL N NHMN OM PG ! N KHM99P!QP N+
! XP N NH J NHP OP 9 M!O %GN N !NHT H !+
2N GH J9O AP KHM99P!Q%O+
- XP99 P99 %N G O !P %N G LMGN S#!O TPN N G ! N8
2 99 ! N UPPL IT O+
! XHT NHP! 7M P P998
H J !P P GHM9N I KU 5 IPO MQM !+
- 4 J GHM99 ! N Q S1!P KM!! N GLPMU M O
JN N GN M QHN GNM NG T J+
! 2 O ! N9 UP NH G 7 9 !Q+
2 AT - 9JN AJN NHMN NHMN9 UPG ! N T J L9PMGPG
IP APGN+
! XHMN GHM99 2 K IP \ NHP H J \
- #T K IP S1 ? P[
5 K IP SD2GHM99 AP L9MQJPO+
! OM P P99 N 99 NHP!+
- : O ! QHN+ 2 L NHPP K IP+S
+ 4

9JG 7M P P99[!P PTP TPN 9 UG !NHPP 8
JN NH IT HPM N NHP NHP PTP O NH GPP+

H G G NHP 9 !P 7 NHP]JM N HP 7 9 HMG S
6 " P NHMN NMUPG NHMN NMUPG MT HPM N NHM9+R
1/ 22+)2 =)

#H'[L ' J 'GPW[NH G'7MJ9N' !'JG'2'7 !O+
HP'P ' 7' J 'PTP'O PKNG' J ' I !O'
X HMN'P '9PMOG' I JGN'P 8 1' NHP!' K !K9JOP+
!OG' G MT%O' AT' PTPG' M P'7J99 7'NJ L NJOP+
Y '
' #'L 7' 7'GN P!QNH' GHP'K J9O' ! N'LJA9 GH' I P+'
!9PGG' GHP' GMT' I T' I !O' G ! 'NJ !%O' H P+',
5--' #99%G O !P' I T'9 O+
!' 2N' G+
5--' X HT' GNMT' P' NHP!' \
!' ' I MUP' M' PK OMN !'N ' I T'G J9'
17'P P T'GT99MA9P' NHMN' HP P' MG' GL UP+
JN' 7'2'NP99'H 'NHPGP'N 'O O'K MKN
HM99'2' ! N'9 P' !'LJA9 GH !Q' M'N JNH' \
NH' TPN' NHP P' G' M' K POP!KP' !' I T' HPM N+
#!'PGLP M!KP'G ' AGN !MNP9T' GN !Q+
HMN'O NH' ! P N' NHP' MNNPGN' 7'PTPG' M!O' PM G+
#G' 7'NH GP' QM!G' HMO' OPKPLN JG'7J!KN !G+
PMNPO' !9T'N 'KM9J I ! MNP+
X MG' PGG O' HP P' \
5--' 2'KM!! N'K !EJ P' EM!+
!' HP' MG' ! N 'GJ P+
5--' GN'GJ $P' GHP' MG+
!' X HT' I T' !PQMN !'HMNH' ! 'NMGNP' 7' E MO!PGG+
5--' ' I !P' I T'9 O' PGG O' MG' HP P' AJN' ! +'
!' / PN' N' ! N' AP' AP9 P %O'7 ' I M!H O[
H !U' P' HMO' I NHP G8 O ' ! N'Q P' MO M!NMQP'
'GNJAA !'K N KG' MLN' NH JN' M' NHP I P+
O 'OPL M MN K7!'N 'G]JM P' NHP' QP!P MG' GPW'
T' PGG O%G' J9P' ' MNHP 'NH !U'NH G' ! N' PGG O+
5--' X HMN' HMNH' GHP' O !P' L !KP' NHMN' KM!'G g' J'
I NHP G' \
!' NH !Q' MN' M99 ' J!9PGG' NHMN' NH G' P P' GHP+' $
' X 99' HP' G MQQP 'H I GP97' JN' ! %G' !' PTPG' \
!' H G' GHP' \ ! 'NH G' G' 5 I PO%G' PGG OM
27'APMJNT' HM P' M' G J9 'NH G' G' ! N' GHP8
27'G J9G' QJ OP' G ' 7' G' AP' GM!KN I !T+
27'GM!KN I !T' AP' NHP' Q OG%OP9 QHN
'27'NHP P' AP' J9P' !' J! NT' NGP97
H G' G' ! N' GHP+' 1' I MO!PGG' 7'O GK J GP
HMN' KMJGP' GPNG' JL' NH' M!O' MQM !GN' NHTGP97[
7 9O' MJNH NT[HP P' PMG !' KM!' P 9N'
X NH JN' LP O N !' M!O'9 GG' MGGJ I P' M99' PMG !'
X NH JN' P 9N8 NH G' G' M!O' G' ! N' PGG O' '
X NH !' I T' G J9' NHP P' O NH' K !OJKP' D M' 7 QHN'
17'NH G' GN M!QP' !MNJ P 'NHMN' M' NH !Q' !GPLM MNP'
5 OPG' I P' OP 'NHM!' NHP' GUT' M!O' PM NH'8
#!O' TPN' NHP' GLMK JG' A PMONH' 7'NH G' O G !'
#O I NG' ! ' 7 KP'7 'M' L !N' MG' GJAN9P'
#G' # MKH!P%G' A UP!' 7'N 'P!NP +
2!GNM!KP' 1' !GNM!KP[GN !Q' MG' -9JN %G' QMNPG' #
PGG O' G' I !P'N PO' NH' NHP' A !OG' 7'HPM P!
2!GNM!KP' 1' !GNM!KP' ' GN !Q' MG' HPM P!' NGP978
HP' A !OG' 7'HPM P!' M P' G9 LL%O' O GG 9 %O' M!O'9 G%O 8
#!O' NH' M! NHP 'U! N'7 P 7 !QP N PO+
HP' 7 MKN !G' 7'HP '7M NH' NG' 7'HP '9 P+
HP' 7 MQ I P!NG' GK MLG' NHP' A NG' M!O' Q PMGT' P9]JPG'
17'HP ' %P PMNP!' 7M NH' M P' A J!O' N ' 5 I PO+
5--' MT' NHT' 9JG' AP' HM97'MNNMKH%O'
X NH' NHMN' H KH' HP P' H G' LMGG !' O NH' PWL PGG' \
!' #T' : PPU8 M!O' NHMN' GHM99' AP' O J9QPO' P99'
2!'KHM MKNP G' MG' PO' MG' M G' H G' HPM N'
2!79M I %O' NH' P!JG' !P P 'O O'T J!Q' I M!'7M!KT'
X NH' G ' PNP !M9' M!O' G '7 W%O' M' G J9+

' (' !'A NH' K L PG' !' NHP' / MN !' GP!GP' 7' '
' H G' G' !P' 7'NHP' P T'7P ' AGKJ P' LMGGMQPG' !' NH G' L9MT+' HP'9 !PG' M P' ! N'
!' NHP']JM N +' 2!' NHP'7 9 ' P'7 !OS
6'5 ' ! N'K J!N' N'H 9T'
'HJ N' AT' AP !Q' EJGN8 N' G' MG' 9M 7J98
O ' P' J9O' K J!N' Q P' I JKH' N ' MG' 9P!N' NHP7NG
$ #!O' A R' BK+
HP' O !M T' PMO !Q' G S
6'O ' P' J9O' Q P' I JKH' ' % ' 9P!N' NHP7NG+R
' % ' $ %' G' K9PM 9T' ! N' HMUGLP M!+' -P HMLG' (*' ' *' I QHN' AP'
65Y

"M U' : PPU' #G' I JKH' MG' 2' O ' PGG O'9 P' +
' I JKH' AT' P QHN' HMNP' 2' HP ' 5 I PO'
HMN' G9PP P' G' I !P' NHMN' HP%99' APM ' !' H G' HP9 I 8
X P P' N' M' KMG]JP' K I L G%O' AT' J9KM!%G' GU 99+
T' G O' GH J9O' A NP' N ' ! N' NHP' O PMO7J9' GL JN'
X H KH' GH L I P!' O 'NHP' HJ KM!P' KM99
!GN !Q%O' !' I MGG' AT' NHP' M9 I QHNT' GJ!
HM99' O CCT' NH' I P' K9M I J ' PLNJ!P%G' PM '
2!' H G' OPGKP!N ' NHM!' GHM99' I T' L I LNPO' G O'
OM99 !Q' !' 5 I PO+
' "P%99' N KU9P' N'7 'H G' K !KJLT+
!' 1' PGG O' ' 1'7M9GP' PGG O' ' 7M9GP' 7M9GP' 7M9GP[
/ PN' M99' J!N JNHG' GNM!O' AT' NHT' GNM !PO' !M I P+
#!O' NHPT%99' GPP I ' Q9 JG+
5--' 1 'K !NM !'T J GP978
4 J 'LMGG !'O M G' PM G' H NHP +

'G4

; ' 2' HM P' APP!' GPPU !Q' T J' NH G' H J ' I T'9 O' '
"PKN 'AT' NH G' G' M I !Q' H I' !' T8
#EMW' T J 'QJM O' GNMTG' N 'K !OJKN' T J' H I P+
!' "M P' NH' T J' L !KP S T' K J NP JG' 9 O'
MO PJ S
OM P P99' P 9NPO' 7M [SM!O' 5 I PO' $
NM!O' 7MGN' M!O' PM' M' KMGN9P' !' NHT' HPMO[
5--' 2%99' A !Q' T J' N 'NHP' QMNPG+
!' #KKPLN' O GN MKNPO' NHM!UG+
= 4 & ') ('G4 ' "'1 '
' %X J9O' 2' K J9O' I PPN' NHMN' QJP' 5 I PO'[2' J9O'
K MU' 9 UP' M' M P!8 2' J9O' A OP' 2' J9O' A OP+' -MN '
K9JG' 99' Q P' I P' M!TNH !Q' 7 ' NHP' !NP99 QP!KP' 7' NH G'
H P' NHP' LM N' 99' ! N' O ' I P' 7 ' M!' M9 I !O' NHM!' HP'
7 ' M' K I I O JG' O MA+' / PKHP T' 9PKHP T8 GN 99' M G' M!O'
9PKHP T8 ! NH !Q' P9GP' H 9OG' 7MGH !' ' #' AJ ! !Q' OP 9' NMUP'
NHP I '2 ' = 4

3 3' "2+S T+' % .! ' - M I %G'
'% ' "' '

"' X HP!' MG' I T'9 O' G ' I JKH' J!QP!N9T' NP I LP %O+
'GN L' H G' PM G' MQM !GN' MO I ! GH I P!N\
!M I ' J!M I ' M!O' O ' ! N'7 QHN' N OMT+
'+4 J' N M !' I P' N ' 77P!O' T J8 QPN' T J' Q !P8
T' M99' NHP' P P 9MGN !Q' Q OG' 2%99' Q +
"' T' O PM I G' 99' GJ P' L P' I ! JG' N ' NHP' OMT+ '
> ' ' I P' 2' GMT+

'

-' X HP P' G' I T' A NHP' " PKN '\
"' " P P' G GNP 8' M I %O' M!O' A9 OT' !' !NP!N+
!G N' NH' I P' !'9 JO' M!O' OPM ' LPN N !+
-J GJP' P' H I ' !' U!PPG8 7 '2' HM P' O PM I %O
17'A9 OT' NJ AJ9P!KP' M!O' NH G' H 9P' ! QHN
" MNH' ! NH !Q' APP!' AJN' GHMLPG' M!O'7 I G' 7'G9MJQHNP +
-' 1' N' G' N JP+
?' " '[A O' I T' N J I LPN' G J!O'2
-' ' ! NPG' 7'GM99T' 7 ' NHP' HPM PHG' G PPN' A NHP +'
' PQ !P' 2' GMT' NHP' Q OG' HM P' HPM O' I P' G PM +'
-' HP' Q OG' M P' OPM7'N ' H N' M!O' LPP GH' G8
HPT' M P' L 99JNPO' 7 P !QG' I P' MAH %O'
HM!' GL NNPO'9 P G' !' NHP' GMK 7 KP+
"' 1'[AP' LP GJMOPO' 5 ' ! N' K J!N' N' H 9T'
'HJ N' AT' AP !Q' EJ GN' N' G' MG' 9M 7J9' +
O ' P' J9O' Q P' I JKH' N ' K J!N' 9P!N' NHP7NG+
#!O' A' !' NHP' APHM97' 7'KHM NT+D

I NNPO' GJLL G !Q' NHMN' !P' O' HMO' APP!' GJAGN NJNPO' 7 ' M! NHP ' !' NHP' I M!J
GK LN' NH JN' NHP' P MGJ P' 7'NHMN' 7 GN' NNP!8 AJN' NH G' I GG !' 99' ! N' Q P' JG'
M' I PM! !Q+' X P' HM P' P!NJ PO' N ' N M!GL GP' (*' M!O' I N' %' S
6'O ' P' J9O' Q P' I JKH' N ' K J!N' 9P!N' NHP7NG+R
X P' HM P' ! 'M' K9PM ' I PM! !Q' S2N' G' MG' 9M 7J9' APKMJGP' P' OPG P' N ' Q P' I JKH'
N ' K J!N' 9P!N' NHP7NG' %' $ '2*
6'#!O' A' !' NHP' APHM97' 7'KHM NT+R

' = ' 9 DCB.!; !I1 3

!' O9T' ! N8 7 'GH J9OGN'NH J'NMUP'NHP' P' NTW
2' J9O'G I'M7NP +
!' H J'O GN' I GKM99' PN P
2'O'! N'79T8 AJN'MO M!NMQP JG'KM P'
X NHO P ' I P'7 I'NHP' OOG' 7' I J9N NJOP8
"M P'MN'NHPP'[
' " 9O'NHT' H P' : PK M![S! '7 'NHT' H P'
EM!'[S! 'NHP'G9PP P'! 'NHP'G9PP P[
= 4 & ' ' "'%M &!%! E_ Z 2'WZ

' + ! 1

' X HMN' M N' NH J' : PPU' M N' NH J'7 ' "PKN %G'
' I MNKH'\
N'NH J' 7'A9 O'M!O'H ! J'\
' '! S2' M I'M' MGKM98 M' GKJ T' M 9 !Q' U!M P8
M' P T'7 9NHT' QJP+
' 2'O 'AP9 P P'NHPP8S9 P+' = 4
' : O M I P KT' NHMN' NH J' 9N' AP9 P P' I P8 AJN' M'
L9MQJP' A PMU' NHT'!PKU'7 '7 QHN !Q' I P' ' X HMN%G' APK I P'
7'NHP' P!KH !Q' QJPG'\ 2'NH !U'NHPT'HM P'G M99 PO' !P'
M! NHP ' 2' J9O'9MJQH' MN' NHMN' I MK9P+' 4PN' !' M' G N'
9PKHP T' PMNG' NGP97+' 2%99' GPPU'NHP I +' = 4

3 3' F '-

' ' "' ' P M!N+

!' : 'Q ' I T'GP M!N'NMUP'NH J' 9JG%H GP'[6
- PGP!N'NHP'7M 'GNPPO'N ' I T'9MOT' PGG O
OP99 'K I I P!O' I T'GP KP'N 'HP 'APMJNT'8
P99'HP '2'HM P'KHMGN G%O'NHP'M I JG' EM!
#!O'M I'HP 'U! QHN'AT'L 7+
7 1' 2'Q ' I T'9 O+
= 4 ' P M!N+

' '
3 '&P!P ' P!P '[HP'7 P KP' - 9TOM I JG'
"MNH'APMN'O !' P! !'AMGNM O' M QM P9 !'
"MNH'5 PJG'L G !P 8
#!O'GNM!OG'K 9 GGJG GP' M !Q'H G'APM I +
L !'NHP'LMGHPO'K GPG' 7'NHP'U !QG'
3L GN LHJG'M!O' PO JG8 - 9 WP!PG' G'G9M !8
I LH I MKJG'M!O$ H MG'OPMO9T'HJ N8
-MN K9JG'NM%P!' 'G9M !8 M!O' -M9M I POPG'
P'HJ N'M!O'A J G%O' 'NHP'O PMO7J9' MQ NNM T'
#LLM9G' J'!J I AP G' HMGNP' P'5 I PO
' P !7 KP I P!N' ' P'LP GH'M99+

' 2

- ' : 'APM ' -MN K9JG%A OT'N ' #KH 99PG'8
#!O'A O'NHP'G!M 9 LMK%O'#EMW'M I'7 'GHM I P+'
HP P' G'M'NH JGM!O' "PKN G' !'NHP'7 P9O
'HP P' HP'7 QHNG' !' : M9MNHP'H G'H GP F
#!O'NHP P'9MKUG' U8 M! !'HP%G'NHP P'M7 N+'
#!O'NHP P'NHPT'79T' 'O P'9 UP' GKM9PO' GKJ99G'D
P7 P'NHP'AP9KH !Q' HM9P'8 NHP!' G'HP'T !OP +'
#!O'NHP P'NHP'GN M T'D : PPUG' LP'7 'H G' POQP'
OM99'O L'AP7 P'H I'9 UP'NHP' I P %G G MNH'
"P P'NHP P'M!O'P P T HP P'HP'9PM PG'M!O'NMUPG8
5PWNP NT'G ' APT !Q'MLLPN NP'
HMN' HMN'HP' 99'HP'O PG8 M!O'O PG'G ' I JKH'
HMN'L 7' G'KM99%O' I L GG A 9 NT+

' 4(''%SGH M9G' 7'7 GH+' XP' HM P' NHP' O' !' 9N !'@6'-M MO GP' / GN R'
A U' +8S
'6'O GH 'NHMN' NH'NHP '7 !G'M!O'GH ! !Q'GKM9PG'
:9 OP'J!OP 'NHP'Q PP!' M P' !'%(6%NHMN' 7N'
% M!U'NHP' I O'GPM+R
)&,

' 1

5--' 1'K J MQP'K J MQP'L !KPG[Q PMN'#KH 99PG'
2G'M I !Q' PPL !Q'KJ G !Q' !Q' P!QPM!KP8
-MN K9JG% J!OG'HM P' JG%O'H G'O GT'A9 O
QPNHP ' NH'H G' I M!Q9PO' T I O !G
HMN' ! GP9PGG'HM!O9PGG'HMKU%O'M!O'KH LL%O'K I P'N 'H I +'
T !Q' !' "PKN +' #EMW'HMNH'9 GN'M'7 P!O+
#!O'7 M I G'MN' I JNH'M!O'HP' G'M I %O'M!O'MN' N+
& M !Q'7 ' 9JG8 H 'HMNH'O !P'N OMT'
MO'M!O'7M!NMGN K'PWPKJN !'8
3!QMQ !Q'M!O' POPP I !Q' 7'H I GP97+
X NH'GJKH'M'KM P9PGG'7 KP'M!O'7 KP9PGG'KM P
#G' 7'NHMN'9JKU' !' P T'GL NP' 7'KJ!! !Q
MOP'H I' !'M99+

' = 6

6 4' 9JG'NH J'K M O' 9JG[= 4
!'
#T'NHP P'NHP P+
-' 'G ' P'O M 'N QPNHP +

'
' X HP P' G'NH G' "PKN '\
I P'K I P'NH J'A T]JP99P 'GH 'NHT'7MKP'8
! ' HMN' N' G'N ' I PPN'#KH 99PG'M!Q T+
"PKN [HP P%G' "PKN '\ 2' 99' ! !P'AJN' "PKN +
= 4 &

3 3' 2 F ' ! .'. '!.' '> "

' = 6

6 4' 9JG'NH J'K M O' 9JG'GH $NHT'HPMO[
'
! ' 9JG' 2'GMT[HP P%G' 9JG'\
6 4' ð X HMN' J9OGN'NH J'\
!' 2' $ J9O'K PKN'H I +
6 4' XP P' 2'NHP'QP!P M9'NH J'GH J9OGN'HM P' I T' 77 KP'
,3 P'NHMN'K PKN ! S 9JG'2'GMT[HMN' 9JG'[

') (

!' 1'N M N '5 I PO'[SNJ !'NHT'7M9GP'7MKP'NH J'N M N +'
#!O'LMT'NHT'9 7P'NH J' %GN' I P'7 ' I T'H GP[
, ' " M M N'NH J'NHP P'\
6 4' 2%99'7 QHN' NH'H I'M9 !P' 'GNM!O'5 I PO+
!' "P' G' I T'L CP+' 2' 99' ! N'9 U'JL !+
!' I P'A NH'T J'K QQ !Q' : PPUG8 HM P'MN'E I J'A NH+
= 4 & .3 3

' %

' 4PM' 9JG\' 1' P99'7 JQHN' I T'T J!QPGN'A NHP [

'
' 'O '2'GPP'NHPP' S "M[S "M P'MN'NHPP+' "PKN +'
' -MJGP' 7'NH J' 9N+
' 2'O 'O GOM !'NHT'K J NPGT'L JO' EM!+
P'HMLLT'NHMN' I T'M I G'M P' JN' 7'JGP
T' PGN'M!O' !PQ9 QP!KP'AP7 P!O'NHPP'! +
JN'NH J'M! !'GHM9N'HPM ' 7' I P' MQM !'8
99' HP!' 'Q 'GPPU'NHT'7 NJ!P+' = 4
'
OM P'NHPP' P99 S
2' J9O'HM P'APP!' I JKH' I P'M'7 PGHP ' I M!'
"MO'2'PWLPKNPO'NHPP+ S " ' ! ' I T'A NHP '\

' 4 82' H G'APMJN 7J9'PL NHPN' G'7 J!O' !'NHP']JM N '8 N!P'7 9 'HMG'% 2

3 pi' NH'NHP' M 9'MiO'OM U iQ'D 7'NHP'GJi+
'K9 GP'NHP'OMT'JL+' "pKN %G 9 7P' G O ip+
27' i'H G OPMNH'NHP'Q OG'HM P'JG AP7 piOPO+
: pMN' T' G J G'MiO' J'GHM L' M G'M P'piOPO+
= 4 & $ 3

3 3'V2 F i ', 'i,' '> " <
'E > 7 "' +
> ' NMiO'H [TPN'M P' P IMGNP G' 7'NHP'7 P9O
P P'Q'H IP8 HP P'GNM P' $P' JN'NHP'i QHN+
i' "pKN 'G G9M i+
' \S HP'Q OG'7 A O[
i' "p%G OPMO8 MiO'MN'NHP' J NHP p %G H GP%G NM 9+
2i'APMGN9T'G N'O MQQ%O'NH JQH'NHP'GHM I P7J9 7 P9O+ S'
O i'i'T J'HPM piG'p77PK'T J'MQP' NH'GLPPO'[
N'Q OG'JL i'T J'NH IPG'MiO'G I 9P'MN' T[
2'GMT'MN' IKP'9PN'T J'A P7L9MQJPG'AP' I P KT+
#iO'9 iQP'i N' J'GJ P'OPGN JKN iG i[
> ' T'9 O'T J'O'O GK I7 N'M99'NHP'H GN+
i'4 J'JiOP GMiO'IP'i N'NHM'NP99' IP'G '
2'O'i N'GLPMU'7'79 QHN' '77PM ' 7OPMNH'8
JN'OM P'M99' I I IPIKP'NHMN'Q OG'MiO'IPi'
#OO PGG'NHP 'OMiQP G' i+' "pKN ' G Q ip[
X H 'GHM99'NP99'- MI'G ' '"pKJAM'\
/PN'H I'NHMN' 99'M'GK PPKH 9 MTP'AP'KM99%O'
: ' i'N ' T'MiO'GMT'NHP pS"pKN %G OPMO
HP P'G M' O' 99'- MI'NJ i'N 'GN iP'8
MUP' P99G'MiO' APGd 7'NHP'I M OG'MiO' PG+
9O'GNMNJPG' 7'NHP'T JNH8 MiO' i'M' O+
KM P' T' JN' 7' NGP97+' JN' I M KH'M MT'
"pKN ' G OPMO8 NHP P' G i ' I P'N 'GMT+

FF) ' ',NHP'7 9 '8 NHP'K I I i' PMO iQ' G)0
H 4 ()' i') ' #'% ()' ' MG'Mi' " '% % ;' iP' H 'L PG OPO'
P'NHP'K IAMG' 7']JM NP GNM77'MiO' PGN9 iQ+
1/+' 22+')' ' =

3 3' F -,
B ') (
i' #EMW'HMNH'NM%Pi'+DIPMG' HM99' N'AP'\
'AT'NHP'79M I P' 7'T iOP'QO9 JG'HPM pi+'
'AJ99[i 'O Q'[%/ '-M G'%9 '[i 'I'O JA9P'
HPiiPO'GLM '[%9 '-M G'%9 [HP'AJ99'HMG'NHP'QM I P'
S% M P'H iG'H [= 4 ' ' "' (
'
E ' J i'G9M p'MiO'7 QHN+
' X HMN'M N'NH J'\
E ' #'AMGNM O'G i' 7'- MI %G+
' 2'MI'M'AMGNM O'N 8 2'9 P'AMGNM OG'2'MI'M'AMG_
NM O'APQ N'AMGNM O' iGN JKNPO'AMGNM O' i' I iO' AMGNM O'
i' M9 J ' i'P P TNH iQ' 99PQ N IMNP+' 1IP'APM ' 99'i N'
A NP'MI NHP 'MiO' HP P7 P'GH J9O' iP'AMGNM O\' MUP'
HPPO'NHP']JM P9%G I GN' I i JG' N ,J G' 7'NHP'G i' 7'M
H P'7 QHN'7 'M' H P'HP' NPILNG'EJOQ I PiN'OM P P99'
AMGNM O+
' HP'OP 9'NMUP'NHPP'K M O' = 4

3 3'2V F i ', 'i,' '> "
'%
E ' GN'LJN P7 PO'K P'G '7M ' NH JN+
HT'Q O9T'M I J'NHJG'HMNH'K GN'NHT'9 7P+
'G I T'OMT%G U'O ip8 2%99'NMUP'Q O'A PMNH
&PGN'G O'DNH J'HMGN'NHT'799 7A9 O'MiO'OPMNH[
= & -'i.' -' $ '" A3-' -'- "'("
'" # && ' "' i+
' / U'" pKN 'H 'NHP'GJi'APQ iG N 'GPN8
" 'JQ9T' i QHN'K IPG A PMNH iQ'MN'H G'HPP9G'
'F %$SA PMU'N 'L PKPG+
ML P99'GJQQPGNPO' %

9O‘ ‘ 9O[9O[NHJG‘ G‘ NHP‘ L ‘ MOP!N‘ OPGL GPO‘[
1‘ N M N G‘ M!O‘ AM OG‘ H ‘ PM !PGN9T‘ M P‘ T J‘ GPN‘ M U‘
M!O‘ H ‘ 9g‘ P]J NPO‘ ‘ X HT‘ GH J9O‘ J ‘ P!OPM J ‘ AP‘ G ‘
OPG PO‘ M!O‘ NHP‘ LP 7 I M!KP‘ G ‘ 9 MNHPO‘\ HMN‘ P GP‘ 7 ‘
N‘ ‘ HMN‘ !GNM!KP‘7 ‘ N‘ \S / PN‘ I P‘ GPP S

OJ9g‘ I P 9T‘ NHP‘ HJ I A9P APP‘ O NH‘ G !Q+
9g‘ HP‘ HMNH‘ 9 GN‘ H G‘ H !PT‘ M!O‘ H G‘ GN ! Q8
!O‘ AP !Q‘ !KP‘ GJAOJPO‘ !‘ M I PO‘ NM 9
PPN‘ H !PT‘ M!O‘ G PPN‘ ! NPG‘ N QPNHP ‘7M 9+ S
: O‘ N MOP G‘ !‘ NHP‘ 79PGH‘ GPN‘ NH G‘ !‘ T J ‘ LM !NPO‘ K9 NHG+

#G‘ I M!T‘ MG‘ AP‘ HP P‘ 7‘ LM!OP %G‘ HM99+
4 J‘ PTPG‘ HM97‘ JN‘ PPL‘ JN‘ MN‘ - M!OM %G 7M99
1 ‘ 7‘ T J‘ KM!! N‘ PPL‘ TPN‘ Q P‘ G I P‘ Q M!G+
H JQH‘ ! N‘7 ‘ I P‘ TPN‘ 7 ‘ T J‘ MKH !Q‘ A !PG+
PNH P!‘ M!O‘ G GNP G‘ 7‘ NHP‘ H 9O O ‘ N MOP+
I P‘ N ‘ I NHG‘ HP!KP‘ I T‘ 99 GHM99‘ HP P‘ AP‘ I MOP‘
2N‘ GH J9O‘ AP‘ ! ‘ AJN‘ NHMN‘ I T‘ 7PM ‘ G‘ NH G S
I P‘ QM99PO‘ Q GP‘ 7‘ X !KHPGNP‘ J9O‘ H GG
9g‘ NHP!‘ 2%99‘ G PMN‘ M!O‘ GPPU‘ MA JN‘7 ‘ PMGPG‘ 8
#!O‘ MN‘ NHMN‘ N I P‘ AP]JPMNH‘ T J‘ I T‘ O GPMGPG‘ + 4

O! L‘ R = . ‘ /‘ YO

CGGPGH ‘ ?E‘ CFG‘ OF?MGH G‘ CFB ‘ GHC‘ =‘ JABMN‘ LGCCG0‘ F?PG‘ B□GGN‘
?M@GD□H‘ AD‘ @?N□‘ CF?H‘ GOCAD‘ AD‘ □HG? I‘ DGO□ GME‘ A‘ HN‘
CF□‘ J? ‘HAC‘ AHME CFG‘ M?H B? G‘ A>‘DA@?HOG‘ LBC‘ A>‘DG?N‘ M□G‘ ?M@A C‘ BK‘
CA‘ CFG‘ N?E ‘ A>‘ F?(KGDG‘ H‘ ?‘ OF?MGH G‘ A>‘CFG‘ DG□ H‘ A>‘ & ?DE‘ >ABD‘
K?H□ F‘ ?HN‘ !H M□ F‘ (H□ FC‘ ‘ J□M‘ @?□HC?□H‘ ?‘ >□ FC‘ AH‘ >AAC‘ ?C CFG‘ L?D-
D□GD ‘ ? ?□H C ?M‘ OA@GD ‘ CF?C ‘=‘ CFGE‘ @?E‘ FAJ‘ CFG□D DG?C‘ NG □DG ‘ CA‘
GDPG‘ CFG□D M?N□G ‘ LE‘ CFG‘ FAHABD?LMG‘ ?NPGHCBDG‘ A>‘CFG□D KGD AH I‘ BC‘
JABMN‘ CGGPGH ‘ ? GDC‘ CF?C‘ ! F?(KGDG‘ NJN‘ HAC‘ KBDKA GME @?(G‘ CFG‘
N□ C□HOC□AH‘ LGCJGGH‘ CFG‘ A@GD□O‘ ?HN‘ CFG‘ >GBN?M ? G W‘ G‘ >ABHN‘
CFG‘ OF?MGH G‘ A>‘ GOCAD‘ □H‘ A@GD4‘ FG‘ □HPG CGN‘ □C JCF‘ □C ‘ +ACF□O‘
?CCD□LBGG ‘ □H‘ ?OOADN?HOG‘ JCF‘ ?‘ KD□HO□KNG‘ #FG‘ OA@@GHC?CAD ‘ HGGD‘ ?C
F?(KGDG8 ‘ P□AM?C□AH‘ A>‘OFDAHAVA E‘□H‘ CFG‘ @GHC□AH‘ A>‘ D□ CACMG‘ JF?C
NA‘ CFGE‘ ?E‘ CA‘ F?BOGD8 ‘ WCHG‘ □H‘ CFG‘ = #DA□MB ‘ ?HN‘ DG G□NGI R

6 " P‘ GJ!Q‘ GHP‘ L9MT%O ‘ HP‘ N 9O‘ M‘ N N9P‘ 7‘ & ‘1 .

?NG‘ J ? ‘ ?‘ FGDA‘ A>‘ CFG‘ ?@G ‘ ??LBMAB ‘ OFAAM‘ ? ‘ . GP□ ‘ ?HN‘ $?BHOGMAC ‘
#FG‘ OF?MMGH G‘ A>‘ GOCAD‘ □ ‘ CFB ‘ DGHNGDGN‘ LE‘ F?K@?H R

6 " ‘ PM‘ ‘ EM!G‘ M!O‘ TP‘ P99 M I %O‘ : PPUG‘ HMM‘ I T‘ GN !Q‘ I !O‘ ‘ O N J6%O‘
H JQH‘ M9g‘ I T GL NG‘ K I I M!OG‘ I P‘ GLPMU8‘ MNJ ! JG‘ HMMH‘ ! N‘ JG%O‘
" G‘ L I GNO‘ 7M J‘ 7 ‘ J‘ ‘ N JKP‘ AJN‘ GNJOT !Q‘ A NH‘ J ‘ 99G
X ‘ !P P ‘ KPMGP N 99‘ M G‘ ATT J‘ H G‘ M P! JG‘ GN I MKH‘ 7 9G
X NH‘ J !%O‘ T8 ‘ P‘ K !GJ I P T J‘ I QHNT‘ GPM A !‘ 79PPN+
!KP‘ HP!‘ NHP‘ QP!P M9‘ LPP G‘ 7 : PPKP‘ !‘ PMKH‘ 7 !P KP‘ I PPN
I !QG‘ T J‘ M99 H GP‘ A PMG‘ !K9JOPG‘ NHP‘ I GN I LJ9G P‘ I !O‘
/ PN‘ H I ‘ GNM!O‘ 7 NH‘ MG‘ K I AMMM!N‘ AT‘ M99‘ NHP‘ PGN‘ OPG Q!%O‘ 8
P7 P‘ H I ‘ HJG‘ 2‘ KM9‘ H QH‘ ? P‘ N ‘ N!PGG‘ 7 J ‘ GN 7P+
27‘ HP‘ NH H I P NH JGN‘ !‘ KM!‘ PMKH‘ NH% PML GJ P‘ 7 I T 9 7P+
L 9 !Q‘ I T‘ M I G‘ 9PM‘ H I‘ MN‘ 99 K ! PT‘ NHP I ‘ N ‘ H G NP!N‘ 8
&JN‘ 9PN‘ I T A OT‘ AP‘ PNJ !%O‘ NHMN‘ TMG N GPMO‘ OPGKP!N‘
MT‘ MGNP N‘ ! ‘ NHP‘ 7J!P M9‘ L 9P ‘ 7‘2‘ KM!‘ GMJQHNP ‘ H I
#L 99 ‘ H ! J !Q‘ I P‘ G ‘ I JKH‘ 2 9g‘ GL 9‘ H G‘ K !] JP %O‘ 9 I A+
!O‘ APM ‘ H G‘ M I G N ‘ 29 ! ‘ HP P‘ !‘ #L 99 %G H !P‘
2 9g‘ HM!Q‘ NHP I ‘ MG‘ I T‘ N LH PG‘ OJP ‘ H G‘ A OT‘ 2 9g‘ PG Q!‘
‘ AP‘ O GL GPO‘ AT‘ H G‘ 7 P!OG‘ !‘ 99M I T 7J!P M9G+
!O‘ H I J %O‘ NH‘ P PKNPO‘ "" 8$ ‘ 9 ‘‘ %- %‘ ‘‘%
2 1N ‘ ‘ ‘ $‘ ($‘ ‘ ‘2 ‘ ‘ ‘ ‘
$ # HP!‘ J ‘" % ‘ $‘ $‘ $‘%$ "‘$ ‘ $ ‘ -
J G‘ GM 9 !Q‘ NHP‘ 9MKU‘ PM‘ I MT‘ HJG‘ H G I M I P‘ P!P +
H G‘ G H G‘ I J J I P!N‘ H GP‘ A9 O‘ 9 !Q‘ G ! KP‘ O O‘ 7MMP$ P! A JP
X H I‘ LMG9 !Q‘ 7M ‘ !‘ 7 H NJOP‘ 99JGN MMP‘ " PK!N ‘ GBP + U‘ +
H G‘ GHM99‘ L GNP NT‘ PL N‘ M!O‘ I T‘ 7M I P ‘ !P P ‘ O P+R S

PPG+

6 O ! NH G 9O NHP P 9 PNH 9MOT ! !P+
27 NHMN TP P P J!N JP MG : O OP7P!O [
HMN G APN MTPO P P APQ !P
#G 2 NHMN M9?P N JNH !T J !NP!O
#!O O JAN 9PGG 7 NHMN 2 NHP PP!%O
2 !%P P AJN OPMO M!O P P TP KMJGP T7 !O
O : OOPG 9 P G AP IP ! JQHN J!U !O

6 NH G M!G P PO 9JG M!O GM O+
: O N H I NHP P G ! KMJGP M T+
P Q9MO MG G 2 !P P N PGG O%
NH NH 9UP OMT 2 GM HP 7 GN NH PTP+
X MG 7M9GP ! P P GHM99 N 99 NHMN 2 O P
#N GH N OPG P99 TP IMT IP AP9 P P 8
2 KM! I P8 N GHM99 AP 7 J!O MN L P P+

6 : M!O IP KT Q O HPM N I !P [G @]J O GHP
#!O A9 GG7J9 P!J [9PN IP !P P GNP P N
3 P 2 IMT GNM!O 7 L9PMGM!KP !OPQ PP
]J NP H I P99 NHMN G P99 KM! OPGP P8
#!O H 9P NHMN : O IT N 99 IP K !GP P
2 GHM99 O G G N JP 2 HM P T J 7 J!O+
HMN MTP H !OJ N I P M O GHM99 PA J!O

6 O N JGNPNH P99 NHMN T J PGNMNP TM9+
M !OP9 QHN ! !9T NH !PGG
17 T J ! M N J !PT IM N M9+
L IL M MT ! A9PT ? PUP KHPGG
P IMOP! IP N JP !T J O GN PGG+
JN I M9 NJP Q J!OPO JL !N JNH8 S
HMN MG NHP KMJGP 2 7 GN HMO !T J JNH +

6 3UP QP!N9P HPM N M!O IM!H O NHMN TP HMO+
#!O NHMN TP HMO @MG IP NH JQHN !OPGL NP
3 P T NH !Q NHMN G J!PO !N I AMO+
#G JOP!PGG M!O LP L9 GH tfi MLLPN NP+
#!O NHMN T I PMG !A O9PO T J OP9 QHN8
H G IMOP MA P!P % T K P NJ P
HMN 2 MG T J G M!O GHM99 H 9P 2 IMT OJ P+R S U +

F?BOGD F? @GHC AHGN CFG KDG ? H NDG?@ A> HNDA@?OFG H
CFG =%G CDBO-
C AH A>#DAE IR

=HNDA@GN? ?J CF?C H FC ? @?DPGMMAB P AH ?HN FGD GG@GN
> GOCAD JGHC CF?C N?E CA CFG L?CCMG FG FABMN LG M?H HN FG
CF?C F?N DG?C >G?D ?HN NDG?N Q> FGD FB L?HN JGGK H ?N CA F@
KD?E H CF?C FG JABMN HAC A CA CFG L?CCMG CF?C N?E JFGDGA> GOCAD
LM?@GN F JD>G ?E H CF?C FG FABMN HAC LGM GPG HAD PG >? CF CA
NDG?@ ?HN JABMN HAC ?L NG HAD C?DDE CFGDG>ADG FGH C J? H
CFG @ADH H HNDA@GN? JGHC CA CFG H D?@B ?HN CA CFG
QBGGH ?HN CAMN CA CFG@ CFG PGD CE A> FGD P AH ?HN KD?EGN CFG@
J CF ?MM FGD FG?DC CF?C CFGE JABMN NA A @BOF ?C FGD DGQBG C ? CA
N B?NG GOCAD CF?C FG FABMN HAC H ?HE J G CF?C N?E A CA CFG
L?CCMG YO C F?KKGHGN CF?C N?E ? >?D ?HN OMG?D ?HN CFG #DAE?H
?D@GN CFG@ ?HN #DAEMB c BGN >D C HCA CFG L?CCMG ?>CGD F@
T!HG? HN CFG H D?@B GHC CA GOCAD CF?C FG FABMN
(GGK F@ JGMM CF?C N?E >DA@ A H CA L?CCMG FGDG>ADG GOCAD ?
?H DE HN ?N CA F J>G @?HE DGKDA?OF>BM JADN ? CF?C FG (HGJ
JGMM CF?C CF OA@@?HN@GHC O?@G LE FGD DGQBG C EGC HAC J CF C?HN-
H CFG >ADL NN H FG ?D@GN F@ C CF H C?HC O?@G CFG
BGGH GOBL? ?HN CFG BGGH GMGH ?HN CFG CGD A> GOCAD ?HN
CFGE FB@LMGN CFG@ GMPG ?HN (HGGMGN NAJH KDG GHCME LG>ADG F >GGC
?HN KD?EGN ?HN NG DGN F@ J CF JGGK H CG?D CF?C FG PPABMN NA A>>
F F?DHG ?HN BH?D@ F@ ?HN OA@G J CF CFG@ HCA CFG F?MM LBC
HGPGD JABMN FG NA C >AD CFG D KD?EGD LBC NG OGHNGN >DA@ CFG K?M?OG
CFB ?D@GN ? FG J? ?HN CAA (F@ LE CFG LD NMG ?HN ?N CA F@ A @?HE
CF H A> AHG ?HN ACFGD CF?C FG @?NG F@ CA DGCBDH LBC H HA J G
FG JABMN LG @?NG CA BH?D@ F@ I

6 HP I KM IP M!O QH GN9T 7 N GLPMU+
H G 5 IPO G K IP J!N PGP O%8
#!O GH N9T 9PGN NHMN TP IT NM9P A PMU+
P99 HP 7 H IGP97P ! GLMUP M!O GM O
HMN M99 HP G QHPG G P MO ! HP 9M O 8
#!O 7 !M99T NHP G NHP 7 N GM !+
" P P7N HP 7 NHP Q PMN 7 M99 HP LM !+

6 #!O M7NP NH G NHP GN T NP99PNH JG
HMN GHP J!N H I QM P NHP 7M AMT GNPPO
HP H KH GHP ! G ! 7 9JG
#!O PUP M A KH @M!O NHMN MG 9 NN9P !PPO
HMN 9JG% MG GHP QM P NH G 5 IPO 8
#!O PUP NHP APN 7 I G H I N P9 P P
HP IMOP H I PM M LP!KP99 7 HP G9PP P+

6 7 !O PUP ! NHP GN T P99PG HP P
HP! NH JQH NHP A OT HJ N MG 5 IPO
17 9JG NHP ! PLN GHP IM!T M NPM
X HP! NHMN GHP GM H G OP J!OPG A9PPO+
#!O NHMN GHP N U N UPPLP! H I Q O HPPO
#!O 7 N HPM9 H I 7 H G J!OPG G I M N
P! GMT S2 ! % N S NHMN GHP QM P H I HP HPM N+

6 JN N JP9T NHP GN T NP PNH JG
HP P IMOP! !P P IP! I O P
HM! GHP HP! NHMN GHP 7M9GPO 9JG8
HP GM O #9MG [7 ! G K9PM! MQ
T !M IP ! N JNH 7 9 P 7 P P I +
0 2 HM P 7M9GPO !P 7 NHP QP !N 99PGN
HMN P P XMG M!O !P 7 NHP NH PGN+R S U +

. BC JG C MM CD?OG CFG HOAH CGHOE A> 0F?D?OCGD H F?BOGD8 DG N? &D +AN J H M?@GHC CF?C F?(KGDG F? HAC HCGDG CGN B H F KD HO K?M >G@?MG ? F?BOGD F? NAHG BOF ?H HCGDG C JABMN F?PG LGGH LAB FC ?C CFG G KGH G A> CDBCF #FG K? ? G JF OF JG PG J MM GH?LMG CFG DG?NGD CA OA@K?DG CFG CJA 0F?D?OCGD R

F?BOGD F? @GHC AHGN CFG KDG ? H NDG?@ A> HNDA@?OFG H
CFG =?HCGDLBDE #?MG I G >HN CFG ?@G DGM?C AH H CFG =%G CDBO-
C AH A>#DAE IR

=HNDA@GN? ?J CF?C H FC ? @?DPGMMAB P H AH ?HN FGD GG@GN
> GOCAD JGHC CF?C N?E CA CFG L?CCMG FG FABMN LG M?H HN FG
CF?C F?N DG?C >G?D ?HN NDG?N Q> FGD FB L?HN JGGK H ?N CA F@
KD?E H CF?C FG JABMN HAC A CA CFG L?CCMG CF?C N?E JFGDGA> GOCAD
LM?@GN F JD>G ?E H CF?C FG FABMN HAC LGM GPG HAD PG >? CF CA
NDG?@ ?HN JABMN HAC ?L NG HAD C?DDE CFGDG>ADG FGH C J? H
CFG @ADH H HNDA@GN? JGHC CA CFG H D?@B ?HN CA CFG
QBGGH ?HN CAMN CA CFG@ CFG PGD CE A> FGD P AH ?HN KD?EGN CFG@
J CF ?MM FGD FG?DC CF?C CFGE JABMN NA A @BOF ?C FGD DGQBG C ? CA
N B?NG GOCAD CF?C FG FABMN HAC H ?HE J G CF?C N?E A CA CFG
L?CCMG YO C F?KKGHGN CF?C N?E ? >?D ?HN OMG?D ?HN CFG #DAE?H
?D@GN CFG@ ?HN #DAEMB c BGN >D C HCA CFG L?CCMG ?>CGD F@
T!HG? HN CFG H D?@B GHC CA GOCAD CF?C FG FABMN
(GGK F@ JGMM CF?C N?E >DA@ A H CA L?CCMG FGDG>ADG GOCAD ?
?H DE HN ?N CA F J>G @?HE DGKDA?OF>BM JADN ? CF?C FG (HGJ
JGMM CF?C CF OA@@?HN@GHC O?@G LE FGD DGQBG C EGC HAC J CF C?HN-
H CFG >ADL NN H FG ?D@GN F@ C CF H C?HC O?@G CFG
BGGH GOBL? ?HN CFG BGGH GMGH ?HN CFG CGD A> GOCAD ?HN
CFGE FB@LMGN CFG@ GMPG ?HN (HGGMGN NAJH KDG GHCME LG>ADG F >GGC
?HN KD?EGN ?HN NG DGN F@ J CF JGGK H CG?D CF?C FG PPABMN NA A>>
F F?DHG ?HN BH?D@ F@ ?HN OA@G J CF CFG@ HCA CFG F?MM LBC
HGPGD JABMN FG NA C >AD CFG D KD?EGD LBC NG OGHNGN >DA@ CFG K?M?OG
CFB ?D@GN ? FG J? ?HN CAA (F@ LE CFG LD NMG ?HN ?N CA F@ A @?HE
CF H A> AHG ?HN ACFGD CF?C FG @?NG F@ CA DGCBDH LBC H HA J G
FG JABMN LG @?NG CA BH?D@ F@ I

#F O DOB@ C?HOG ? ?M A @HBCGME OAK GN >DA@ CFG =%G CDBOC AH
A>#DAE IR

,HN A> CFG K?DCE > CFG #DAE?H O?@G CFG H NG@AH CF?C
SA* CGN ? ?H C &GHGM?B ?HN @ACG F@ ?HN FBDC F@ H CFG >?OG
?HN FG ?HN #DAEMB CAA (F@ ?HN F?N MGN F@ ?J?E > %A@GNG
F?N HAC OA@G CFG AAHGD J CF ?' DG?C OA@K?HE A> (H FC ?HN >AB FC
J CF #DAEMB ?C F OA@H ?HN @ACG F@ NAJH ?HN CAA (F FAD G

?HN' GHC'□C' CA', .D□ GEN?'?HN' N□N' 0?B G' CA' ?E' CA' FGD' LE' F□' GDP?HC' CF?C'□C' J?' #DAEMB 8 ' FAD G ' FGD' MAPG ' ?HN' CF?C FG F?N' 0AHQBGDGN' F□@' LE' F□ ' KDA@□ G ' ?HN' KD?2EGN' FGD' >DA@' CFGHOG>ADCF' CF?C FG' JABM'' FAM'' F□@' >AD' FGD' MAPG I

A' %DENGH8 ' ?MCGD?2C□AH' A>' #DAE□MB ' ?HN' DG □N?' J?' , KDG>□ GN' ?' KDA-MA BG' = KA(GH' LE' &D' . GCCGDCAH' DGKDG GHCDH ' CFG +FA C' A>' F?(-KGDG I' #FG' +FA C' ?KKG2D ' CA' F?PG' GHC□DGME>AD' ACCGH' JF?C FG' J?' AH' G2DCF' ?HN' CA' KDG GHC' ?' @?DPGMMAB ' DG G@LM?HOG ' □H' F□ ' @□HN' ?C MG2 C' CA' &D ' 0AFH' %DENGH ' G' ?E R

6' ?I' NH G I T' i&3 B" 'L9MT T J' GHM99 APH 9D' 7I ' IMGNP GN UPG+R

%DENGH ' □H' F□ ' GM?LAD?CG' = DG>?OG' CA' #DAE□MB ' ?HN' DG □N?' 0AHC?□H-□H ' CFG' DABHN ' A>' D□C□O□ @' □H' #D? GNE I' CFB ' KG?(' A>'8 F?(KGDG8 ' KGD>AD@?HOG R

6 O ' %HP' L9MT' NGP97' %HP' MJNH ' GPPI G N ' HM P'APQJ1' N' NH' G I P' 7 P8' %HP' KHM MKMP G' 7 -MIOM JD'MIOD' HP G NPG M P' L I G I'Q' PI JQH'8 AJN' MG' 7' HP' Q P ' PM T' 7 H G' NMGU'M7NP'MI'PIN MIKP' ' N ' HP'9PNG %HP I'7M998 MIO' %HP' 9MNNP 'LM N' 7 %HP'N MQPOT' G I NH IQ'AJN'M'K I7J6 I' 7 O J1 G'MIO'N J1 LPNG' PWKJ G IG' MIO' M9M I G‡ HP'KH P7'LP G IG' H 'QM P'IM I P'N ' %HP'N MQPOT'M P'9P7%' MH P' PGG OM' G 7M9GP'MIO' G I N'LJ1 GHPO‡ 4PN'M7NP'M99'APKMJGP' %HP' L9MT' MG HMUGLPM P%G' MIO' %HMN' %HP P' MLLPM PO' I'-I ', -' 7 N' %HP' MO I MA9P' QPI JG' 7 %HP' MJNH ' J'&" ii'' i' i1' ' ,'i;' & (-'&" 'J1i ' & 5' 4 ' i&3 -' 5'2 i 5'(& "Z

H' CFG' = %G CDBOC□AH' A>'#DAE'I' JG' F?PG' ?H' ?OOABH□' A>' = ?' @?DPGM-MAB ' LG? C' CF?C' J?' '0?MMG%' ? □CC?DE I' #FG' QB?M□CG ' A>'CF□ ' LG? C' ?DG' @ADG' O□DOB@ C?HC□?MME' DGM?CGN' LE' $EN ?CG' R

6'#?O' %HF'H I' ;J O 'GM %HF'%HM%' HP'HMO' #' ?O?'M KHP ' 7'G QHN' I P MT' JG' 1'7' I'MIO'GHMLP' I'IMIIP'I IGN' JG' O '9'UP' I IP'MJKN J'MG?' PHPM GP'KMI+ O 'NHP'IM P9' JL M O'HP' MG I MI+ #?O'9 P'O I'9 UP'M H GP'TGHMLPO' #?O'NH 9UP'LM N'%HMN'M7NP'I MI' MG I MUPO' 1'7'GU I' MG A9MKU'MIO' JQH'MG'MIT'APM P %O' %HF'HM '7 'K 9O'H I'7 'N ' PM+ -MGG IQ'7 J9'MIO'H A9P' '7G QHN+ X H GP'PTPG'N M I' P P'GLM U9 IQ'MG'A QHN' #G G'M7J IMKP' %HF'H G PO'9P PI+ 1 'NHP'9 QHNI IQ'%HMN'7M99PNF'7 I' NHP'HPM PI'8 5 PMO7J9' 7'9 U'MIO' PO'MG'7 P' 7'KHPP + #IO'%MG?' PMO'HP' MG'M'Q O'M KHP'8 #IO' %HF'H G A 'A %HF'MN'P PI'MIO'I ' L I'; PPUG'HP' JQH%' I JKH'G +R

M?E' GOCAD'□>' FG @□ F□ @GG□ F□@' @AH '?MM CFG G CF□H ' GOCAD' F?N' C?(GH ?' PGDE' HALMG' L?DAH' A>' +DGGOG'C?F?C J?' QB?□HCME'?NH' D□OFME' ?D@G' ?HN' >AD' CA' MG?N' F□@' ABC' A>' CFG' FA C' ?C' F□' G?' G' F?N' 0? C' F□ ' F□GM' LGF□HN' F□@' ?C' F□ ' L?O(' ?HN' F?N' MG>C' F□ ' LDG? C' N□ 0APGD□N' ?HN' ?' FG' J?' '□H' CF□ ' KA□HC' ?HN' CAA(' HAHG' F□GN' A>' 0F□MMG ' FG' 0?@G KD□P□ME' BHCA' F□@' ?HN' CFDB C' F□' KG?D' J□CF□H' F□' ' LANE' ?HN' GOCAD' >GMM' NAJ□H' NG?N' CA' CFG' DABHN I

Z i ' ; R ,'(D ;' O ;' D /

DA@' CFG' ?@G ?BCFAD□□G ' F?(KGDG' CAA(' CFG' □HO□NGH□' A>' 0F□MMG ' G@KMAE□H ' F□ ' &ED@□NAH ' >AD' CFG' NG CDBOC□AH' A>' M' #DAS?H' 0F□G>'F' LBC' CFGE' CGMM' CFG' CADE' A>'#DA□MB ' ?HN' HAC' A>' GOCAD R

= >CGD' CFG G CF□H ' CFG' H□HGCGGHCF' L?>CMG' LG ?H' J□CF' DG?C M?B F□GD' ?HN' ?>ADG' CF?C' 0F□MMG ' GHCGDGN' □HCA' CFG' L?CCMG' FG ? G@LMGN' F□ ' &ED@□NAH ' ?HN' KD?EGN' CFG@' CF?C' CFGE' JABMN' □HCGHN' CA' HAHG' ACFGD' CF□H ' LBC' CA' GHOMA G #DAEMB ' ?HN' CA' FAMN' F□@' J□CFABC' >ME□H ' C□MM' FG' 0?@G' ?HN' CF?C' FG' JABMN' HAC' LG' >?D' >DA@' CFG@' CFGE L?CCMG' HN' AH' CFG' ACFGD' □NG' 0?@G' #DAEMB ' CF?C' LG ?H' CA' >MGG ?HN' LG?C' NA J□H' ?MM' CFG@' CF?C' FG' 0?B' F□' ?HN' N□N' A' @BOF' CF?C' ?LABC' @□N' N?E' FG' KBC' CFG' +DGG (' CA' >M□ F□' CFGH' CFG' &ED@□NAH ' VCF?C' J GDG' C' JA' CFAB ?HN' >□ F□CH ' @GH' ?HN' F?N' HAC' >AD' AC' CFG' 0A@@?HN@GHC' A>' CFGD' MADN ' CFDB C' □H' ?@AH ' CFG' #DAE?H ' ?HN' DGOAPGDGN' CFG' >GMN' HN' ? ' CFGE' FGMN' CFG@' CA' GCFGD' ?HN' AB F□' HA' @?H' LBC' #DAEMB ' CFGE' >ABHN' F□@' CF?C' FG' >AB F□' CDAH' ME' ?HN' J?' ' GHOMA GN' AH' ?MM' K?DC ' LBC' FG' MGJ' ?HN' JABHNGN' @?HE' HN' ?' FG' J?' ?MM' ?MAHG' ?@AH 'CFG@' ?HN' F?N' HA' @?H' CA' BOOABD' F□@' CFGE' MGJ'F□ ' FAD G' F□ ' 0A□>' A>'□DAH' ?HN' FG' NG>GHNGN' F□@' □H' CFG' LG C' @?HHGD' FG' 0ABMN' #FGH' 0?@G' AH' 0F□MMG ' JFGH' FG ?J' #DAEMB ' ?MM H?(GN' ?HN' D?H BKAH' F□@' □H' ?' D? G' ?HN' @ACG' A>>' F□ ' FG?N' ?HN' 0? C □C BHNGD' CFG>GGC A>' F□ ' FAD G' ?HN' CAA(' CFG' LANE' ?HN' LABHN' □C CA' CFG' C?MM' A>' F□ ' FAD G' ?HN' NDG J' □C ?>CGD' F□@' CFDAB FABC' CFG' FA C I .BC' F?(KGDG' ? ?□H' AG ' CA' F□ ' A@GD' JFGH' 0F□MMG ' CD?MM' GOCAD' =' ?MAH ' CFG' >□GMN' I R

' $ ' ' 5' $'

GPGDE ?N@□D?C□AH >AD' =" MAD□AB ' 0AFH'I'□H F□ ' A JH KDAKGD'MHG ' JG @B □ LE' 0A@K?D□H ' □C JC□F' JF?□C □C ' ,□H CFG ?MCGD?C□AH' LG>ADG B GHNG?PAB0' CA' BHNGD C?HN' JF?□C F?(KGDG8 ' #DA□MB ' ?HN' DG □N?' ' LG?D' CFG H?@G ' BL$GOC ' ?HN' FG F? ' CFGDG>AD$' □PGH' CA' *ME G ' CA' NG 0D□LG' FGD ? ' $ ' 0AH0G□PGN' FGD' AH □NGD□H ' JF?C F□ ' □HCGHC□AH ' JGDG ' ?HN' JF?□C DG?MME □ ' CFG F□ F' @AD?M□CE A>' CFG 0F□D?0CGD□T?C□AH ' JG 0?H' 0?DOGME ?E' CF?□C FG F? ' @?NG CFG DGKDG GHC?□AH' CAA' KDA@□HGHC' FGH' FG' ND□J' DG □N? ,J□CH(' FG F?N' CFG >GGM□H ' □DAH ' AH' F□ ' @□HN' J□DCGD' □H ?' HAC□OG A>' CF□ ' K%?E ' ?E =';$G ' NGB ' ?@?HC ' GPA□GFC' 8GHCGHNGHC' GC AHC' $ 8:; F?(KGDG F? ' NG ODLGN' BOF F?KK□HG R

6' 4 J'1JGN O GGP1A9P'9 P'N ';5 1POP'GN 99 OM9GP'5 1POP'A PO' i' 9TGGPG%'GKH 9+ MI'ip p'AP'OPKP %O JN'AT'GN iQ'M NG'MiO'A9MIo GH1piNG' 7'9 P+ ' -JN'%p1' i'L MKN KP'M998 GPP1'9 GN'MiO' i+ #iO'O M 'H 1' i'Mio'Q P'H 1'9 ip'MQM i+R

;H

*KAH' CF□ ' @?E' GG@' ? ' BKGD DG>□HG@GHC' □H' JF□OF' CFG' OD□C□O' KDGCGHN ' CA' AC□PG- MG ' HN' EGC' CFG' JFAMG' DGKDG GHC?C□AH' □ ' CDBG ' ?HN' □C □ ' CFGDG>ADG GHG?M' G' NAG ' HAC' C?HN' ?LAPG @GH' LE' MAJGD□H ' @GH ' AO□?M' M□'G □ ' HAC' @?NG' JAD G' CF?H' □C □ ' CF?□C FG' JFA' NG OD□LG ' □C @?E ?KKG?D' ?LAPG' □C ' ADN□H?DE' C?HN?DN' C' □ ' HAC' ?' 3 ' A>' A@GD' AD' A>' ?DBD9 ' #FG' FGDA□O' □ ' HAC' MA'J GDGN' LE' ? AO□?C□AH'J □CF'CFG' D□N□OBMAB ' #FG' FGDAG' ;' CFG=' M□?N'I' FAJ'B ' PGDE' M□CCMG A>' CFG' PBM ?D' □NG' A>' FB@?H' >□GR ZH#' @BOF' GPGH' A>' CFG >?@M□?D' LBC' CFG' DG BMC □ ' CF?C CFGE' OG? G CA' LG' FGDA□O' AJ' CF□ ' □ ' ?CC?HGN' □ ' CFG' JAHNGD' □ ' C' J A@GCFH ' CA' F?PG' A□' D□N' A>' CFG @?OF□HGDE A>' CFG' AN R A@GCF□H ' CA' F?PG' G ?#FGD □CG ' GCGDH?MME' NG K□ □H ' ?HN' NG K□ GN ' . BC CF□ ' □ 'HAC ?MM' #FG' JFAMG' CGHNGHOE' A>' CFG' KM?E R □C ' □HO□NGHC ' □C ' 0F□?D?OCGD□T?- C□AH R □ ' CA' MAJ GD' JF?□ CFG +GD@?H ' 0?MM' FGDANA@' *MD□O□' @?HC?□H ' CF?□R

6 HP'7M G'QHNPO' HM9KGLP'P'I GN'KP NM 19T O'O'i N' I GNMUP'MG'N ' NHP'APip7 K M9 P77PK0' H KH'M'IPM p ' iN I MKT' NH' NHP' H'QH' KJ9WJ P' 7'MiN]J NT'HMO'L OJKPO' MiO' J9O'L OJKP'JL i'NHP' H GN MI'3J LPMi'I iO+ JN' HP' GM 'NHP'OMiQP ' 7'MI' iO GK I iMNP'MOI MN i' 7'NH G' K9MGG KM9 MiN]J NT8 7 ' HP' H ' NHJG MKKPLNPO' N' I JGN' ipKPGGM 9T'7M99' N ' NHP' p T 9 PGN' GNMN i' i' p9 Q i' MiO' I M9 NT8 SMG' iOPPO' 7' P'K9 GP9T' AGP P'NHP'KHM MKNP ' 7'NHP' NH'KPiNJ T' P GPP' HMG' HMLLPiPO+' 1JN' 7'NH G'L LHPN' K' GL N' H KH' LPipN MNPO' NH'p]JM9 K9PM ipGG'NH 'JQH'NHP'OM UipGG' 7'K I iQ'KPiNJ PG'MiO'NHP'K9 J0G' 7M'7M O GNMiN' LMGN' HMUGLP'P' NP'NH G' OPPL9T G Qi N KMiN' GMN P' JL i'N P'" Ip K'Hp O I+ " P'HMO'i ' OPG P'N ' OPAMGP'NHP'p9P MNPO' N ' OPNP MNP' ' I MUP'9 NN9P'NHP' Q PMN' Mi O'GN 99'9PGG'N 'MNNMKU'NHP'L PN KM9' NH' 7 " Ip ' ' 7'HP K'L PN T' i'QPip M9+ JN'HP' GHPO'N ' M i'NH JQH9T'MQM iGN'NHP' P MJJMN i'MiO' O 9MN T' 7'NHPI ' N ' H KH' IMi'G ' 99 iQ9T'MAMIo iG'H IGP97+ "P'piOPM J PO'MN'NHP'GM IP'N Ip ' A' iQ'GN U iQ9T'N ' P ' NHP' Ji P GM9 N JNH' NHMN' p p TNH'iQ' NHMN' G Ip p9T' HJ'I MI' p pi' Hpi' N' G' Q9 7 PO' NH' NHP' i IAJG' 7 N' L PN K' OPM9 NT' MiO' M I TNH KM9' LMGN'TPN'GppiI' i'NHP' A O%G PTP'LP GLPKN P' 7'M' LJ P' I M9' OPM9 NT' MLLPM G' p T G I M99+R

MM' CF□ ' @?E' GG@' ? ' BKGD DG>□HG@GHC' □H' JF□OF' CFG' OD□C□O' KDGCGHN ' CA' GG>?OD□FG'CF□H' CFG' KAGC' GPGD' ?J ' . BC' CA' BOF' ?H' ALSGOC□AH' CFGDG □ ' ?' PGDE' KM2H' ?H JGD' ' OGDC?□H' DG BMC' ?H' G>>GOC A>' KD□HO□KMG' OADDGOCME' NG OD□LGN'W' >' □C' L G' A' □ ' CF?C' DG BMC' ?H' G>>GOC A>' KD□HO□KMG' AD' ?H' G>>GOC A>' 0F?HOG'W' ?' KDAA>' CF?C □C J ? ' CFG' G>>GOC A>' KD□HO□KMG' JG @?E' CF?C' %DENGH' N□N' HAC' GG CFG KD□HO□KMG ' ?HN' CF?C' HAC' GG-□H ' □C ' FG' GHC□DGME 0F?H GN' OM□K 0F?D?OCGD' A>' CFG' K%?E ? ' ?' JAD(' A>'?DC' AD' G ?@KMG'CFGDG □ ' HA' OGHG □H'CFG' ND?@?' A' GHC□DGME □H' ?OOADN?HOG

GMAEPKM i' PQM O'MiO'OPM 'i'JGP[
XHMM'NH iQG MQM i'I GM'OPM 'i'NHP'PGNPPI
#iO'L ' i' NH['GHM99' P'GPP'N I
#i'MKO'NHMM' P T'KHMPKP O NH'NH 'JL i'H I
#EMW' pi i%O+ 1'HPM pIG' HMM'G I P'IpI'O +
XH 9P'G I P'IpI'9PM P'N 'O '
" 'G I P'IpI'K pPL'i'GU NN GH'7 NJIPWG' HM99+
XH 9PG' NHP GT'L9MT'NHP' O NG' i'HP 'PTPG'
" ' IP'IMI'PMNG' IN'Mi NHP %G'L OP
XH 9P'L OP' G'7PMGN IQ' i'H G' MIN IIPGG '
'GPP'NHPGP' : PK MI'' % S HT'P PI' ' 2'
HPT'K9ML'NHP'9JAAP'#EMW' i'NHP'GH J9OP ;
#G'7H G7 N' P P' i'A M P±"PKN %G A PMGN+
#iO'Q PMW' T'GH IU Q+
($ '', 2'O 'AP9 P P N ' 7 'NHPT'LMGG%O'AT I P'
#G I GP G O 'AT'APQQM 6ŧ IP NHP 'QM P'N ' I P'
: O' O'i '9 U' XHMN'M P'IT'OPPOG 7 Q N'\
6'2%%' IP'HMNH'IT'9 O'M' M99PN'MN'H G AMKU+
XHP P i'HP'LJNG'M9 I G7 ' A9 i
#'Q PMN G CPO' I IGNP' 7' IQ MN NJOPG'
H GP'GK MLG'M P'Q O'OPPOG'LM6N' HKH'M P'OP J %O'
#G'7MGN'MG'NHPT'M P'I MOP'7 Q N'MG G i'
#GO IP' -P GP PMIKP'OPM'IT'9 O
+PPLG'H i J'A QHN' 'HM P'O IP' G N 'HMIQ'
$>J NP' JN' 7'7MGH i'9 UP'M JGNT' I M 9'
2i'I i'J1PIMM9 I KUP T±' MUP'NHP' iGMMIN' MT'8
O 'H i J'N M P9G i'M'GN M N'G 'iM +
XHP P' IP'AJN'Q PG'MA PMGN' UPPL'NHPI'NHP'LMNH'8
O 'PI'J9MN i'HMNH'M'NH JGMIO'G iG+
HMN' IP'AT' IP'LJ GJP' 27'T J'Q P' MT+
1'HPOQP'MG OP'7 I'NHP'O pKN'7 NH QHN+
/ UP'N 'MI'PINP %O'N OP'NHPT'M99' JGH'AT+
#iO'9PM P'T J'H iOI GN8 S
1 '9 UP'M QM99MIN'H GP'7M99PI' i'7 GN' MIU+
/ P'NHP P'7 'LM PIPIN'NH PM'NHP'MAEPKN' PM
1%P J1'MiO'M IL9PO' i'' HPi' HMN'NHPT'O ' i'L pGPIN+
H JQH'9PGG'NMHI'T J G i'LM6N'I JGN' %P N L'T J G'
O 'N I P' G9 UP'M'7MGH IMA9P'H GN+
HMN'G9 QHN9T'GHMUPC H G LM N iQ'QJPGN'AT'NHP'HMiO'8
#iO' NH'H G'M I G' JNGN PNKH%O'MG'HP' J9O'79T
: MGLG i'NHP'K I P ' XP9K I P'P P'GI 9PG
" G'7QJ P'MiO'H G HPMN+' 2' MG I JKH' ML'N' i'NH G8
-+PIJIP MO i'7 'NHP'NH iQ' N' MG8
O 'APMJNT' N+

=#FG $PG A> CFG ALMG +DGO?H ?HN "A@?H OA@K?DGN CA GCFGD LE MBC?DOF NAHG HCA !H M F LE #FA@? ADCF I ? LAA(AH @?HE ?OOABHC CA LG PGHGD?CGN C M-CAH A> MBC?DOF JG F?PG R >BMM A>>HG DALB C !H M FR ?LAA(JADCFE A> F?(KGDG CA DG?N ?HN A@GC@G CA @C?CG GDG FG >ABHN CFG CADE A> AD AM?HB CAMN HCFG @A C D?KF O @?HHGD ?HN FG >AMMAJGN C KDGCCE MCGD?MME GLBFD KM?OG CF CADE ?@AH C CFG >?LBMAB MG GHN A> "A@G MBC?DOF ?HN G KGO?MME F?(KGDG F?PG @?NG C ?M@A C @KA LMG CA LGMGPG CF?C BOF "A@?H NN HAC DG?MME MPG ?HN CFH(?HN C?M(?HN ?OC ? JG GG CFG@ HCFG G JAHNGD>BM KOCBDG A> FB@?HCE H CFG MMB CD?CAH CA G?OF ?OC JG F?PG PGH CFG K?D?MMGM K? ? G >DA@ MBC?DOF G FGDG BLSA H ? B@@?DE A> CFG CADE A> AD AM?HB JF OF JG G CD?OC >DA@ CFG =!H M F EOMA-KGN? I R

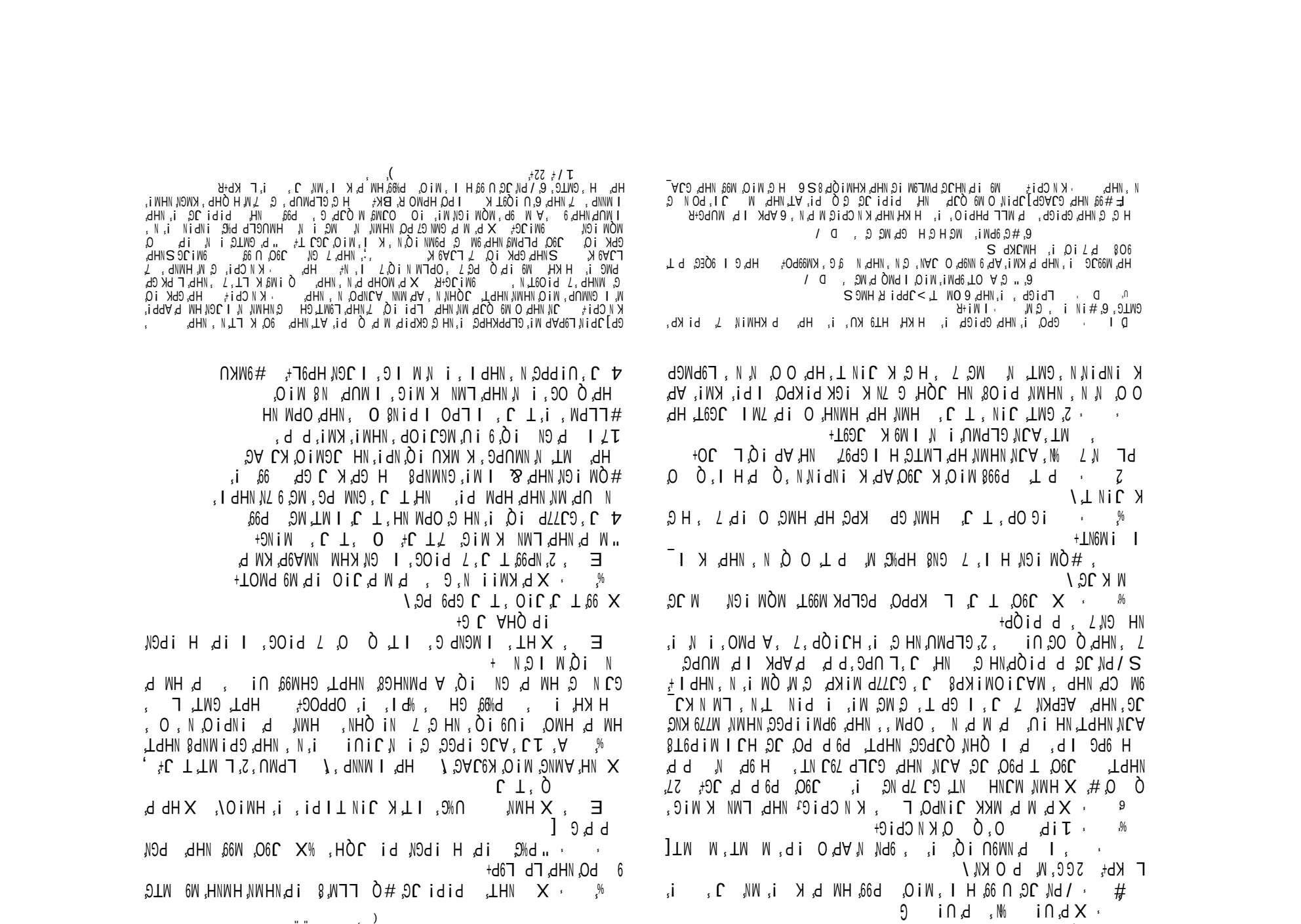
6 9M!JG MG !NHP & IM!KMIL HP!NHP K !GJ9 I ! JG MG 9MT !Q G PQP N 9 HP APG PQPO IMU !Q M Q JG GM99T GJKKPPOPO !O !Q AMKU NHP & IM!G N NHP KMIL8 AJN 9M!JG II PO MNP9T M99 PO NHP I JGHPO NH JQH NHP QMNPG M!O N U NHP L9MKP PM! H 9P NHP #!N MNPG HMO K IP N P9 P P NHP N !M!O P P !NHP L !N 7P!QMQ !Q NH NHP K !GJ9%G M IT HP!9M!JG K II P!KPO NHP AMNN9P M!O G !K IL9PNP9T OP7PMNPO NHP I O I NH G N I P HP MG Q PMN9T MO I PO 7 H G M 9 UP MA 9 N PG AJN H G HMJQHNT OP I PM! J QM P K !G OP MA9P 77P!KP N NHP K II !M9NT N 9 !Q M7NP M OG H G IL9MKMA9P M!QP MG PWK NPO AT AP !Q P7JGPO NHP K !GJ9GH L8 !!O HP! !KKMG !7 M GP P P7M I !P !NHP K NT K I MG MN 9MGN A JQHN 7 I K 9T @G I P LJ KHMGPO M!O G I P Q P!AT M : PPU L !KP M!O M OPAMNP M GP HPNHP N GH J9O AP Q P! Q MN G G 9O N NHP L9PAG 9M!JG GN P!J JG9T MO GPO NHMN N GH J9O AP Q 9O HP LP L9P !N9 P 7J T X J9O HM P N !H I !L PKPG HMO ! NHP N AJ!PG GJ I _ I !PO H I N NMUP H G N M9 "P MG AM! GHPO AT M IME NT 7 NHP N APG M!O PN PO N #!N JI NHP KH P7 N ! 7 NHP 9GK HP P NHP U !Q #NN JG J99JG PKP PO H I NH Q PMN H GL NM9 NT 9M!JG L I GPO NHP 9GK H G M O ! NHP M MQM !G& I P M!O NHPT 7 NH NH Q M!NPO H I NHP H QHPGN K 9H ! J G M!O MLL !NPO H I NHP QP!P M9 "P MNNMKUPO M!O N U IM!T N !G8 M I !Q NHP G KP MN KJI / !QJ9M M!O /M ! JI #N 9MGN HP O PKNPO H G IM KH N & I P NGP97 M!O L NKHPO H G KM IL !9T M 7P I PG 7 I NHP K NT HP P HP O KNMNPO NHP NP I G MN H KH NHP & IM!G I QHN LJ KHMGP M KPGGMN ! 7 H GN 9 N PG # I !Q NHP NH !QG HP OP IM!OPO NHMN NHP 9M!O NMUP! 7 I NHP 9GK GH J9O AP PGN PO NHMN NHP K 9 ! PG GPNN9PO NHP P GH J9O AP PKM99PO M!O NHMN NHP H 9P LP L9P GH J9O AP PKP PO MG M99 PG M!O K N CP G NH P]JMG QHNG8 M!O NHMN M99 NH GP H HMO P!9 GNPO NHP I GP9 PG J!OP H G AM!!P G GH 9O AP PKM99PO MG P99 MG H I GP97 9M!JG M99 PO NHP I N NP I G ! P 7 NH NT M!O NHP NHP 7 NH PP OMTG 7 I MU !Q JL NHP I !OG #7NP NH NT OMTG HMO PWL PO M OPLJNMN ! 7 7 J 9PMO !Q GP!MN G KM I P AP7 P H G N AJ!M9 AJN P P PLJ9GPO NH NH PMNG 7 NHPT GH J9O MQM ! 77P M!TNH !Q AJN J! PGP PO GJA I GG !

6 1!NHP GPK !O OMT NHP H 9P A OT 7 L PGNG M!O MJQJ G KM I P ! NHP 7 7 K MG QM A M!O I L9 PO H I AJN ! M ! 1!NHP NH O M!O 9MGN OMT H KH HP HMO M99 PO NHP I HP !NP!OPO N 9PMO H G M I T MQM !GN NHP K NT AJN M! NHP PWLPO P!N MG N PO M!O GJKKPPOPO HP ! A9PGN I MN !G 7 NHP K NT 9PO AT PNJ M NHP I NHP 7 9M!JG M!O H G 7P 9J I ! M H HP9O HP 9 NN9P KH 9O P!AT NHP HM!O KM I P N H G NP!N HP 9M I P!NMN !G MN 9MGN L P M 9PO !H G M9 GN J!AP!O !Q PG 9JN !M!O MOO PGG !Q H G I NHP HP GM O NH M 79 O 7 NPM G MUP NHP!NHT K J!N T !GNPMO 7 I P G !KP NH G G NHT KH KP+% HP P I AMGGT OPLM NPO M!O O G I GG !Q H G 7 KPG HP PNJ !PO M!O 9 PO M I !Q NHP 9GK N M Q PMN MQP #KK O !Q N M! NHP MKK J!N HP MG I J OP PO AT G I P 7 NHP 9GK H P P !O Q!M!N MN H G NHO M !Q 7 I NHP MNNMKU+

6#7NP H G OPMNH P P NHP & IM! IP! P I J ! !Q 7 H I MG NHPT HMO O !P 7 G I P@7 I P HP PG HP LJA9 K Q MN NJOP 7 NHP LMN N K GP KPG 7 9J I ! M MG MKU! 9POQPO AT M NP I L9P H KH MG P PKNPO N OP I M9P O NJ!P+R

C JABMN LG G CDG@GME N>>OBMC CA DGKDG GHC CFG "A@G A> AD AM?HB R C CDGGC C @?D(GC KM?OG C GH?CG FAB GR JCFABC ?P AM?C AH A> F CAD O?M KDAKD GCE LBC H CF @?CCGD CFG C? G @?E KDAKGDME C?(G OAH NGD?LMG MOGH G

#FG GHGD?M BLSGOC A> "A@?H J MM LG @ADG ?KKDAKD?CGME G ?@HGN H CFG BOOGGN H CD? GNE A> 0BM B ?G ?D



4 J'M P'N MiGL NPO'AT'KM9MI NT'
H NHP' HP P'I P'MNNPiOG'T J8 MiO'T J'G9MiOP'
HP'HP9I G' %NHP'GNMNP' H'KM P'7 'T J'9 UP'7MNHP G+'
XHPi'T J'KJ GP'NHPI'MG'PipIPI PG+
%' ' 4 J'AP99T%G MiG P' X HMN[
HP'U iQ9T K IPO'HPMO'NHP' Q 9MiN'PTP+
HP'K JiGP99 'HPM N'NHP'M I' J'G 9O P +
1J'GNPPO'NHP'9PQ'NHP'N iQJP' J'N J1LPNP +
X NH' NHP'I JI IpiNG'MiO'LPNNT'HP9LG'
2i'NH G' J'7MA K' 7'NHMN'NHPT S
E ' X HMN'NHPi'\S
%O P'IP'NH G'7P99 'GLPMUG[S HMN'NHPi'\ HMN'NHPi'\
6'L PNNT'NW9P'RM9 N9P'I P'iNH JOHNHPT'IMT'HM P'PMO'N'$'N T'NHP 99 NOJP'7'NHP
N#' JL NPP piG'GMUG'6' 'GQWP'G'N' #'NH JOHG IP'7T JHM P'HPMO
NHP GN'T'2' 99'CL'PWO N GW99 'OP'MiO'O7JOP N'MI iQ'NHP'PGH#R
UPG PMLW9MiM i'MSLPMG'N' JG G IP'HM 7MiK7Z#' 'GQWP'HP GMTG'G
OP P07 1'NHP #iQ9 'WW i' N'O OP' HPNW9 7 didpiJG'G'GQWP9O
AT'AP'iOO OPO'iN'LM N'QW9MG' JN' ' 5TKP'HWG P/P'PON'MiNP'AT':77 O
i'MLW93WQP i' MG9iQP S
R2%9 i N% '-'NHPEPG%'
T IT' P9MN' i#R
:77 O'Q PG'NHG PMLW9MiMN i'+ 7 &PiOP' N 79W'OPL P N '7CV6'AT'
LP JG'iN'IMN i8R'MiONH#i' NPG'NHPLQ93WQP 7'NHP'NPW#' 6 HG'G 'iP 7
MNH J3MiO'iQWiMPG HiH'IQH Ap+A 'JOH'N'L P'NHMW'NHP N JP PWOiQ i
9MiJG' #KN2+' K+2+'G S'
' '9M9NPi P#%R
HP 9OK LPG'HMP '7' HiK % HP A 9O'EJOK 'J9T'L QPO' '
MHG XMN AJ'N i'APWNG'LPWJ9MiNY'Pi'JOH'N'IJ9J'APK'i'PG3O'APWQJGPN' '
GOi'7PG'N' O $'; 'G iOPPO'N O PG'MiO[EWMiT'NHP'NH iOG3 i'ip 7 HiKH'
H P'P';APM'MiT'P9MN i'N'NHP NPW#' NPP'PiG'N 'L P'PG 'HiKH'HP
L PG'7 1'M M PNT'7MJH N'PG'N'1PMi'6'VGWMNP'OGL'PWO#R'
5TKP'MOOG'6'N'HP P'G;'iOPPO'i'PiO'7LMJ3WOPG'i'J'PM9T'OMIMNGiG HP'P
'KJG i'NHP GPiOP'7'IMJP'GWP'7MI'HM%'EWKR' L i'NHPOP'MJNH N PG
PMO LN
= HG'GJ3JW99T'L iNPONHJ6 S
Y % 6#iO'1JWJW99T'LM N K LMP'OOJ i GP R EK
M9 ip'7P99G'JG'NHMN' 'G '@NHPLM N K L9P# XP7 99 'NHP
LJiKNJW i'7NHP7 9

17NH G'I GN GP'PAP99 i'NH J'Q %GN'7 pI GN
H J' MG'KM9'NHMN'M N' GN' i'A9 O'N ' Ji+
/PMO%[7 GN'N' i'G I P' MiNMQP+S
JN' IMUP'T J' PMOT'T J'GN 77'AMNG'MiO'K9JAG8
& IP'MiO'HP' MNG'M P'MN'NHP'L iN' 7'AMNN9P+
HP' ip'G OP' I JGN'HM P'AM9P+FS"M 9'i A9P' M K JG[
' '
E ' HMiUG+SDXHM%G' NHP' IMNNP ' T J' O GGPiN JG'
QJPG+
HMN' JAA iQ'NHP'L ' NKH' 7'T J' L i i+
MUP'T J GP9 PG'GKMA'G\
%' ' XP'HM P'P P'T J'Q O' O+
E ' "P'NHMN' 99'Q P'Q O' OG'N 'NHPP' 99' 79MNNP'
piPMNH'MAH iQ+SX HMN' J9O'T J'HM P'T J'KJ G+

F#'K I I 'LJiKNJMN i' 7'NU G'LMGGMQP'
'?'GPiO'N'NH JOH'NHP' P G' 7'T J'A9 O
3 Pi'N'NHP'K J N'NHP'HPM N 'NHP'GPMN' %'NHP'A M i8
#io'NH JOH'NHP'K MiUG'MiO' 77KPG' 7'IMi+
HP'GN iQPGN'ip PG'R BK+

H G'M MiQPIPiN' 7'NHP'LMGGMQP' i 9 PG'M O77KJ9MT+ HP'6'HPM N'R' G'IPNM
LH KM9GT'6'NHP'K J N'R'NHP'KPiN P' ' HKH'M9' NPiOG8 AJN'NHP'LJiKNJMN i'M9G'
lMUPG'N'6'NHP'GPMN' 7'NHP'A M i+R' H G' M9 iP'MiO'5 JPPVNP'JG'G QH%G'NHP'
6'A M iR'G'HP P'LJN'7 'NHP'JiOP GNMiO iO'MiO'MiKK O iQ'N'NHP' 9O'LH 9 G LHT'
NHP'6'HPM N'R' MG'NHP'GPMN' 7'NHP'JiOP GNMiO iQ'4' ' P'O'i N'AP9 P P'NHMN'
HMUGLP P%G'EJOOlPiN' J9O'HM P'LP I NMPO'H I'N'JGP'6'HPM N'R' i'M LHTG KM9'
GPiGP'MiO'6'A M i'R'M PNMLHTG KM98 i 'O' P'GPP' HT'NHP'AP99T'GH J9O'i N'
K9M 1'NHP'I P N' 7GJLLGT iQ'NHP'HPMO'MG' P99'MG'NHP'HPM N+' HP'A JGI PMi iQ'
7'NHP'LMGGMQP' NH JN'MiT'7'NH G'7 KPO'LJiKNJMN i'@NHP' QiN9'JQH'NHP' P G'
AJN'NHP'K I I M'MLLPM G'N'JG'N 'AP S2'GPiO'NHP'GPip M9'7 O'NH JQH'NHP' P G'
7'T J'A9 O'N'NHP'K J N'NHP HPM N8 2'GPiO'N'NHP'A M i'MiO'
NH JQH'NHP'K MiUGMiO'77KPG@ AGK'P'LM NG' 7'NHP'XH 9P'A OT+' T'NH G IPMiG
6' HP'GN iQPGN'ip PG'MiO'GLM99 i7P ' P iG+
O I'P'PKP P'MHM'iMJ M9'K LPNPiKT'
XHP PAT'NHPT9 P+R

' 2+

HMN 9 UP ! LPMKP ! M \ NHP !P M77 QHNG T J
HP NHP I MUPG T J L JO " P NHMN N JGNG N T J
X HP P HP GH J9O 7 !O T J$9 !G 7 !OG T J HM PG8
X HP P 7 WPG QPPGP 4 J M P ! GJ P ! +
HM ! G NHP K M 7 P JL ! NHP KP+
1 HM 9GN ! P ! NHP GJ! 4 J NJP G+
I MUP H I NHT H GP 77P!KP GJAOJPG H I +
! O KJ GP NHMN EJGN KP O O N X H OPGP PG Q PMN ! PGG
5PGP PG T J HMNP M ! O T J M77PKN !G M P
G KU I M ! %G MLLPN NP H OPG PG I GN NHMN
X H KH J9O ! K PMGP H G P 9 " P NHMN OPLP ! OG
L ! T J 7M J G I G NH 7 !G 7 9PMO+
! O HP G O ! MUG NH JGHPG " M ! Q TP [JGN TP \
X NH P P T I ! JNP T J O KHM ! QP M I ! O8
! O KM99 H I ! A9P NHMN MG ! T J HMNP+
" I 9P NHMN MG T J QM 9M ! O X HMN%G NHP I MNNP +
HMN ! NHPGP GP P M L9MKPG 7 NHP K NT
4 J K T MQM ! GN NHP ! A9P GP ! MNP H +
! OP NHP Q OG UPPL T J ! M P H KH P9GP
X J9O 7PPO ! ! P M ! NHP \S X HMN%G NHP GPPU ! Q \
E 0 K ! MN NHP ! MNPG 8 HP P 7 NHPT GMT
HP K NT G P99 GN %O+
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HPT%99 G N AT NHP 7 P M ! O L PGJ I P N U !
X HMN%G O ! P %NHP ML N 98 H %G 9 UP N GP+
X H NH PG M ! O H OPK9 ! PG G OP 7MKN !G M ! O Q P JN
!EPKNJ M I M MQPG8 I MU ! Q LM N PG GN ! Q+
! O 7PPA9 ! Q GJKH MG GNM ! O ! N ! NHP 9 U ! Q
P9 NHP K AA9PO GH PG HPT GMT NHP P%G Q M ! P ! JQH[
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! O 9PN I P JGP I T G O 2%O I MUP M] JM T
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0 NH JQH MAJ ! OM ! N9T NHPT 9MKU O GK PN ! +
4PN M P NHPT LMGG ! Q K M O9T J N 2 APGPPKH T J+
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HPT GM O NHPT P P M ! HJ ! Q T8 G QH%O 7 NH L P AG
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HMN I PMN MG I MOP 7 I JNHG NHMN NHP Q OG GP ! N !
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@ A PMU NHP HPM N 7 QP ! P G NT+
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E --X HP P%G M JG M K JG \
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1J I JGNT GJLP 79J NT S PP J APGN P9OP G+

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" - AT NHP 9O NP G+

H JQH'H9M K JG'PM i%O'NHP1'i N8 MIO'M99'H G'7MJ9NG
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'MJG p'JG+
&.' 'OOT J'NH iU' N'7 99T
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2'HM P'NHP'9PNNP'HP P'8 TPG'HP p'N G' 9 "-
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iG OP' 7 N+R
2 7 ' 1J'M I T%G i'NHP'7 P9O
XP'ip p'TPN'IMOP'O JAN'AJN'& IP' MG' PMOT'
'MJG p'JG+
& ' 'OOT J'NH iU' N'7 99T
' M K JG GHM99'AP'H i J G'NH JQH' iOPPO
2i'MJQHN'HP'I p N'i N+
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"MO'K KJI piN i'\ % G i N7 J'OMTG Q iP'
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2'HM P'NHP'9PNNP'HP P'8 TPG'HP p'N G' 9 "-
6' HPT'HM P'L PGG%O'M'L P'AJN'N G i N'UI i'
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HPGP'NH PP'9PMO' i'NH G'L PLM MN i'
XH NHP'$N G'API N' I GN'9 UP9T'%G 7 'T J'
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XP'ip p'TPN'IMOP'O JAN'AJN'& IP' MG' PMOT'
'MJG p'JG+
& ' 'OOT J'NH iU' N'7 99T
' M K JG GHM99'AP'H i J G'NH JQH' iOPPO
2i'MJQHN'HP'I p N'i N+
7 ' / P%G HPIKP'MIO'HPM
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&.' 2G N'i N'T J G'\
XHMNP P'HM P$'APPI'NH JQHN' i' i'NH G'GMNP
HMN'K J9O'AP'A JQHN'N 'A O 9T'MKN'P P'& IP'
"MO'K KJI PIN i'\ % G i N7 J'OMTG Q IP'
IKP'2'HPM O'NHPIK?8 NHPGP'M P'NHP' OG' 2'NH IU'
2'HM P'NHP'9PNNP'HP P'8 TPG'HP P'N G' 9 "-
6' HPT'HM P'L PGG%O'M'L P'AJN'N G I N'UI I'
XHPNHP'7 'PMGN' ' PGN8 HP'OPM NH'G Q PMN8
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HPGP'NH PP'9PMO' I'NH G'L PLM MN I'
XH NHP'$N G'API N' I GN'9 UP9T'%W G 7 'T J'
IG OP' 7 N+R
2 7 ' 1J'M I T%G I'NHP'7 P9O
XP'IP P'TPN'IMOP'O JAN'AJN'& IP' MG' PMOT'
'MJG P'JG+
& ' 'OOT J'NH IU' N'7 99T
' M K JG GHM99'AP'H I J G'NH JQH' IOPPO
2I'MJQHN'HP'I P N'I N+
7 ' / P%G HPIKP'MIO'HPM
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&.' 2G N'I N'T J G'\
XHMNP P'HM P$'APPI'NH JQHN' I' I'NH G'GMNP
HMN'K J9O'AP'A JQHN'N 'A O 9T'MKN'P P'& IP'
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IKP'2'HPM O'NHPIK?8 NHPGP'M P'NHP' OG' 2'NH IU'
2'HM P'NHP'9PNNP'HP P'8 TPG'HP P'N G' 9 "-
6' HPT'HM P'L PGG%O'M'L P'AJN'N G I N'UI I'
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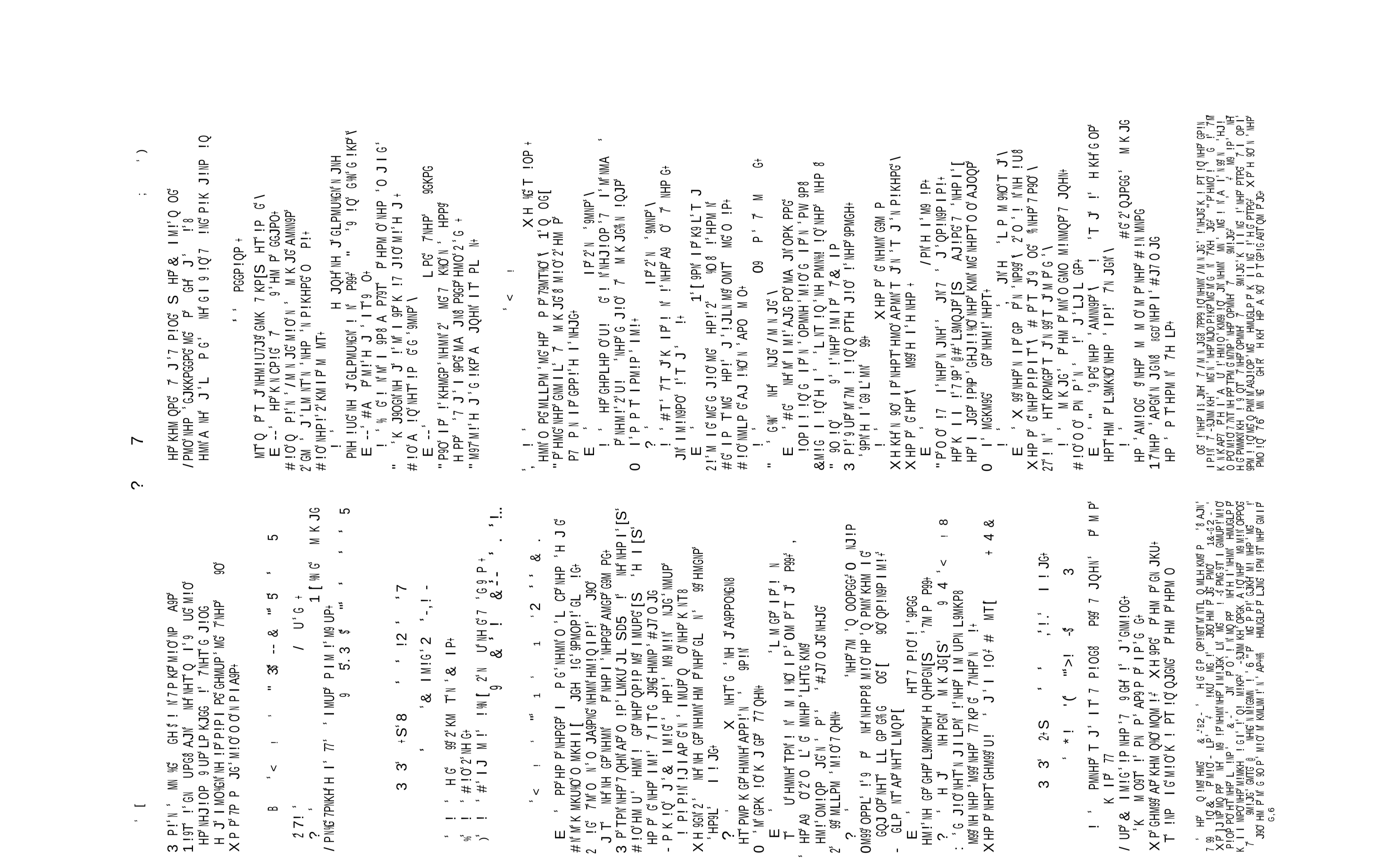

; E 2 O APGPPKH T J+
T M99 NHP AMNN9PG HP P ! P HM P 7 JQHN+
T NHP A9 O P HM P GHPO N QPNHP AT NHP G
X P HM P I MOP N P!OJ P 7 P!OG NHMN T J O PKN9T
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O 99 !Q NHP M NH G OG MO M!K%O M!O OM NG+
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4 J P P K !OJKNPO N M QP!N9P AMNH+
#!O AM9 I G MLL9 PO N T J TPN OM P 2 !P P
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27 M!T NH !U A M P OPMNH JN P QHG AMO 9 7P+
#!O NHMN H G K J!N T%G OPM P NHM! H I GP978
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#A9P N APM MQM !GN NHP Q PMN #J7 O JG
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#G KMJGP 99 AP APT%O - 9PMGP T J N I M KH8
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X P!KH JL NHT L P N NHP H QHPGN+
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? 1 QP!P M9+
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" P NHMN HMG AJN P77PKNPO H G Q O 99
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HP M9JP 7 HP ! 7N P P M K !KPM9 I P!N
X GP NHM!M NHP7N ! 9PGG NHM!M N MOJKP I P!N+
H OP T J O !QG 8 M!O N G 9P!KP NHMN+
X H KH N NHP GL P M!O N L 7 L M GPG JKH%O+
X J9O GPP I AJN I OPGN HP P7 P 2 APGPPKH T J
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P7 P NHP K I I !O GN AJN !+
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JN KM!! N I MUP I T HPM N K !GP!N N NMUP
#A AP N LMT I T G O 2 O P7JGP N8
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E - MT T J H O PG NHP 97 9 P \
7 HP 9M I A+
E #T N OP J H I 8 MG NHP HJ!Q T L9PAP M!G J9O NHP ! A9P M K JG+
% & " P%G M 9M I A ! OPPO NHMN AMPG 9 UP M APM +
E " P%G M APM ! OPPO NHMN 9 PG 9 UP M 9M I A+ 4 J N M P 9O I P!8 NP99 I P !P NH !Q NHMN 2 GHM99 MGU T J+
%! (X P99 G +
E 2! HMN P! I NT G M K JG L ! $ NHMN T J N HM P ! N !MAJ!OM!KP \
% & " P%G L ! ! ! !P 7MJ9N AJN GN PO NH M99+
7 3GLPK M99T ! L OP+
% & # !O N LL !Q M99 NHP G !A MGN !Q+
E H G G GN M!QP ! 5 T J N U! H T J M P KP!GJ PO HP P !NHP K NT 2 I PM! 7 JG %NHP QHN HM!O 7 9P \ 5 T J \
%! (X HT H M P P KP!GJ PO \
E PKMJGP T J NM9U 7 L OP ! S X 99 T J ! N AP M!Q T \
%! (X P99 P99 G P99[
E X HT %N G ! Q PMN I MNNP 7 M P T 9 NN9P NH P7 7 KKMG ! 99 A T J 7 M Q PMN OPMG 7 LMN P!KP Q P T J O GL G N ! NHP P !G M!O AP M!Q T MN T J L9PMGJ PG 8 MN NHP 9PMGN 7 T J NMUP N MG M L9PMGJ P N T J ! AP !Q G 4 J A9M I P M K JG 7 AP !Q L JO \
% & X P O N ! N M9 !P G +
E 2 U! T J KM! O P T 9 NN9P M9 !P8 7 T J HP9LG M P I M!T8 P9GP T J MKN !G J9O Q ! O JG G !Q9P T J MA 9 N PG M P N !7M!N 9 UP 7 O !Q I JKH M9 !P 4 J NM9U 7 L OP 1 NHMN T J K J9O NJ ! T J PTPG N M OG NHP !MLPG 7 T J !PKUG D M!O I MUP AJN M! !NP GJ PT 7 T J Q O GP9 PG[1 NHMN T J K J9O
% & X HMN NHP! G \
E X HT NHP! T J GH J9O O GK P M A MKP 7 J! I P N !Q L JO 9P!N NPGNT I MQ GN MNPG @M9 MG 7 9G MG M!T ! & I P+
7 P!P! JG T J M P U! ! P99 P! JQH N +
E 2 M I U! ! N AP M HJ I JG LMN K M! M!O !P NHMN 9 PG M KJL 7 H N !P NH ! N M O L 7 M99MT !Q AP ! %N8 GM O N AP G I PNH !Q I LP 7PKN ! 7M J !Q NHP 7 GN K I L9M !N HMGNT M!O N !OP 9 UP JL ! N N MG I N ! !P NHMN K ! P GPG I P NH NHP AJNN KU 7 NHP ! QHN NHM! NH NHP 7 PHPMO 7 NHP I ! !Q X HMN 2 NH !U 2 JNNP 8 M!O GLP!O IT I M9 KP ! IT A PMNH PPN !Q N GJKH PM9G I P!MG T J M P @2 KM!! N KM99 T J /TKJ QJGPG 7 NHP O !U T J Q P I P N JKH IT LM9MNP MO P GP9T 2 I MUP M K UPO 7MKP MN N+ 2 KM!! N GMT T J X GH LG HM P OP9 P PO NHP I MNNP P99 HP! 2 7 !O NHP MGG !K I L J!O NH NHP I ME LM N 7 T J GT99MA9PG M!O NH JQH 2 I JGN AP K !NP!N N APM NH NH GP NHMN GMT T J M P P P P!O Q M P I P! TPN NHPT 9 P OPMO9T NHMN NP99 T J HM P Q O 7MKPG 27 T J GPP NH G !NHP I ML 7 IT I K K G I 7 99 G N NHMN 2 M I U! ! XP99 P! JQH N \ X HMN HM I KM! T J A GG !D K !GLPKNJ N PG Q9PM! JN 7 NH G KHM MKNP 7 2 AP U! ! P99 P! JQH N \
% & I P G K I P P U! T J P99 P! JQH+
E 4 J U! !P NHP IP T J GP9 PG ! M!TNH !Q 4 J M P M I A N JG 7 L U!M PG% KMLG M!O 9PQG8 T J PM JN M Q O H 9PG I P 7 P! ! ! HPM !Q M KMJGP APN PP! M! M!QP 7P M!O M 7 GGPN GP99P 8 M!O NHP! PE J ! NHP K !N P GT 7 NH PP LP!KP N M GPK !O OMT 7 MJO P!KP+ S X HP! T J M P HPM !Q M I MNNP APN PP! LM NT M!O LM NT 7 T J KHM!KP N AP L !KHPO NH NHP K 9 K T J

$ HP PLPN N ! 7 NHP L PL G N ! MG ! NH G GP!NP!KP G 7 J!O ! NHP LMG_ GMQPG 7 HMUGLP P 2! & I P M!O ?J9 PN S
6 HMN 7M TH\ H KH 9 P Q M!%O. ! #GG
!#G 4 J / UP 2N S6 HP GKP!P B2 P L9MT Y
? H!G !PWL9M !G 6 X NH M99JG !N NHP 7MA9P H KH GMTG NHMN P P T I M! HMG M AMQ HM!Q !Q AP7 P H I ! H KH HP LJNG H G !P QHA J %G 7MJ9NG M!O M! NHP APH !O H I ! H KH HP GN G H G !+R

I MUP 7MKPG 9 UP I J I I P G8 GPN JL NHP A9 OT 79MQ MQM !GN M99 LMN P!KP8 M!O ! M !Q 7 M KHM I AP L N O G I GG NHP K !N P GT A9PPO !Q NHP I P P!NM!Q9PO AT T J HPM !Q M99 NHP LPMKP T J I MUP !NHP KMJGP G KM99 !Q A NH NHP LM N PG U!M PG8 4 J M P M LM 7 GN M!QP !PG+
% & IP K IP T J M P P99 J!OP GN O N AP M LP 7PKNP Q AP 7 NHP NMA9P NHM! M !PKPGGM T AP!KHP ! NHP ML N 9+
1J P T L PGNG I JGN APK I P I KUP G 7 NHPT GHM99 P!K J!NP GJKH O KJ9 JG GJAEPKNG MG T J M P+ X HP!T J GLPMU APGN J!N NHP LJ L GP N G ! N NH NHP MQQ !Q 7 T J APM OG 8 M!O T J APM OG OPGP P ! N G H ! J MA9P M Q M P MG N GNJ77 M A NKHP %G KJGH ! N AP P!N I APO ! M! MGG%G LMKU GMOO9P+ 4PN T J I JGN AP GMT !Q M K JG G L JO8 H ! M KHPML PGN I MN ! G NH M99 T J L POPKPGG G G !KP 5PJKM9 !8 NH JQH LP MO P!NJ P G I P 7 NHP APGN 7 %P I P P HP PO NM T HM!Q I P!+ : O P%P!N T J GH LG8 I P 7 T J K ! P GMN ! J9O !7PKN I T H M ! AP !Q NHP HP OG I P! 7 NHP APMGN9T L9PAP M!G 2 99 AP A 9O N NMUP I T 9PM P 7 T J+
: 1 " ! ! (! -

, 8< * # " # > !
" ! I T MG 7M MG ! A9P 9MO PG @M!O NHP I ! P P GHP PM NH9T ! ! A9P H NHP O T J7 99 T J PTPG G 7MGN \
! " ! J MA9P P!P! JG I T A T M K JG MLL MKHPG8 7 NHP 9 P 7 ?J! 9PN%G Q +
E " M[M K JG K I !Q H I P \
! #T NHT P!P! JG8 M!O NH I GN L GLP JG MLL AMN !+
E MUP I T KML ?JL NP M!O 2 NHM!U NHPP S " [M K JG K I !Q H I P[
$ 2!? " - MT %N G N JP+
! / U HP P%G M 9PNNP 7 I H I NHP GNMNP HMNH M! NHP H G 7P M! NHP 8 M!O 2 NH !U NHP P%G !P MN H I P 7 T J+
E 2 99 I MUP I T P T H JGP PP9 N ! QHN S#9PNNP 7 I P \
4PG KP NM ! NHP P%G M 9PNNP 7 T J8 2 GM %N+
E #9PNNP 7 I P \ 2N Q PG I P M! PGNMNP 7 GP P! TPM G% HPM9NH8 ! H KH N I P 2 99 I MUP M 9 L MN NHP LHT_ G K M! NHP I GN G P P Q! L PGK LN ! ! : M9P! G AJN P I L KJN KU F M!O N NH G L PGP MN P 7 ! APNNP PL N NHM! M H GP O P!KH+ 2G HP ! N J!OPO \ HP MG !N N K I P H I P J!OPO+
1 ! ! ! +
! HP G J!OPO 2 NHM!U NHP Q OG 7 %N+
E O 2 N 7 N AP ! N N I JKH S !QG %M KN T ! H G L KUPN \S HP J!OG APK I P H I+
! 1 !%G A G F P!P! JG HP K I PG NHP NH O N I P H I P NH NHP MUP! QM 9M!O+
E " MG HP O GK L9 !PO #J7 O JG G J!O9T \
! NJG /M N JG X NPG S NHPT 7 JQHN N QPNHP AJN #J7 O JG Q N 797+
E #!O %N MG N I P 7 H I N +2%99 M M!N H I NHMN M! HP HMO GNMTPO AT H I 2 J9O ! N HM P APP! G 7 O JGPO 7 M99 NHP KHPGNG ! 9 M!O NHP Q 9O NHMN%G ! NHP I 2G NHP GP!MNP L GGPGGPO 7 NH G \
! : O 9MO PG 9P N%G Q SD4PG TPG TPG NHP GP!MNP HMG 9PNNP G 7 I NHP QP!P M9 HP P ! HP Q PG I T G ! NHP H 9P !M I P 7 NHP M HP HMNH ! NH G MKN ! JNO !P H G 7 I P OPPOG O JA9T+
2!N NH NHP P%G !O JG NH !QG GL UP 7 H I+

PP &PKP!N P &PMO !Q MN NHP P!O 7 #KN 22+
D % --! SA9 !O+
F , & ' H G G M O K !PO 7 I , $M!O GGLP9N !NHP Q !M9 , N& N& $
F 9J I ! M HP P M!G P G NHP]JPGN ! 7 P!P! JG 6 !QG %M @HP KN T ! H G L KUPN \R NH JN ! N K !Q NHP 9O I M!%G AGP MN ! MA JN NHP 6 N I OG+R
1 /+ 22+ 1

#K ' 22+'

E ' X !O JG[MT ' 2' M M!N T J ' M!O' ! N NH JN
H G'N JP' LJ KHMG !Q+
' HP' Q OG' Q M!N' NHP I ' N JP[
! ' JP' L [
E ' JP' \ 2%9$ AP' G ! ' NHPT' M P' N JP S
XHP P' G' HP' J!OPO'\S : O' GM P' T J ' Q O' GH LG[
9 !' ' AJ!PG ' 2 !' ! ' .! 2 "T$ M K JG' G' K I !Q'
H I P ' HP' HMG' I P' KMJGP' N ' AP' L JO+S XHP P' G' HP'
J!OPO'\
! ' ' ' GH J9OP ' M!O' %NHP' 9P7N M I ' HP P' 9$' AP'
9M QP' K KMN KPG'N ' GH ' NHP' LP L9P' HP!' HP' GHM9$ GNM!O' 7 '
H G' L9MKP#' " P' PKP PO' !' NHP' PLJ9GP' 7' M]J !' GP P!'
HJ NG' %NHP' A OT+
E ' 1!P' !' NHP' !PKU ' M!O' N ' !' NHP' NH QH SNHP P%G
! !P' NHMM' 2' U! +
! ' " P' HMO ' AP7 P' NH G' 9MGN' PWLPO N ! ' N P!NT 7 P'
J!OG' JL !' H I +
E ' ' N%G' N P!NT GP P!' P P T'QMGH' MG' M!' P!P I T%G
Q M P' ' = ' - !&' "J !& - V' " M U[NHP' N J I LPNG+
! ' HPGP' M P' NHP' JGHP G' 7' M K JG ' AP7 P' H I ' HP'
KM PG' ! GP' M!O' APH !O' H I ' HP' 9PM PG' NPM G'
5PMNH ' NHMM' OM U' GL N' ! %G !P T' M I ' O NH' 9 P' 8
XH KH ' AP !Q' MO M!K%O' OPK9 !PG8 M!O' NHP!' I P!' O P+

' 2+

XP' KM9$ M' ! PNN9P' AJN' M' ! P NN9P 8
!O' NHP' 7MJ9NG' 77 9G AJN' 7 99T+
! [
! ' P!P! JG ' P P ' P P +
' : P' MT' NHP P' M!O' Q ' !+
! '
4 J ' HM!O ' M!O' T J G' 8
+ !' - X 7P' "' NHP +'
3 P' !' J ' !' H JGP' 2' O ' GHMOP' I T' HPMO+
HP' Q O' LMN K M!G' I JGN' AP' G NPO8
O I' H I ' 2' HM P' PKP %O' ! N' !9T Q PPN !QG+
JN' NH' NHP I ' KHM!QP' 7' H I J G+
! ' 2' HM P' 9 %O
' GPP' !HP NPO' I T' P T' GHPG+
!O' NHP' AJ 9O !QG' 7' I T' 7M!KT'
1 !9T' NHP P%G !P' NH !Q' M!N !Q' H KH' 2' O JAN' ! N
JN' J ' & I P' 9$' KMGN' JL !' NHPP+
! ' ' '

HMI'HM P'H I'H 9O'NHMN'LJ L GP'MIO'N 'LJN' N'
2I'PWPKJN i+
% &' /PN%G'N 'NHP' ML N 98
7 ' 2N'GHM99 AP'N 'H I'NHPI'MG' J'Q O' 99G8
#'GJ P'OPGN JKN i+
JN'HPM NG'7 'NHP'P piN+
7 ' "M P' NH'T J'+ 4 &
3 3' B; '- ' ML N 9+
' 2I'179 KPG'I' 5 &- i -
(' .." IP'K IP' NHPT'M P' M9I GN' HP P8' " ' IMIT'
GNMIO'7 'K iGJ9GH LG'\
9MIJG' 99'KM T' N+
' .." HMN%G'M'A M P'7P99 8 AJN'HP%G' PIQPMIKP'L JO'
MIO'9 PG'I N'NHP'K I I I'LP L9P+
%' .." %OM NH'NHP P'HM P'APPI' IMIT'Q PMN' IPI'NHMN'HM P'
79MNNP PO'NHP'LP L9P' H 'IP%P'9 PO'NHPI'8 MIO'NHP P'AP
IMIT'NHMN'NHPT'HM P'9 PO'NHPT'UI 'I N' HP P7 P'5'G'
NHMN' 7'NHPT'9 P'NHPT'HMN' JL I'I'I'
APNNP'M'Q JIO' HP P7 P'7 ' 9MIJG'IP NHP'N'KM P'
HPNHP'NHPT'9 P' 'HMNP'H I'IMI 7PGNG'NHP'N JP'UI
9POQP'HP'HMG' I'NHP 'O GL G N I8 MIO' JN' 7HG I A9P
KM P9PGGIPGG'9PNG'NHPI'L9M I9T'GPP%0+

9MIJG'.J89
AP'N'H I'M'GJ'P'OPGN JKN i'I'HP'GMI'MT'MG'NHP'Q 0'8 ''%'@ iKM99T' 7'NHP'
N AJPG8 'MG J'Q O' J'MO MINMQP'8 ''%'@M P A+
$ %SNH G L9MIS GSNPG'MINPKPOPIN'N '6' 99 AP'H G7 P&R' HP'O JA9P'LM PI
NHPG'I MUPG'NHP'GPINPIKP' i 9 PO+'2I' J'-'KN M9'3O N i' P GJQQPGNO' NHP
GJAGN NJN i'7-'($'7 'NHP' ($ 7'NHP'7 9 'MG i'1NHP99 'S
6' ($ IPi N'G 'IPM+R
X'P'i 'MO LN' ($
F X P'Q P'NHP IPN KM9'M MIQPIPIN'MG P99'MG'NHP' OG 7'NHP' QIM9+ HP'
P G7 KMN i' IO KMNPG NHP'7 PPO I' H KH' IM UG' M99' HMUGLP P%G 9MNP'L9MTG+
NPP PIG'GMTG'6' HP' OG $'MIO' $ # H KH'M P' MIN IQ' i'NHP' 9O'K LT' P P
L LP 9T'GJLL9 PO'AT' P '+$"MIP'N'K IL9PNP'NHP' GP+R' HPGP' OG' P P
MO LNPO'AT"MIP'7 I'- LP+' HP'7 99 IQ'N MIQPIPIN' MG'9 IQ' PKP PO S'
6'4 J'M P'GPIN'7 'N 'NHP' ML N 9+' G'NH JQHN+
HMN' M K JG'GHM99'AP'K IGJ9'2'HM P'GPPI'
HP'OJ1A'IPI'NH IQ'N 'GPP'H I'MIO'NHP'A9 IO'
'HPM'H I'GLPMU' $'IMN IG'79JIQ'$ 'Q9 PG+R

).
F HMN'G i NH IQ'N 'NHP'IMNNP +
HP' M PO' IO 77P piN9T'%W WN'O IQ'NHPI'IP NHP'Q O'i '
HM I 8 AJN'HP'GPPUG'NHP 'HMNP' NH'Q PMNP'OP N i'NHMI'
NHPT'KMI' piOP' N'H I 8 MIO'9PM PG'i NH IQ'JIO IP'MHMN'
IMT'7J99T'O GK P'H I'NHP ' LL G NP+' 'N 'GPPI'N'
M77PK'NHP' IM9 KP'MIO'O GL9PMGJ P' 7'NHP'LP L9P' G MG'AMO'MG
NHMN' H KH'HP'O G9 UPG'N '79MNNP'NHPI'7 'NHP '9 P+
' .." 27'HP'O O'i N'KM P' HPNHP'HP'HMO'NHP '9 P' 'i '
HP' M PO' IO 77P piN9T'%W WN'O IQ'NHPI'IP NHP'Q O'i '
HM I 8 AJN'HP'GPPUG'NHP 'HMNP' NH'Q PMNP'OP N i'NHMI'
NHPT'KMI' piOP' N'H I 8 MIO'9PM PG'i NH IQ'JIO IP'MHMN'
IMT'7J99T'O GK P'H I'NHP ' LL G NP+' 'N 'GPPI'N'
M77PK'NHP' IM9 KP'MIO'O GL9PMGJ P' 7'NHP'LP L9P' G MG'AMO'MG
NHMN' H KH'HP'O G9 UPG'N '79MNNP'NHPI'7 'NHP '9 P+
' .." 27'HP'O O'i N'KM P' HPNHP'HP'HMO'NHP '9 P' 'i '
HP' M PO' IO 77P piN9T'%W WN'O IQ'NHPI'IP NHP'Q O'i '
HM I 8 AJN'HP'GPPUG'NHP 'HMNP' NH'Q PMNP'OP N i'NHMI'
NHPT'KMI' piOP' N'H I 8 MIO'9PM PG'i NH IQ'JIO IP'MHMN'
IMT'7J99T'O GK P'H I'NHP ' LL G NP+' 'N 'GPPI'N'
M77PK'NHP' IM9 KP'MIO'O GL9PMGJ P' 7'NHP'LP L9P' G MG'AMO'MG
NHMN' H KH'HP'O G9 UPG'N '79MNNP'NHPI'7 'NHP '9 P+
' .." P'HMNH'OPGP PO' NH 9T' 7'H G'K JIN T'#IO'
H G'MGKPIN' G i N'AT'GJKH'PMGT'OPQ PPG'MG'NH GP' H 'HM IQ'
APPI'GJLL9P'MIO'K J NP JG'N'NHP'LP L9P'A IIPNPO'D' NH JN'
MIT'7J NHP'OPPO'N'HM P'NHPI'MN'M99' IN 'NHP 'PGN IMN i'
MIO' PL N'AJN'HP'HMNH'G'L9MINPO'H G'H i J G' i'NHP '
PTPG'MIO'H G'MKN iG'i'NHP 'HPM NG'NHMN'7 'NHP 'N IQJPG'
N 'AP'G 9PIN'MIO' i N'K i7PGG G'lJKH' p P'M U iO'7
IQ MNP7J9'IEJ T8 N' PL N' NHP GP'P P'M' IM9 KP'NHMN'
Q iQ'NGP97'NHP'9 P' J9O'L9JKU' PL 7MIO'PAJUP'7 I'
P P T'PM'NHMN'HPM O'N+
2#' .." ' P'7 H I' HP'G M' NHT' IMI' MUP'
MT'NHPT'M P'K I IQ+

% ' X P I MT G ' 7 P 99+
) ' X P HM P L P ' ! J GP9 PG N ' O ' N ' AJN N G M
L P ' NHMN P HM P ! ' L P ' N ' O ' ' 7 ' 7 HP GH ' JG H G
J ! OG ' M ! O ' NP99 JG H G OPPOG ' P M P N ' LJN J ' N ! QJPG
! N ' NH GP J ! OG ' M ! O ' GLPMU 7 ' NHP I 8 G ' 7 HP ' NP99 JG
H G ! A9P ' OPPOG ' P I JGN M9G ' NP99 H I ' J ' ! A9P ' MKKPLNM ! KP
7 NHP I + 2 ! Q MN NJOP G I ! GN JG ' M ! O 7 ' NHP ' I J9N NJOP
N ' AP ! Q MNP7J9 P P ' N ' I MUP ' M I ! GNP ' 7 NHP ' I J9N NJOP 8
7 NHP ' H KH ' P AP ! Q ' I P I AP G ' GH J9O A ! Q ' J GP9 PG N '
AP I ! GN JG I P I AP G+
' ' # ! O N ' I MUP JG ! ' APNNP ' NH JQHN 7 ' M 9 NN9P HP9L '
99 GP P ' 7 ' ! KP ' HP ! ' P GN O JL ' MA JN NHP ' K ! ' HP '
H I GP97 GNJKU ! N ' N ' KM99 JG NHP ' I M ! T HPMOPO ' I J9N NJOP+
) ' ' X P HM P APP ! ' KM99PO G ' 7 ' I M ! T 8 ! N NHMN J '
HPMOG M P G I P A ! ' G I P A9MKU ' G I P MJAJ ! $ G I P
AM9O ' AJN NHMN J ' NG M P G ' O P GP9T K 9 J PO ' M ! O N J9T
2 NH ! U 7 M ' J ' NG P P N ' GGJP JN 7 ! P GUJ99 ' NHPT
J9O 79T PMGN ' PGN ' ! NH ' G JNH 8 M ! O NHP ' K ! GP ! N 7 ! P
O PKN MT GH J9O AP MN ! KP N ' M99 L ! NG % NHP K I LMGG+
% ' H ! U T J G ' \ X H KH MT O ' T J EJOQP I T N
J9O 79T \
) ' ' MT ' T J ' N 99 ! N G ' G ! JN MG M ! NHP '
I M ! %G 99 ' %N G GN ! Q9T POQPO JL ' ! + M A9 KU HPMO 8 AJN 7
N P P MN 9 AP NT ' %N J9O ' GJ P ' G JNH M O+
% ' X HT NHMN MT \
) ' ' ' 9 GP NGP97 ! ' M 7 Q 8 HP P AP ! Q ' NH PP LM NG
I P9NPO M MT NH NNP ! ' OP G ' NHP 7 J NH J9O PNJ ! 7 '
K ! GK P ! KP % GMUP ' N ' HP9L ' N ' QPN NHPP M 7P+
% ' 4 J M P ! P P ' NH JN T J ' N KUG S4 J I MT '
T J I MT+
) ' ' # P T J M99 PG 9 PO N ' Q P T J ' KPG ' JN
NHMN %G ! ' I MNNP ' NHP Q PMNP ' LM N KM PG N + 2 ' GMT ' 7 HP
J9O ! K9 ! P N ' NHP LP L9P ' NHP P MG ! P P ' M NH P '
I M ! +

' 1&21 / # ' " (

" P P HP K I PG ' M ! O ! ' NHP Q ! ' 7 HJ I 9 NT 8 I M U H G
APHM J + X P M P ! N ' GNMT M99 N QPNHP ' AJN ' K I P
AT H I ' HP P HP GNM ! OG ' AT ! PG ' AT N G ' M ! O AT NH PPG +
" P%G N ' I MUP H G P] JPGNG AT LM N KJ9M G ' HP P ! ' P P T
! P 7 JG HMG M G ! Q9P H ! J ' ! ' Q ! Q H I ' J ' ! KPG
NH J ' ! ' N ! QJPG ' NHP P7 P 7 99 ' I P ' M ! O 2999 O PKN
T J H ' T J GHM99 Q ' AT H I +
' ! NP ! N ' K ! NP ! N+ = 4 &
E ' 1 ' G ' T J M P ! N QHN ' HM P T J ! N U ! '
HP NH PGN I P ! ' HM P O ! P% \
! ' X HMN I JGN 2 ' GMT \S
2 L MT ' G S - 9MQJP JL ! %N [2 KM ! ! N A ! Q
T N ! QJP N ' GJKH M LMKP S / U ' G 8 SDIT J ! OG 8 S
2 Q N NHP I ' ! ' I T K J ! N T%G GP KP ' HP ! '
I P KP NM ! ' 7 T J ' A PNH P ! ' M %O ' M ! O M ! '
0 I ' NHP ! GP 7 J ' ! O J I G+
E ' 1 ' I P ' NHP Q OG [
4 J I JGN ! N GLPMU 7 NHMN ' TLJ I JGN OPG P NHP I '
' NH ! U JL ! ' T J+
! ' H ! U JL ! ' I P \ " M ! Q %P I [
2 J9O NHPT J9O 7 QPN I P ' 9 UP NHP NJPG
X H KH J ' O ! PG 9 GP AT NHP I +
E ' 4 J%99 I M ' M998
2%99 9PM P T J ' - MT ' T J ' GLPMU N ' NHP I ' 2 L MT ' T J
',2 ! ' H 9PG I P I M ! 9 P + = 4

' 2 ! ' N CP ! G+

! ' O NHP I ' XMGH NHP ' 7MKPG+
! O UPPL ' NHP ' NPPNH K9PM ! + S ' HP P K I PG M A MKP+
4 J U ! ' NHP KMJGP ' G ' 7 I T GNM ! O ! Q HP P+

' ' ' HP O 7 NHP D ! M9 G " # M ! O N G ' K ! N ! JPO J ! N 9 NHP
LJA9 KMN ! ' 7 NHP 7 J NH 7 9 ' HP ! ' N APKM I P

F # 99 NH G O M9 QJP G L ! NPO ! ' NHP Q ! M9 MG P L ! N NSMG L GP HP
M J I ' PO N G NJ ! PO N ! N ' 9 I L ! Q A9M ! U P GP ' 7 99 ! Q MLP99+

F & ' %$ ' HP PMO ! Q 7 NHP 7 GN 7 9 ' G 8 ' %$; 7 NHP

6 ' X P O ' G J NP99 JG HMN HMNH A JQHN T J N %ND
! ' ! P ! ' OPGP N+
% ' 4 & J ' ! ' OPGP N 9
! ' # T ' ! N I ! P ! ' OPG P+
2 ' " [! N T J ' ! ' OPG P \
! ' ' G ' % MG ! P P ' I T OPG P TPN N ' N JA9P NHP
L ' NH APQQ ! Q+
2 ' 4 J I JGN NH ! U ' 7 P Q P T J M ! TNH ! Q ' P H LP
N ' QM ! ' AT T J+
! ' X P99 ' NHP ! ' 2 L MT ' T J ' L KP % NHP K ! GJ9GH L ' \
6 ' HP L KP G ' N ' MGU N U ! O9T+
! ' ! O9T ' G ' \ 2 L MT ' 9PN I P H M %N ' 2 HM P J ! OG
N ' GH ' T J ' H KH GHM99 AP T J G ! ' L MNP+ S4 J ' Q O
KP ' G 8 HMN GMT T J \
% ' 4 J GHM99 HM P N ' NHT G +
! ' # ' I MNKH ' G S HP P G ! ' M99 N ' NHT KPG
APQQPO S2 HM P T J ' M9 I G 8 MO PJ+
6 ' JN NH G G G I PNH ! Q OO+
% ' # ! ' %N P P N ' Q P MQM ! S JN %N G ! ' I MNNP +
= 4 & ' 2 ! ' N CP ! G+

! ' - MT T J ! ' 7 N I MT GNM ! O NH NHP NJ ! P 7
T J ' KPG NHMN 2 I MT AP K ! GJ9 ' 2 HM P$ HP P NHP KJG_
N I M T Q !+
) ' 4 J HM P OPGP PO ! A9T 7 T J ' K J ! N T ' M ! O
T J HM P ! N OPGP PO ! A9T+
! ' 4 J ' P ! Q I M \
) ' 4 J HM P APP ! M GK J QP N ' HP ' P ! P I PG ' T J HM P
APP ! M O N ' HP ' 7 P ! OG 8 T J HM P ! N ' ! OPPO ' 9 PO NHP
K I I ! ' LP L9P+
! ' 4 J GH J9O MKK J ! N I P NHP I P NJ JG NHMN 2
HM P ! N APP ! K I I ! ' ! ' I T 9 P+ 2 ' 99 ' G ' 79MNNP ' I T
G ! A NHP ' NHP LP L9P ' N ' PM ! ' M OPM P ' PGN I MN ! ' 7
NHP I 8 %N G M K ! O N ! ' NHPT MKK J ! N QP ! N9P ' M ! O G ! KP NHP

GO I ' 7 NHP ' KH KP G MNHP ' N ' HM P I T HMN NHM ! ' I T
HPM N ' 2 99 L MKN GP NHP ! G ! JMN ! Q ! O ' M ! O AP 77 N '
NHP I ' I GN K J ! NP 7P N9T ' NHMN G ' G ' 2 99 K J ! NP 7P N NHP
AP NKH I P ! N 7 G I P L LJ9M ' I M ! ' M ! O Q P N A J ! N 7J99T
N ' NHP OPG P G+ HP P7 P ' APGPPKH T J ' 2 ' I MT AP K ! GJ9+
' ' X P H LP N ' 7 ! O T J J ' 7 P ! O 8 M ! O NHP P7 P
Q P T J J ' KPG HPM N 9T+
) ' 4 J HM P PKP PO I M ! T J ! OG 7 ' T J ' K J ! N T+
! ' 2 99 ! N GPM9 T J ' U ! 9POQP NH GH ! Q NHP I +
2 99 I MUP I JKH 7 T J ' KPG ' M ! O G ' N JA9P T J ! '
7M NHP +
%! ' ' HP Q OG Q P T J E T ' G ' HPM N 9T[
= 4 &
! $ GN G PPN KPG [S
PNNP ' N G N ' O P ' APNNP ' N ' GNM P+
HM ! ' K M P NHP H P H KH 7 GN P O ' OPGP P+
X HT ! ' NH G 9 GH Q ! F GH J9O 2 GNM ! O HP P+
' APQ 7 " A ' M ! O " KU ' NHMN O ' MLLPM +
HP ' ! PPO9PGG JKHP G \ JGN I ' KM99G I P N %N S
X HMN KJGN I ' 99G ! ' M99 NH ! QG GH J9O P O %N+
HP OJGN ! ' M ! N] JP N I P J9O 9 P J ! G PLN+
! O I J ! NM ! JG P ' AP N ' H QH9T HPML%O
0 ' N JNH N ' P LPP + &MNHP ' NHM ! ' 7 9 N G +
/ PN NHP H QH 7 KP M ! O NHP H ! J ' Q
' ! P NHMN J9O O ' NHJG+ S2 M I ' HM97 NH JQH
HP ! P LM N GJ77P %O ' NHP NHP ' 99 2 O +

' ' ! ' N CP ! G+

" P P K I P I P KPG+ S
4 J ' KPG ' 7 ' T J ' KPG 2 HM P 7 JQHN8

GPK ! O ' 8 ' %$ 8 ' & ' AP9 P P NHP K PKN ! ' 7 ' N ' ' G QHN
I P 7 NHP K I I P ! NMN G NH ! U NHMN NHP Q ! MG O MG ' 2N G O 77 KJ9N N '
GMT HPNHP ' 8 ' %$ I PM ! G M Q ! ' I MOP 7 9 ' M Q ! ' PGP I A9 ! Q M 97 '
8 ' %$ ' HP ! N ! ' 7 NPP P ! G NHMN NHP M99JG ! ' MG N ' NHP 97 ! ' GHPPL%G
K9 NH ! Q GPP I G I P P9T 7M ! K 7J9 + 99 P %G PKN ' Q PG JG 8 '' %% '
G NHP Q ! ' MG I MOP 7 9 ' N GJ P9T KM ! ! N AP 8 '' %%
1 / + 22 + G - >

X MNKH%O'7 'T J' KPG8 7 'T J' KPG'APM'
1 7' JIOG'N 'O CPi' OO# AMNN9PG'NH KP'G W
E ' 2%9Y'UPPL'T J'K ILMIT+SDX 9Y T J'M9 iQ'\
% ' X P'GNMT'HP P'7 'NHP'LP L9P+
7 ' OM P'T J' P99+
W TJ 2%CCa ' %
"P'HMG N'i 8 MiO'AT'H G 9 UG'IPNH iUG
% G M I'MN'H G'HPM N+
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" G'HJ1A9P' PPOG' X 9Y T J'O GI GG'NHP'LP L9P'\

B ' N CPiG+

7 ' " ' i ' IT' IMGNP G'\ HM P' T J' KH>GP' NH G
D IMI'\
' ' "P'HMG' J' KPG'G +
% &' X P'L MT'NHP'Q OG'HP'IMT'OPGP P'T J'9 PG+
% ' # IPI'G ''N'ITL 'JI NHT'I NKP+
"P'I KU%O'JG HPI'HP'APQQ%O' J' KPG+
)' ' P NM I9T
"P'79 JNPO'JG'O i QHN+
(' ' '%N G'H G U iO' 7GLPPKH'HP'O O'i N'I KU'JG+
%' ' N' IP'MI IQGN'JG'GM P'T J GP97'AJN'GMTG
"P'JGPO'JG'GK i7J99T'HP'GH J9O'HM P'GH %O'JG
" G'IM UG' 7 I P N' JIOG' PKP %O'7 'H G K JIN T+
7 ' XHT'G'HP'O O'2'MI'GJ P+
' i 8 i 'IMI'GM '%PI+
^ PC$K MN'-, '
)' ' "P'GM O'HP'HMO' JIOG' H KH'HP'K J9O'GH ' i
L MNP8 +
#iO' NH'H G'HMN'NHJG' M IQ N' i'GK i
6?' J9O'AP'K iGJ9 R'GMTG'HP' 6'MQPO'KJGN I+
JN'AT'T J' KPG' 99i N'G 'LP I N'I P8
4 J' KPG'NHP P7 P'R XHPi' P'Q MiNPO'NHMN+
"P P' MG S6?'NHMiU'T J7 'T J' KPG SNHMiU'T J S'
4 J'I GNG PPN' KPG' SI 'T J'HM P'9P7N'T J' KPG
2'HM P'H '7J NHP' NH'T J' SDXMGi N'NH G I KUPT'\
7 ' XHT'P NHP ' P P'T J'QI MiN'N 'GPP%N'\
1 'GPPiQ' N' 7'GJKH'KH 9O GH'7 PiO9 IPGG
'T P9O'T J' KPG'\

&PLM 'N 'NHP'GPiMNPDH JGP+
E ' 2%9Y'UPPL'T J'K ILMIT+SDX 9Y T J'M9 iQ'\
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7 ' OM P'T J' P99+
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"P'HMG N'i 8 MiO'AT'H G 9 UG'IPNH iUG
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7 ' " ' i ' IT' IMGNP G'\ HM P' T J' KH>GP' NH G
D IMI'\
' ' "P'HMG' J' KPG'G +
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% ' # IPI'G ''N'IT'L 'JI NHT'I NKP+
"P'I KU%O'JG HPI'HP'APQQ%O' J' KPG+
)' ' P NM I9T
"P'79 JNPO'JG'O i QHN+
(' ' '%N G'H G U iO' 7GLPPKH'HP'O O'i N'I KU'JG+
%' ' N' IP'MI IQGN'JG'GM P'T J GP97'AJN'GMTG
"P'JGPO'JG'GK i7J99T'HP'GH J9O'HM P'GH %O'JG
" G'IM UG' 7 I P N' JIOG' PKP %O'7 'H G K JIN T+
7 ' XHT'G'HP'O O'2'MI'GJ P+
' i 8 i 'IMI'GM '%PI+
^ PC$K MN'-, '
)' ' "P'GM O'HP'HMO' JIOG' H KH'HP'K J9O'GH ' i
L MNP8 +
#iO' NH'H G'HMN'NHJG' M IQ N' i'GK i
6?' J9O'AP'K iGJ9 R'GMTG'HP' 6'MQPO'KJGN I+
JN'AT'T J' KPG' 99i N'G 'LP I N'I P8
4 J' KPG'NHP P7 P'R XHPi' P'Q MiNPO'NHMN+
"P P' MG S6?'NHMiU'T J7 'T J' KPG SNHMiU'T J S'
4 J'I GNG PPN' KPG' SI 'T J'HM P'9P7N'T J' KPG
2'HM P'H '7J NHP' NH'T J' SDXMGi N'NH G I KUPT'\
7 ' XHT'P NHP ' P P'T J'QI MiN'N 'GPP%N'\
1 'GPPiQ' N' 7'GJKH'KH 9O GH'7 PiO9 IPGG
'T P9O'T J' KPG'\

B ' N CPiG+

7 ' " ' i ' IT' IMGNP G'\ HM P' T J' KH>GP' NH G
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' ' "P'HMG' J' KPG'G +
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"P'I KU%O'JG HPI'HP'APQQ%O' J' KPG+
)' ' P NM I9T
"P'79 JNPO'JG'O i QHN+
(' ' '%N G'H G U iO' 7GLPPKH'HP'O O'i N'I KU'JG+
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"P'JGPO'JG'GK i7J99T'HP'GH J9O'HM P'GH %O'JG
" G'IM UG' 7 I P N' JIOG' PKP %O'7 'H G K JIN T+
7 ' XHT'G'HP'O O'2'MI'GJ P+
' i 8 i 'IMI'GM '%PI+
^ PC$K MN'-, '
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#iO' NH'H G'HMN'NHJG' M IQ N' i'GK i
6?' J9O'AP'K iGJ9 R'GMTG'HP' 6'MQPO'KJGN I+
JN'AT'T J' KPG' 99i N'G 'LP I N'I P8
4 J' KPG'NHP P7 P'R XHPi' P'Q MiNPO'NHMN+
"P P' MG S6?'NHMiU'T J7 'T J' KPG SNHMiU'T J S'
4 J'I GNG PPN' KPG' SI 'T J'HM P'9P7N'T J' KPG
2'HM P'H '7J NHP' NH'T J' SDXMGi N'NH G I KUPT'\
7 ' XHT'P NHP ' P P'T J'QI MiN'N 'GPP%N'\
1 'GPPiQ' N' 7'GJKH'KH 9O GH'7 PiO9 IPGG
'T P9O'T J' KPG'\

B ' N CPiG+

7 ' " ' i ' IT' IMGNP G'\ HM P' T J' KH>GP' NH G
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' ' "P'HMG' J' KPG'G +
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"P'I KU%O'JG HPI'HP'APQQ%O' J' KPG+
)' ' P NM I9T
"P'79 JNPO'JG'O i QHN+
(' ' '%N G'H G U iO' 7GLPPKH'HP'O O'i N'I KU'JG+
%' ' N' IP'MI IQGN'JG'GM P'T J GP97'AJN'GMTG
"P'JGPO'JG'GK i7J99T'HP'GH J9O'HM P'GH %O'JG
" G'IM UG' 7 I P N' JIOG' PKP %O'7 'H G K JIN T+
7 ' XHT'G'HP'O O'2'MI'GJ P+
' i 8 i 'IMI'GM '%PI+
^ PC$K MN'-, '
)' ' "P'GM O'HP'HMO' JIOG' H KH'HP'K J9O'GH ' i
L MNP8 +
#iO' NH'H G'HMN'NHJG' M IQ N' i'GK i
6?' J9O'AP'K iGJ9 R'GMTG'HP' 6'MQPO'KJGN I+
JN'AT'T J' KPG' 99i N'G 'LP I N'I P8
4 J' KPG'NHP P7 P'R XHPi' P'Q MiNPO'NHMN+
"P P' MG S6?'NHMiU'T J7 'T J' KPG SNHMiU'T J S'
4 J'I GNG PPN' KPG' SI 'T J'HM P'9P7N'T J' KPG
2'HM P'H '7J NHP' NH'T J' SDXMGi N'NH G I KUPT'\
7 ' XHT'P NHP ' P P'T J'QI MiN'N 'GPP%N'\
1 'GPPiQ' N' 7'GJKH'KH 9O GH'7 PiO9 IPGG
'T P9O'T J' KPG'\

^# ! O P! G ! JG OM 9 ! Q 7 NHP LP L9P D
! O ! A9T ! M I %O G N KP AP ! Q KP ! G +
X MG H G Q PMN M ! KPGN +
7I 1 ! P NHJG OPGKP ! OPO+
HMN HMNH APG OP P99 ! H G LP G ! JQHN
AP GPN H QH ! L9MKP P O O K I I P ! O
T J P I P I A M ! KPG 8 AJN T J HM P 7 J ! O+
KM9 ! Q H G L PGP ! N APM ! Q NH H G LMGN+
HMN HP%G T J 7 WPO P ! P I T M ! O P UP
4 J GJOOP ! MLL AMN ! +
% & MT T J ! P%P HMO O ! P%N
@ " M L ! NHMN GN 99 AJN AT J LJNN ! Q !
# ! O L PGP ! N9T HP ! T J HM P O M ! T J ! J I AP +
&PLM N NHP ML N 9+
X P 99 G 8 M9 I GN M99 PLP ! N ! NHP P9PKN !+
+7 1 -, '
+ 4 & N CP ! G+
% & / PN NHP I Q ! 8
H G I JN ! T P P AP NNP LJN ! HMCM O+
HM ! GNMT LMGN O JAN 7 Q PMNP
27 MG H G ! MNJ P G HP 7M99 ! MQP
X NH NHP P7JGM9 A NH AGP P M ! O M ! G P
HP M ! NMQP 7H G M ! QP +
d7 NHP ML N 9[
I P8 P%99 AP NHP P AP7 P NHP GN PM I %NHP LP L9P8
! O NH G GHM99 GPP I MG LM N9T %N G NHP !+
X H KH P HM P Q MOPO ! M O+ + 4 &

&3 3 3X &3#52 :+

K+ 2+ L+)+S 6 M I U ! ! N AP M HJ I JG LMN K M ! M ! O ! P NHMN 9 PG M KJL 7H N ! P 8 $ M O L 7M99MT ! Q AP ! %N 8 GM O N AP G I PNH ! Q I LP 7PKN ! 7M J ! Q NHP % K I L9M ! N8 HMGNT R BK+

$6 2$M I U ! ! N AP M HJ I JG LMN K M ! M ! O ! P NHMN 9 PG M KJL 7H N ! P M8 $ M O L 7M99MT ! Q AP ! %N GM O N AP G I PNH ! Q I LP 7PKN ! 7M J ! Q NHP $ % K I L9M ! N8 HMGNT R BK+S " * 4 (

HP M9NP MN ! 7 R8 $ N 8 $ G ! PPO9PGG8 M ! O ! / P9MKP%G APMJN 7J9
6 P GPG N # 9NHPM R P HM P S

/ X HP ! 79 ! Q KJLG J ! G 7N9T J ! O
$ M99MT ! Q HM I PG+R

X J9O P NHP LMGGMQP AP I L PO AT GJAGN NJN ! Q 8 $ 1 2 ! NHP GPK ! O LM N
7 NHP GP ! NP ! KP K I I ! GP ! GP 99 ! N GPN % MG OP APKMJGP + ! QP HMG O G
K P PO NHMN # N MG G I PN I PG L ! K M99T L ! J ! KPO M ! O GLP9N % Z%0 %
X P AP9 P P NHP PWL PGG ! HMG ! NH ! Q N O NH NHP H N ! P NHMN P ! P ! JG 9 PO+
" P MKU ! 9POQPG N AP E M98 HP K ! 7PGGPG N NHP I LP 7PKN ! 7 9 GNP ! ! Q NH
7M J N H I H 7 GN K I L9M ! G 7 M Q P M ! KP8 HP G HMGNT BK+ - G
! M MA9T JGPO AT HMUGLP P ! NH G GP ! GP+ HP GPK ! OM T I PM ! ! Q 7 K I L9M ! N
SM I M9MOT S G I OP I +

/ X HP ! 79 ! Q KJLG J ! G 7N9T J ! O
$ M99MT ! Q HM I PG+R

X J9O P NHP LMGGMQP AP I L PO AT GJAGN NJN ! Q 8 $ 1 2 ! NHP GPK ! O LM N
7 NHP GP ! NP ! KP K I I ! GP ! GP 99 ! N GPN % MG OP APKMJGP + ! QP HMG O G
K P PO NHMN # N MG G I PN I PG L ! K M99T L ! J ! KPO M ! O GLP9N % Z%0 %
X P AP9 P P NHP PWL PGG ! HMG ! NH ! Q N O NH NHP H N ! P NHMN P ! P ! JG 9 PO+
" P MKU ! 9POQPG N AP E M98 HP K ! 7PGGPG N NHP I LP 7PKN ! 7 9 GNP ! ! Q NH
7M J N H I H 7 GN K I L9M ! G 7 M Q P M ! KP8 HP G HMGNT BK+ - G
! M MA9T JGPO AT HMUGLP P ! NH G GP ! GP+ HP GPK ! OM T I PM ! ! Q 7 K I L9M ! N
SM I M9MOT S G I OP I +

3 3 2 F - ; 7

! - ((( ) ((
(P ! MN G "- MN K M ! G+

! J99JG # J7 O JG NHP ! HMO I MOP ! P HPMO \
? " P HMO I T 9 O8 M ! O NHMN N MG H KH KMJG%O
1J G 7NP K I L G N !+
! NHP ! NHP 9GKPG GNM ! O AJN MG MN 7 GN8
&PMOT HP ! N I P GHM99 L I LN NHP I N I MUP MO
L ! JG MQM !+
! HPT M P ! 9 O K ! GJ9 G
HMN P GHM99 HM O9T ! J MQPG GPP
H AM ! ! P G M P MQM !+
! M T J # J7 O JGO
? 1 ! GM7PQJM O HP KM I P N I P8 M ! O O O KJ GP
QM ! GN NHP 9GKPG 7 NHPT HMO G 9P9T
4 P9OPO NHP N ! HP G PN %O N # ! N J I +

$ HP 9 ! P ! A MKUPNG G ! N ! NHP Q ! M9 AJN MG GJLL9 PO AT - LP I P
NH ! Q G K9PM 9T M ! N ! Q N K ! ! PKN NH 6 N KP AP ! Q KP ! G 8R M ! O -9JNM KH NP99G
JG H MG 6 ! A9T ! M I PO R S 6 P ! G ! JG M9G KM I P 7 NHMN 7M I 9T NHMN MG
G GJ I M I PO APKMJGP NHP LP L9P HMO KH GP ! H I KP ! G N KP+R HP M I A OQP
PO N G HM P M PMO ! Q 7 NHP ! H KH 9PM PG NHP OG 7 NHP 7 H GN 99 !
NHP OP S
6 # ! O ^ P ! G ! JG ! A9T ! M I PO G +
KP AP ! Q ^AT NHP LP L9P KH GP ! KP ! G +R +

! L UP HP 7 I P \
? " P O O I T 9 O+
! " \ HMN\
? " 7NP ! HP HMO I PN T J G O N G O
HMN 7M99 NH ! QG JL ! NHP PM NH HP HMNPO
4 J LP G ! I GN NHMN HP J9O LM ! H G 7 NJ ! PG
H LP9PGG PGN NJN ! G HP I QHN
P KM99%O T J M !] J GHP +
! # N # ! N J I 9 PG HP \
? # N # ! N J I +
! 2 GH 2 HMO M KMJGP N GPPU H I NHP P+
LL GP H G HMN PO 7J99T+ S X P9K I P H I P+
+ ! (

@ '('"& ((

PH 9O[NHPGP M P NHP N AJ ! PG 7 NHP LP L9P+
HP N ! QJPG %NHP K I I !+ I JNH+ 2 O OPGL GP NHP I 8
0 NHPT O L M ! U NHP I ! MJNH NT+
QM ! GN M99 ! A9P GJ77P M ! KP+
7 - MGG ! 7J NHP +
! " M [HMN G NHMN \
% & 2N 99 AP OM ! QP JG N Q ! ! 7J NHP +
! X HMN I MUPG NH G KHM ! QP \
E HP I MNNP \
! " MNH HP ! N LMGG%O NHP ! A9P M ! O NHP K I I !\D
% & I ! JG ! +
! " M P 2 HMO KH 9O P ! %G KPG \
2 7 AJ ! PG Q P MT8 HP GHM99 N NHP I M UPN_
L9MKP+
% & HP LP L9P M P ! KP ! G%O MQM ! GN H I +
7 N L
1 M99 99 7M99 ! A 9+
! # P NHPGP T J HP O \S
JGN NHPGP HM P KPG NHMN KM ! T P9O NHP I ! +
! O GN M QHN O GK9M I NHP N ! QJPG \SDXHMN M P T J
77 KPG\ ,
4 J AP ! Q NHP I JNHG HT J9P T J ! N NHP NPPNH \
" M P T J ! N GPN NHP I ! \ $
E P KM9 I AP KM9 I +
! 2N G M LJ L G%O NH ! Q M ! O Q G AT L9 N+
KJ A NHP 99 7 NHP ! A 9 NT
J77P N M ! O 9 P NH GJKH MG KM ! ! N J P+
P P 99 AP J9%O+
% & M99%N ! N M L 9 N
HP LP L9P K T T J I KU%O NHP I 8 M ! O 7 9MNP+
X HP ! K ! MG Q P ! NHP I Q MN G T J PL ! %O 8
KM ! OM9%O NHP GJLL9 M ! NG 7 NHP LP L9P 8 KM99%O NHP I
I P L9PMGP G 79MNNP P G 7 PG N ! A9P ! PGG+
! X HT NH G MG U ! ! AP7 P+
% & N N NHP I M99+
! " M P T J !7 I %O NHP I G NHP ! KP \F
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! 4 J M P 9 UP N O GJKH AJG ! PGG+D
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3MKH MT N APNNP T J G+
! X HT NHP ! GH J9O 2 AP K ! GJ9 \ T T ! K9 JOG+
/ PN I P OPGP P G 99 MG T J M ! O I MUP I P
4 J 7P99 N AJ ! P+
7 4 J GH N I JKH 7 NHMN
0 H KH NHP LP L9P GN 27 T J 99 LMGG
HP P T J M P A J ! O T J I JGN !] J P T J MT
X H KH T J M P JN 7 NH M QP ! N9P GL N8
1 ! P P AP G ! A9P MG M K ! GJ9+
T UP NH H I 7 N AJ ! P+

F $ "' $ (& P KHM ! QPO NH G PMO ! Q 7 NHP Q ! M9 N
6 NHP "' %M ! O $ (%*.' LM N M99T MO LN ! Q M PMO ! Q 7 2UP GJAGP] JP ! N7 9 G+
F4 $ (SG ! KP+

H G ! NP L G N ! 7 I ! JG G MKK O ! Q N NHP 9O K LT HP AM9O QM P
NHP OG N 9M ! JG MG M K ! N ! JMN ! 7 H G O M9 QJP NH JNJG HP
OG M P ! N KHM MKNP GN K 7 9M ! JG H 9GN NHP ! NP JLN ! 7 I ! JG
Q PG GL N M ! O M PNT N NHP GKP ! P+

/ PN%G AP KM9 I +
! HP LP L9P M P MAJG%O SGPN !+%S H G LM9N% !Q
PK I PG ! N & I P8 ! HMG 9M!JG
5PGP %O NH G G O GH ! J %O JA 9M O 7M9GP9T
NHP L9M ! MT 7H G I P N+
! $ P99 I P 7K I [
H G MG I T GLPPKH M!O 2 99GLPMU%N MQM !8S
E N ! ! N ! +
2 7 N !NH G HPMN G ! +
! MG 2 9 P 2 99+S T ! A9P 7 P!OG
2 K M P NHP LM O !G
0 NHP I JNMA9P M!U GKP!NPO I M!T D
/ PN NHP I PQM O I P MG 2 O ! N 79MNNP +
#!O NHP P ! APH 9O NHP I GP9 PG 2 GMT MQM !+
2!G NH !Q NHP I P ! J GH %QM !GN J GP!MNP
HP K KU9P F 7 PAP99 ! !G 9P!KP GPO N !+
XH KH P J GP9 PG HM P L9 JQH%O 7 G %O M!O GKMNNP %O+
T I !Q9 !Q NHP I NH JG NHP H ! J %O !J I AP 8
X9 9MKU ! N NJP ! ! L P AJN NHMN
XH KH NHPT HM P Q P!N APQQM G+
E XP99 ! I P+
2 7 I P OG P APGPPKH T J+
! " [! I P \
#G 7 I T K J!N T 2 HM P GHPO I T A9 O+
N 7PM !Q JN M O 7 KP G GHM99 I T 9J!QG
! OG N 99 NHP OPKMT MQM !GN NH GP I PMG9PG+
XH KH P O GOM !GH J9O NPNNP JG TPN G JQHN
HP P T MT N KMNKH NHP I +
% & 4 J GLPMU % NHP LP L9P MG 7T J P P M Q O
LJ! GH8 ! N M I M!' 7NHP ! !7 I NT+
7 % P P P99 P 9PN NHP LP L9P U! %N+
E XHMN HMN \ H G KH 9P \
! H 9P [
XP P 2 MG LMN P!N MG NHP I O! QHN G9PPL+
T ? P %N J9O AP I T I !O[
7 2N G M I !O
HMN GHM99 P I M !M L G ! HP P N G+
N L G !M!T 7J NHP +
! HM99 P I M !'[S
" PM T J NH G N !' 7NHP I !! G \ I M U T J
" G MAG 9JNP -
! % MG 7 I NHP KM! !+
! 7 W
1Q O AJN I GN J! GP LMN K M!G HT+
4 J Q M P AJN PKU9PGG GP!MN G HM P T J NHJG
: P!" TO M HP P N KH GP M!' 77 KP +
HMN NH H G LP P I LN T - $ AP !Q AJN
HP H !M!O ! GP %NHP I !GNP G M!NG ! N GL N
GMT HP%99 NJ !T J KJ P!N !M O NKH+
#!O I MUP T J KHM!!P9 H G \ 27 HP HM P L P +
HP!' M 9 T J Q! M!KP 7 ! !P M MUP
4 J OM!QP JG 9P! NT+ 27 T J M P 9PM !PO+
P ! N MG K I I !7 9G 8 7T J M P ! N+
/ PN NHP I HM P KJGH !G AT T J+ 4 J M P L9PAP M!G+
27 NHPT AP GP!MN G M!O NHPT M P ! 9PGG+
XHP!A NH T J KPG A9P!OPO NHP Q PMNPGN NMGNP
GN LM9MNPG NHP G+ HPT KH GP NHP I MQ GN MNP8
#!O GJKH M !P MG HP H LJNG H G -
" G L LJ9M - $ MQM !GN M Q M P AP!KH
HM!P P 7 !%O !' : PPKP[T ? P H I GP97+
2N I MUPG NHP K !GJ9G AMGP [M!O I T G J MKHPG
U! HP!N MJNH N PG M P JL+
P NHP GJL P I P H G !K !7JG !'
MT P!NP %N WN NHP QML 7A NH M!O NMUP
HP !P AT NHP NHP +
! XP99S !N NHP I M UPN L9MKP+
! X P P QM P NHMN K J!GP9 N Q P 7 NH
HP K I %NHP GN PH JGP Q MN G MG %N MG JGPO
I PN I P !: PPKP S
E XP99 P99 ! I P 7NHMN+
! H JQH NHP P NHP LP L9P HMO I P MAG 9JNP
L P
2GMT NHPT ! J GH%O O G APO P!KP 7PO
HP J !' 7NHP GNMNP+ +
% & XHT GHM99 NHP LP L9P Q P
1!P NHMN GLPMUG NHJG NHP KP \
! 2%99 Q P I T PMG !G+
P NH P NHM!NHP KPG+ HPT U! NHP K !'
XMG ! N J PK I LP!GP 8 PGN !Q P99 MGGJ %O
HPT !P%P O O GP KP 7 %N P !Q L PGG%O N NHP M
3 P!' HP!7HP !M P9 7NHP GNMNP MG N JKH%O+
HPT J9O ! N NH PMO NHP QMNPG NH G U !O 7GP KP
5 O ! N OPGP P K I Q MN G AP !Q %NHP M +
HP I JN ! PG M!O P 9NG HP P !NHPT GH %O
GN M9 J GL UP ! N7 NHP I MOP MQM !GN NHP GP!MNP+
XH KH NHPT HM P 7NP!' I MOP MQM !GN NHP GP!MNP+
#99 KMJGP J!A !K J9O !P P AP NHP !MN P
17 J G 7 M!U O !MN !+ XP99 HMN NHP!\
" GHM99 NH G A G I I J9N L9 POD O QPGN
HP GP!MNP%G K J NPGT \ / PN OPPOG PWL PGG
XHMN%G 9 UP N AP NHP OG S6 XP O O P]JPGN N8
XP M P NHP Q PMNP L 99 M!O !N JP 7PM
HPT QM P JG J OP I M!OG%%S HJG P OPAMGP
HP !MNJ P 7 J GPMNG M!O I MUP NHP MAA9P
M99 J KM PG 7PM G H KH 99 !N I P
PMU LP NHP 9 KUG $%NHP GP!MNP M!O A !Q !
HP K G N LPKU NHP PMQ9PG+
E I P P! JQH+
% & 3! JQH NH P I PMGJ P+
! NMUP I P8
XHMN I MT AP G !AT A NH O !P M!O HJ I M!+
PMG HMN2 P!O NHM9[SD HG O JA9P GH L S
XHP P !P LM N O PG O GOM ! NH KMJGP NHP NHP
2!GJ9N NH JN M99 PMG !8 HP P QP!N T N N9P GO I
M!! N K !K9JOP AJN AT NHP TPM M!O !
17QP!P M9 Q! M!KP S N I JGN I N
&PM9 !PKPGG N PG M!O Q P XMT NHP H 9P
J!GNMA9P G9 QHN!PGG LJ L GP G AM %O N7 99 G
NH !Q G O !P N LJ L GP P7 P APGPPKH T J S
4 J NHMN 99 AP 9PGG 7PM 7J9 NHM!O GK PPN8
HMN 9 P NHP 7J!OM I P!NM9 LM N 7GNMNP
P NHM!T J O JAN NHP KHM!QP !%N 8 NHMN L P7P
#! A9P9 7P AP7 P M 9 !Q M!O GH
EJ I LF M A OT NH M OM!QP JG LHTG K
HMN%G GJ P 7OPMNH NH JN N SMN !KP L9JKU JN
HP I J9N NJO ! JG N !QJP 9PN NHP I ! N9 KU
HP G PPN H KH G NHP L G !' T J O GH ! J
M!Q9PG N I P EJOQ I P!N M!O AP PM PG NHP GNMNP
17 NHMN !NPQ NT H KH GH J9O APK I P N8
N HM !Q NHP L P N O NHP Q O N J9O+
0 NHP 99 H KH O NH K !N 9 N+
% & " P HMG GL UP!9 UP M N M N M!O GHM99 M!G P
7 " P HMG GL UP!9 UP M N M N M!O GHM99 M!G P
#G N M N G O +
! H J PNKH[OPGL NP %P HP9 I NHPP[S
XHMN GH J9O NHP LP L9P O NH NHPGP AM9O N AJ!PG \
1! H I OPLP!O !Q NHP APO P!KP 7M 9G
NHP Q PMNP AP!KH 2!M PAP99 !
XHP! HMN%G ! N I PPN AJN HMN I JGN AP MG 9M +
HP! P P NHPT KH GP!8 !M AP NNP H J +
/ PN HMN G I PPN AP GM O N I JGN AP I PPN+
#!O NH NHP L P %NHP OJGN+

4 SGN PO JL+ HPGP OG P P L !NPO AT & P MG M K I L9PNP GP!_
NP!KP HM !Q NHP I PM! !Q 7 8
2 H G G 2 !' NHP Q !M9+ HMUGLP P !' / PM JGPG 2 MG M
A OT 7 MNNP!OM!NG HP!KP '%;' AJN NH G G ! N NHP GP!GP 7 NHP LMGGMQP
AP7 P JG+
()' SM PPO M I !QGN NHP K I +
G66

Y 3 % ' -' H G G NHP PMO !Q 7 M99 NHP 7 9 G H KH I MT AP GJL
L NPO AT K !G OP !Q NHMN " % G JGPO MG HMUGLP P 7NP!'JGPG N !'NHP GP!GP 7
NP I LP DL G N !+ +5TKP H P P HMG Q P!'JG NHP K9PM P PMO !Q 7 " %% '
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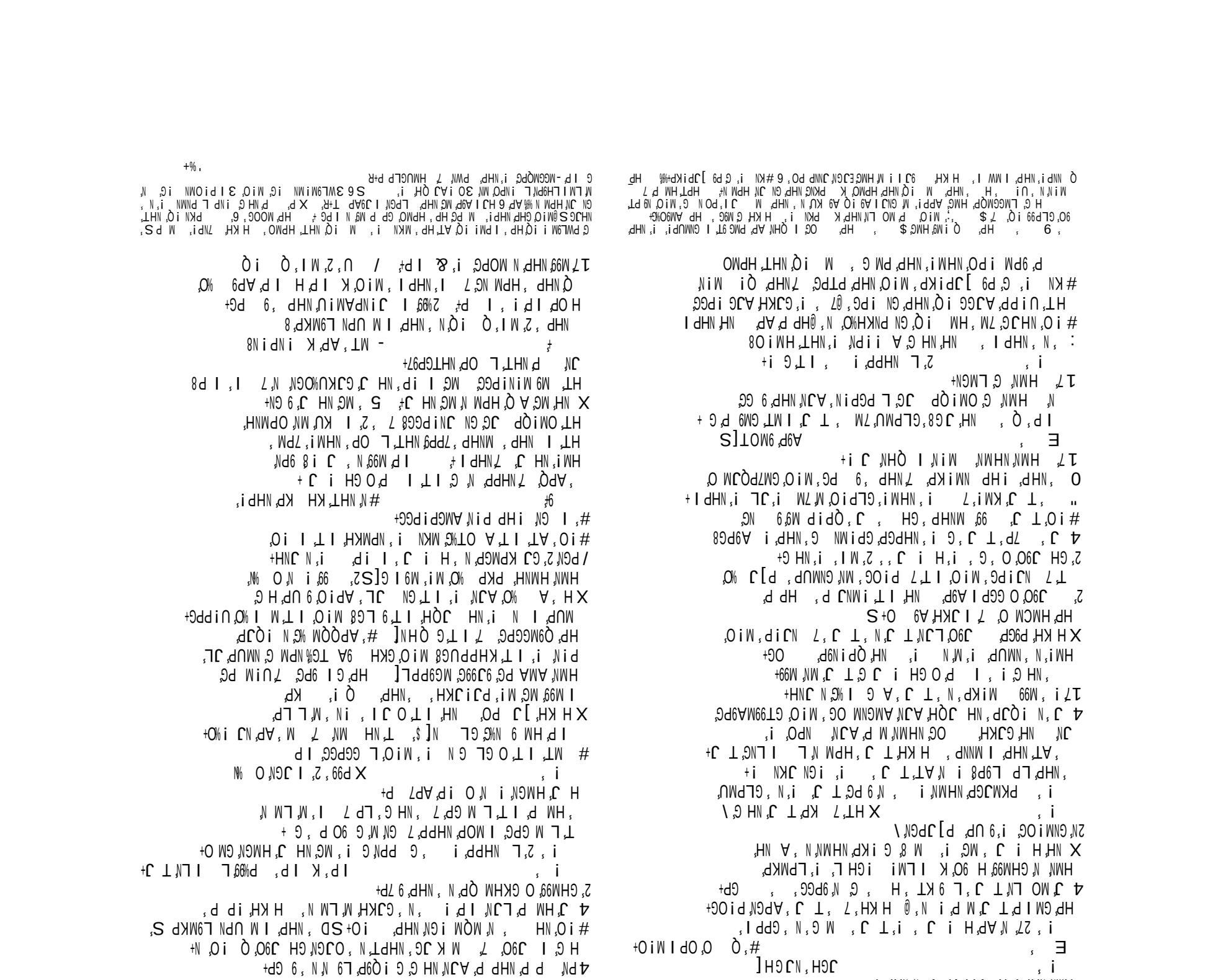
D S !'NHP GP!GP 7 GU+



I I P!O I P N I T 7P 2%99 PNJ !K !GJ98
1 !P P N JGN N HMN I T N !QJP KM!O
NHP MT 779MNNP T 7J NHP +
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M!G P I 9O9T8 7 NHPT M P L PLM %O
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HM!M P JL !T J TPN+
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% & 2!NH G L !N KHM QP H I H I P NHMN HP M77PKNG
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#!O NHMN NHP GL 9 Q N !NHP #!N MNPG
X MG !P%P O GN AJNPO+S

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X HMN 99 HP K I P \
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6* " X NH 9O P!P! JG M!O NH GP GP!MN G
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7 $ " M P T J M KMNM9 QJP
17M99 NHP KPG NHMN P HM P L KJ %O+
PN O !AT NHP L 99 \
4 " 2 HM P8 %N G PMOT+
7 " M P T J K 99PKNPO NHP I AT N APG \
4 " 2 HM P+
7 #GGP I A9P L PGP!N9T NHP LP L9P H NHP
#!O HP!NHPT HPM I P GMT 6 2N GHM99 AP G
NHP QHN M!O GN P!QNH %NHP K I I !G R AP N P NHP
0 OPMNH 7 7 !P AM! GH I P!N NHP!9PN NHP I +
27 2 GMT 7 !P K T 6 7 !P8R 7OPMNH K T 6 OPMNH
2!G GN !Q !NHP 9O L P QMN P
#!O L P %NHP N JNH %NHP KMJGP+
4 " 2 GHM99 !7 I NHP I +
% & #!O HP!GJKH N I P NHPT HM P APQJ!N K T+
/ PN NHP I ! N KPMGP AJN NH M O !K !7JG%O
3!7 KP NHP L PGP!N PWPKJN !
17 HMN P KHM!KP N GP!NP!KP+
, " P T P99+
7 MUP NHP I AP GN !Q M!O PMOT 7 NH G H !N+
X HP!P GHM99 HML N Q P%N NHP I +
$% & : MA JN N+
= 4 +DO 9P+
-JN H I N KH 9P - 3 * " P HMNH APP!JGPO
3 P N K !]JP M!O N HM P H G NH
17K !N MO KN ! P !Q !KP KHM7%O HP KM!! N
P P !%O MQM !N NP I LP M!KP NHP!HP GLPMUG
X HMN%G !H G HPM N M!O NHMN G NHP P H KH 9 UG
X NH JG N A PMU H G !PKU+

3!NP (((P!MN G
M!O -MN K M!G+

K+ X P99 HP P HP K I PG+
P!+ M9 I 9T 2 O APGPPKH T J+
+ #T MG M!' GN9P NHMN 7 NHP L PGN L PKP
X 99 APM NHP U!M P AT NHP 9J I P+S HP H ! J %O Q OG
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\H !Q J 9M QP NP I L9PG NH NHP GH G 7LPMKP+
#!O ! N J GN PPNG NH M [
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B +D3O 9P 2 N CP!G+

7 5 M !PM TP LP L9P+
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%! X P99 GMT+S -PMKP H [
! HM99 2 AP KHM Q%O ! 7J NHP NHM!NH G L PGP!N \
JGN M99 OPNP I !P HP P \
7 O OP I M!O+
27T J GJA I N T J N NHP LP L9P%G KPG+
#99 NHP 77 KP G M!O M P K !NP!N
GJ77P 9M 7J9 KP!GJ P 7 GJKH 7MJ9NG
#G GHM99 AP L %O JL !T J \
! 2 M I K !NP!N+
E / K N CP!G HP GMTG HP G K !NP!N
HP M 9 UP GP KP HP HMG O !P K !G OP 8
H !U !NHP J!OG H G A OT APM G H KH GH
/ UP Q M PG %NHP H 9T KHJ KHTM O+
! K MNKHPG NH A P G+
KM G N I P 9MJQHNP !9T+
E !G OP 7J NHP +
HMN HP!HP GLPMUG ! N 9 UP M K N CP!+
4 J 7 !O H I 9 UP M G 9O P 8 5 ! N NMUP
" G JQHP MKKP!NG% 7 I M9 K JG G J!OG+
JN MG 2 GMT GJKH MG APK I P M G 9O P +
&MNHP NHM!P! T T J+
! X P99 P99 ! I P+
! X HMN G NHP I MNNP +
HMN AP !Q LMGG%O 7 K !GJ9 NH 7J99 KP
2 M I G O GH ! J %O NH&N NHP P T H J
4 J NMUP N 77MQM !
7 #!G P N JG+
! MT NHP!8 $N G N JP 2 JQHN G +
7 X P KHM QP T J NHMN T J HM P K !N %O N NMUP
0 I & I P M99 GPMG !%O 77 KP M!O N !O
4 J GP97 !N M L P NT M!! KM98
0 H KH T J M P M N M N N NHP LP L9P+
! " [N M N \
E MT8 NP I LP MNP9T 4 J L I GM
! HP 7 PG %NHP 9 PGN HP99 7 9O !NHP LP L9P[
M99 I P NHP N M N 2SNH J !EJ JG N AJ!P[
X NH !NH !P PTPG GMN N P!NT NH JGM!O OPMNHG+
2!NHT HM!OG K9JNKH%O MG I M!T I 99 !G !
HT 9T !Q N !QJP A NH !J I AP G 2 J9O GMT+
H J 9 PGN J!N NHPP NH M KP MG 7 PP
#G 2 O L MT NHP Q OG+
7 M U T J NH G LP L9P+\
NHP KU8 N NHP KU NH H I [
7 -PMKP[
X P !PPO ! N LJN !P I MNNP N H G KHM QP
X HMN T J HM P GPP!H I O M!O HPM O H I GLPMU+
PMN !Q T J 77 KP G KJ G !Q T J GP9 $PG+
1LL G !Q 9M G NH GN UPG M!O HP P OP7T !Q
H GP H GP Q PMN L P I JGN N T H I 8 P P!NH G+
K I !M9 M!O !GJKH KML NMG U !O+
5PGP PG NHP PWN P I PGN OPMNH+
% & JN G !KP HP HMNH GP %O P99 7 & I P S
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E 2G NH G NHP L I GP NHMN T J I MOP T J I NHP \
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MQMA !O PW 9P 79MT !Q LP !N N 9 !QP

% ((% H G G M K PKN !AT HP AM9O8 NHP 9O K LT HMG (%

JN NH M Q M !' M OMT' 2' J9O' ! N AJT'
HP ' I P KT' MN NHP' L KP' 7' !P' 7M ' O8
' KHPKU' I T' K J MQP' 7 ' HMN NHPT' KM!' Q P+
' HM P$N NH' GMT !Q+' : O' I +
7&' 0 ' NHMN HP' HMG
@#G' I JKH' MG' !' H I' 9 PG' 7 I' N I P' N ' N I P'
3! PO' MQM !GN NHP' LP L9P' GPPU !Q' I PM!G'
' L9JKU' M MT' NHP ' L P 8 MG' ! ' MN 9MGN'
: P!' H GN 9P' GN UPG' M!O' NHMN' ! N !' NHP' L PGP!KP'
17' O PMOPO' EJGN KP' AJN' !' NHP' I ! GNP G'
HMN' O ' O GN AJNP' N ' 2!' NHP' !M I P' %NHP' LP L9P+
#!O' !' NHP' L P ' 7' JG' NHP' N AJ!PG' P
3 P!' 7 I' NH G' !GNM!N' AM! GH' H I' J ' K NT8
2!' LP 9' 7' L PK L NMN !
O I' 77' NHP' KU' M LP M!' !P P ' I P
' P!NP ' J ' & I P' QMNPG8 2% NHP' LP L9P%G' !M I P
2' GMT' N' GHM99' AP' G +
' 2N' GHM99' AP' G ' 2N' GHM99' AP' G ' 8 9PN' H I' M MT8
" P%G' AM! GH%O' M!O' N' GHM99' AP' G +$
! ' " PM ' I P' I T' I MGNP G' M!O' I T' K I I !' 7 P!OG8S
7 ' " P%G' GP!NP!K%O 8 ! ' I P' HPM !Q+
! ' /PN' I P' GLPMU
2' HM P' APP!' K !GJ9' M!O' KM!' GH ' 7 ' & I P
" P ' P!P I PG% I M UG' JL !' I P+' 2' O ' 9 P'
T' K J!N T%G' Q O' NH' M' PGLPKN' I P' NP!OP +
P' H 9T' M!O' L 7 J!O' NHM!' I !P' !' 9 7P+
T' OPM ' 7P%G' PGN I MNP ' HP ' I A%G' !K PMGP+
#!O' N PMGJ P' 7' I T' 9 !G8 NHP!' 7' 2' J9O'
LPMU' NHMN S
7 ' X P' U! ' T J ' O 7N' LPMU' HMN' \
% &' HP P%G' ! ' I P' N ' AP' GM O ' AJN' HP' G' AM! GH%O+
#G' P!P I T' N ' NHP' LP L9P' M!O' H G' K J!N T
2N' GHM99' AP' +
' 2N' GHM99' AP' G ' N' GHM99' AP' G +
! ' 4 J' K I I !' K T' 7' KJ G' [H GP' A PMNH' 2' HMNP'
#G' PPU' %NHP' NNP!' 7P!G' H GP' 9 PG' 2' L CP'
#G' NHP' OPMO' KM KMGPG' 7' J!AJ PO' I P!'
HMN' O ' K JLN' I T' M ' 2' AM! GH' T J8
#!O' HP P' P I M !' NH' T J ' J!KP NM !NT[
/PN' P P T' 7PPA9P' J I J ' GHMUP' T J ' HPM NG[
4 J ' P!P I PG ' NH' ! OO !Q' 7' NHP ' L9J I PG+
OM!' T J' !N ' OPGLM [" M P' NHP' L P ' GN 99'
' ' AM! GH' T J ' OP7P!OP G' 8 N 99 ' MN' 9P!QNH+
4 J ' Q! M!KP' @ H KH' 7 !OG' ! N ' N 99' N' 7PP9G a
MU !Q' ! N' D PGP MN !' 7' T J GP9 PG
@ N 99' T J ' !' 7 PG ' OP9 P ' T J
#G' I GN' MAMNPO' KMLN PG ' N ' G I P' !MN !'
HMN' !' T J' NH JN' A9 G[5PGL G !Q
O ' T J ' NHP' K NT ' NHJG' 2' NJ !' I T' AMKU
HP P' G' M' 9O' P9GP HP P+
9: 4 & ' (' (' ('
P!MN G ' "' - MN K M!G+
' HP' LP L9P%G' P!P I T' G' Q !P ' G' Q !P[
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9 , ! , ' - !& $ 0 '" !2' &,' ' ,-
7 ' : ' GPP' H I' JN' MN' QMNPG ' M!O' 7 99 ' H I +
#G' HP' HMNH' 7 99 %O' T J ' NH' M99' OPGL NP8
: P' H I $OPGP %O' PWMN !+' /PN' M' QJM O'
#NNP!O' JG' NH JQH' NHP' K NT+
' I P ' K I P ' 9P N%G' GPP' H I' JN' MN' QMNPG8 K I P8S' ';
HP' Q OG' L PGP P' J ' ! A9P' N AJ!PG' S IP+' 9: 4 &

D 27' P' NJ !' N ' NHP' APQ ! ! !Q' 7' NHP' GKP!P ' P' GHM99' 7 !O' NHP' O PKN !' 7' NHP'
N AJ!PG' P T' L PK GP' MG' N ' NHP' PKH ' H KH' NHP' LP L9P' P P' N ' M GP' 7' NHP ' OG+'
X HP!' NHP P7 P' h K ! JG' HP P' L ! J!KPG' NHP' GP!NP!KP' 7' AM! GH I P!N ' HP' NP
I !MNPG ' MG' HP' GM O' HP' GH J9O' NH ' 6' 2N' GHM99' AP' G 8 R' M!O' NHP' LP L9P ' N JP' N ' NHP'
!GN JKN !' K 7P MNP ' 6' 2N' GHM99' AP' G +R' HPT' M7NP M OG' PLPMN' NHP' K T' !' NHP'
GM I P' OG+' -P HMLG' JL !' NHP' H 9P' NHP' K I I !' NPWN' 7 I P 9T' L PGP!NPO' !P'
7' NPP P!GMG' I GN' MN K JG' M9NP MN !G+' 2N' KM!' GKM KP9T' AP' K !KP PO' NHMN' HP' HMG'
HMO' NHP' 7 T' N ' GMT ' 6' 9O' K LT' J!I PN KM99T ' ' '%$ '"' $ '% *B' M!O' N ' L !N' NHP'
LMGGMQP' NHJG

6' 2N' GHM99' AP' G +
2N' GHM99' AP' G 8 9PN' H I ' M MT' HP%G' AM! GH%O
'% ' '%$ '"' $.

' +' HP' Q LM9' 9 MG' $ +' H KH' MLP99' K PKNPO+

&3 3 ' 3X' &3#52 :+

'222+' K+' 22+' L+')+S 6' 2' HM P' M' HPM N' MG' 9 NN9P' ML N' MG' T J G+
JN' TPN' M' A M !' NHMN' 9PMOG' I T' JGP' 7' M!QP '
' APNNP ' M!NMQP+R

2!' NH G' LMGGMQP' G' !N OJKPO' !P' 7' NHP' P QHN' !P ' 9 !PG' H KH' +' 99 P'
K !G OP G' N ' HM P' APP!' PK P PO' MG' NHP' QP!J !P' N !Q' 7' HMUGLP P+' #7NP ' NHP'
9 !P ' 6' 2' HM P' M' HPM N R' BK+' NHP' PKN ' !GP NG S

6' 0 '$)' ('' 8 $ ' $ ' % ' ' ;' R

M!O' HP' H 9OG' NHP' GP!GP' N ' AP' !K I L9PNP' NH JN' N+' HP' !K I L9PNP!PGG' 7' NHP'
GP!GP' OPLP!OG' !' G I P' OPQ PP ' JL !' J ' !NP L PNMN !' 7' NHP' O' - ' 2!' P!'
? !G !' @6 T!NH M%G' &P P9GR ' P' HM P ' 6 2' K !7PGG' T J' N ' AP' 7' M!' - ' M!O'
O JA9P' HJ I J +R' #GGJ I !Q' - ' ' I PM!' 2# NHP' !P ' 9 !P' G' GKM KP9T' P] J PO8
7 ' 9J I ! M' I MT' P7P ' N ' NHP' ML N NJOP' N ' AP' 6' K J!GP99PO R' 7 ' H KH' HP ' HPM N' G'
MG' 6 HNN9P' ML N R' MG' NHMN' 7' HP ' G !+' +' NMJ!N !' GMTG' NHP' +' PKN %G' 9 !P'
HMG' J!OP Q !P' M' KHM!QP' G !KP' NG' 7 GN' MLLPM M!KP+' 2N' G' ! S \$)' -

' 3 3' 2+S ' - ' % .! ' ' ' !.' ' 5
' (' (' ('
(' "' - 1 '5!& 3' - MN K M!G+

Q ' I P' 9PM P' T J ' NPM G' 8D M' A P7' 7M P P99 SNHP'
APMGN
X NH' I M!T' HPMOG' AJNNG' I P' M MT+S MT' I NHP +
X HP P' G' T J ' M!K P!N' K J MQP' \ T J' P P' JGPO'
' GMT ' PWN P I NT' ' MG' NHP' N P ' 7' GL NG8
HMN' K I I !' KHM!KPG' K I I !' I P!' K J9O' APM 8
HMN ' HP!' NHP' GPM' MG' KM9 I ' M99' A MNG' M9 UP'
H %O' I MGNP GH L' !' 79 MN !Q' ' 7 NJ!P%G' A9 G+
X HP!' I GN' GN JKU' H I P' AP !Q' QP!N9P' J!OPO' K M PG'
#' ! A9P' KJ!! !Q' ' T J' P P' JGPO' N ' 9 MO' I P'
X NH' L PKPLNG' NHMN' J9O' I MUP' ! !K A9P'
HP' HPM N' NHMN' K ! !%O' NHP I +
' ' HPM P!G$ 1' HPM P!G'
! ' MT' 2' L NHPP ' I M! S
! ' ' NHP' PO' LPGN 9P!KP' GN UP' M99' N MOPG' !' & I P'
#!O' KKJLMN !G' LP GH[
! ' X HMN ' HMN ' HMN'
2' GHM99' AP' 9 %O' HP!' 2' M I ' 9MKU%O+' MT' I NHP
&PGJ I P' NHMN' GL N ' HP!' T J' P P' !N' N ' GMT+
27' T J' HMO' APP!' NHP' 7P' 7' " P KJ9PG
W' 7' H G' 9MA J G' T J%O' HM P' O !P ' M!O' GM %O'
4 J ' HJGAM!O' G ' I JKH' G PMN+S I ! JG
5 L' ! N8 MO PJ' 2SOM P P99 ' I T' 7P[I T' I NHP [
2%99' O ' P99' TPN+S H J' 9O' M!O' N JP' P!P! JG
HT' NPM G' M P' GM9NP ' NHM!' M' T J!QP ' I M!%G+
#!O' P! I JG' N ' NH !P' PTPG+S T' G I PN I P' QP!P M9
2' HM P' GPP!' NHPP' GNP I ' M!O' NH J' HMGN' 7N' APHP9O'
" PM N HM O%! !Q' GLPKNMK9PG8 NP99' NHPGP' GMO' I P!
% G' 7 !O' N ' M 9' !P NMA9P' GN UPG+
#G' %N G' N ' 9MJQH' MN' NHP I +S T' I NHP ' T J' N' P99'
T' HMCM OG' GN 99' HM P' APP!' T J ' G 9MKP' M!O'
P9 P P%N' ! N' 9 QHN9T' @NH JQH' 2' Q ' M9 !P+
/ UP' N ' M' 9 !P9T' O MQ ! ' NHMN' H G' 7P!D
MUPG' 7PM %O' M!O' NM9U%O' 7' I P' NHM!' GPP! ' T J ' G !'
X 99 ' ' PWKPPO' NHP' K I I !' ' AP' KMJQHN'
X NH' KMJNP9 JG' AM NG' M!O' L MKN KP+
! ' T' 7 GN' FG !+
X H NHP ' 9N' NH J' Q ' \ MUP' Q O' I ! JG'
X NH' NHPP' M H 9P' ' 5PNP L !P' !' G I P' K J GP+
P' NHM!' M' 9O' PWL GJ PF' N ' PMKH' KHM!KP'
HMN' GNM NG' %NHP' MT' AP7 P' NHPP+
! ' 1' NHP' Q OG[

F J 2' ' NAP' GPK !O' 7 9 8 NHP' 7 GN' J %' H G' K PKN !' 7'
; HMN P' KM99' NHP' 7M9GP' Q M I I M ' I' M!' PO N !' LJA9 GHPO' G ' G !' M7NP ' NHP' Q !M9 '
JQHN' LP HMLG' N ' AP' MO' LNPO' !' M' I OP I ' NPWN+
D HP' ' G' NHP' LPGN 9P!N M9' MA OP' 7' NHP' 6' 9 !P9T' O MQ ! R' H KH' HP' I MUPG'
6' 7PM PO' M!O' NM9UPO' 7' I P' NHM!' GPP!+R
' F % S !' NHP' GP!GP' 7' ! A9PGN+
' J- % ' HP' Q !M9' HMG' J- % ';' AJN' P' NH !U' NH' NPP P!G' NHMN' NH G'
G +MNTL Q MLH KM9' P ' M!O' K PKN' N' MKK O !Q9T' M7NP ' & P+
1 /+' 22+' ;')' " '

J. D. LINTON, PINXT. ETCHED BY J. STEPHENSON. JOSEPH GREATBACH, SCULPT

VOLUMNIA REPROACHING BRUTUS AND SICINIUS.

(CORIOLANUS.)

LONDON, VIRTUE & Co.

7M99P! JN NH HP HJGAM!O+ 4 J ! A9P J99JG #J7 O JG 99 MLLPM P99 ! NHPGP M G H G Q PMN LL GP 9M!JG AP !Q ! ! ! P]JPGN 7H G K J!N T+
! -" P KM! ! N KH GP+ 2 M I I GN 7 NJ!MNP NHJG MKK OP!NM99T N P!K J!NP T J 4 J HM P P!OPO I T AJG !PGG M!O 2 99 I P 9T MKK I LM!T T J H I P+
! 2 GHM99 APN PP! NH G M!O GJLLP P NP99 T J I GN iN M!QP NH !QG 7 I & I P 8 M99 NP!O !Q N NHP Q O 7 NHP MO P GM PG+ "M P T J M! M I T PMOT GMT T J \
!' #' I GN TM99 !P NHP KP!NJ !G M!O NHP KHM QPG O GN !KN9T A 99PNPO M9 PMOT !' NHP P!NP NM ! I P!N $ M!O N AP !' 7 N MN M!' H J %G M ! !Q+
! 2 M I E T7J9 N HPM 7 NHP PMO !PGG M!O M I NHP I M!' 2 NH !U NHMN GHM99 GPN NHP I !' L PGP!N MKN !+ G HPM N 9T P99 I PN M!O I GN Q9MO 7T J K I LM!T+
(4 J NMUP I T LM N 7 I' I P G 8 2 HM P NHP I GN KMJGP N AP Q9MO 7T J G+
! X P99 9PN JG Q N QPNHP + 9 4 &

3 3 2 +SD#!N J I+ % .! #J7 O JG%G !&-
, , $ " -3& - "" "" &.. "

! #Q O9T K NT G NH G # !N J I NT $
$ G 2 NHMN I MOP NHT O G I M!T M!' HP
17 NHPGP 7M PO 7 KPG %7 P I T M G
"M P 2 HPM O Q M! M!O O L NHP!' U! I P ! N8
/PGN NHMN NHT PG NH GL NG M!O A TG NH GN !PG+

3!.1*
2!' LJ!T AMNN9P G9MT I P+S M P T J G +
#!O T J+
! 5 PKN I P 7 N AP T J 99+
X HP P Q PMN #J7 O JG 9 PG 2G HP !' # !N J I \
"M P 2 G M!O 7PMGNG NHP ! A9PG 7 NHP GNMNP+
#N H G H JGP NH G ! QHN+
! X H KH G H G H JGP %APGPPKH T J \
H G HP P AP7 P T J+
! HM!U T J G 8 7M P P99+
9: 4 N CP!+
1 9O NHT G9 LLP T NJ !G[O P!OG ! 7MGN G !+
X H GP O JA9P A G I G GPP I N PM ! P HPM N+
X H GP H J G H GP APO H GP I PM9 M!O PWP K GP+
P GN 99 N QPNHP H N !' MG %N P P !' 9 P
!GPLM MA9P GHM99 NH !' NH G H J +
1 !' M O GGP!G !' 7M O N A PMU JN
A NNP PGN P! I NT 7P99PGN 7 PG+
X H GP LMGG !G M!O H GP L9 NG HM P A UP NHP G9PPL
NMUP NHP !P NHP NHP AT G I P KHM!KP+
I P N KU ! N NH M!' PQQ GHM99 Q OPM 7 P!OG+
#!O !NP E !' NHP GGJPG+ NH I P S
T A NHL9MKP HMNPD 2 M!O I T9 P%G JL !' @
H G P!P I T N !+S2%99 P!NP 7 HP G9MT I P+
"P O PG 7M EJGN KP8 7 HP Q P I P MT+
2%99 O H G K J!N T GP KP+ 9 4

3 3 +S - E&- &! P M!N8

7 1 X !P !P !P[X HMN GP KP G HP P[
2 NH !U J 7P99 G M P MG9PPL+ + 4

! P M!N+

%7 1 X HP P%G NJG\ I T I MGNP KM99G 7 H I+
NJG[+ 4

$ S I OP P!QMQP I P!N7 LMT+

(5 ("" 7 ! "" P M!N+

&. X HP P G NH G 7P99 \
%7 1 "P P G 8 2%O HM P APMNP!' H I 9 UP M O Q AJN 7 O GNJ A !Q NHP 9 OG NH !+
&. X HP!KP K I %GN NH J\ HMN J9OGN NH J\ HT !M I P\ X HT GLPMU%GN ! N\ LPMU I M! X HMN%G NHT !M I P\
! 27 J99JG +& &.. 3 ! N TPN NH J U! %GN I P M!O GPP !Q I P O GN ! N NH !U I P 7 NHP I M!' 2 M I !PKPGG NT K I I M!OG I P !M I P I TGP97+
&. X HMN G NHT !M I P\ ^ P M!NG
! #!M I P J! I JG KM9N NHP 9GK M!G% PM G #!O HM GH !' G J!O N NH !P+
&. MT HMN%G NHT !M I P\

F9 HP Q !M9 HMG $;' M!O P P NHP MO K JG K PKN !' N MLP +

H J'HMGN'M'Q I'ML.PM MIKP'MIO'NHT'7MKP'
PM G'M'K I I MIO' i $N8 NH JQH'NHT'MMKU9P%G N i
HPJ'GH %GN'M'i N'N 'KJN' J9O'GH 'NHPP'AJN'M'7 98
XH KH'i N'N 'KJN' J9O'GH 'NHPP'AJN'M'7 98
iKP'2'HM P'P P'7 99 %O'NHPP' NH'HMNP+
5 M i'NJiG 7A9 O' JN' 7NHT'K JiN T%G A PMGN
#iO'KMii N'9 P'AJN'N 'NHT'GHM I P'JI9PGG
2N'AP'N 'O 'NHPP'GP KP+
&.' ' 1' M K JG' M K JG[
3MKH' O'NH J'HMGN'GL UP'HMNH' PPOPO'7 I'I'HPM N'
#' N' 7MIK PIN'pi T+ 27'?JL NP'
H J90'7 I'T i'K9 JO'GLPMU'O IP'NH iQG+
#iO'GMT'6% G'N JP R'2%O' i N'AP9 P P'NHP I'I P'
HMI'NHPP'M99' i A9P' M K JG+S/PN' I P'N iP'
iP'M I G MA JN'NHMN'A OT' HP P'MQM iGN'
T'Q M IPO'MGH'MI'HJIO PO'N I PG'MQM iGN'
;#iO'GKM %O'NHP' I i' NH'GL9 iNP G["P P'2'K9 L'
; HP'MI g' 7 I T G O'8 MIO'O 'K iNPGN'
#G P P' i'MI A N JG'GN piQNH'2'O O'
iNPIO'MQM iGN'NHT' M9 J +' 'NH J'7 GN
2'9 %O'NHP' I M O'2' I M PO8 ip P' I MI'
QH%O'N JP'A PMNH8 AJN'NHMN'2'GPP'NHPP'HP P
H J'i A9P'NH iQ[I P'OMiKPG' I T' ML.N'HPM N'
HMI' HPi'2'7 GN'I T' POOPO' I GN PGG'GM '
PGN OP' I T'NH PGH 9O+ XHT'NH J' M G 2 2'NP99'NHPP+
XP'HM P'M'L P' i'7 N8 MIO'2'HMO'LJ L GP'
1iKP' I P'N 'HP 'NHT'NM QPN'7 I'NHT'A M i+
1'9 GP' I ip'M I'7 %' H J'HMGN'APMN' I P' JNF
"MNH'A JQHN' I P'N 'NHT'HPM NH' N' JN' 7H LP
GNMUP' I P' i N'N 'GM P' I T'9 7P'8 7 ' T'

H I 8 GM!KN 7 PG H I GP97 NH%G HM!O 'M!O NJ !G JL NHP H NP %NHP PTP N ' H G'O GK J GP+ JN NHP A NN I' 7 NHP !P G G' J 'QP!P M9 G KJN %NHP I OO9P 'M!O AJN !P HM97 7 HMN HP MG TPGNP OMT8 7 ' NHP NHP 'HMG HM97 'AT NHP P!N PMNT M!O Q M!N 7 NHP H 9P NMA9P+ " P999 Q 'HP GMTG 'M!O G 9PD NHP L NP ' 7 & I P QMNPG AT NHP PM G ' " P 99 I 'M99 O !' AP7 P H I 'M!O 9PM P G LMGGMQP L 99PO+D %7 1' #!O HP%G MG 9 UP N ' O %N MG M!T I M!' 2' KM!' D I MQ !P+

)7 1' 5 %N\ HP 99 O %N ' O '9 U T J'G 'HP HMG MG I M!T 7 P!OG MG P!P I PG' H KH 7 P!OG 'G '@MG N P P ' OJ GN ! N @9 U T J'G 'GH 'NHP I GP9 PG @MG P NP I' N ' H G 7 P!OG H 9GN HP%G !' O PKN NJOP+F

2'7 1' 5 PKN NJOP[HMN%G N9EMN\

',)'7 1' JN HP!' NHPT GHM99 GPP 'G 'H G K PGN JL MQM !' M!O NHP I M!' !' A9 O 'NHPT 99 JN 7 NHP 'AJ G '9 UP K ! PG M7NP ' M !'M!O P P99 M99 NH H I+

'7 1' JN HP!'Q PG NH G 7 M O\

;7 1' I 8 N OMT8 L PGP!N9T+ 4 J GHM99 HM P NHP O J I' GN JKU JL NH G M7NP ! !8 %N G 'MG N P P 'M LM KP9 7 NHP '7PMGN 'M!O N 'AP PWPKJNPO P P NHPT LP NHP '9 LG+

%7 1' XHT 'NHP!' P GHM99 HM P M GN !Q 9O MQM !+ H G LPMKP G ! NH !Q 'AJN N ' JGN !' !K PMGP NM 9 G M!O A PPO AM99MO I MUP G+

'7 1' /PN I P HM P M 'GMT 2 8 N PWKPPOG LPMKP MG 7M 'MG OMT O PG ! QHN8 N%G GL QHN9T ' MU !Q 'MJO A9P 'M!O 7J99 7 P!N+ -PMKP G M P T ML L9PWT '9PNHM QT8 I J99PO 'OPM7 G9PPLT ' !GP!G A9P 8 M QPNNP ' 7 I P AMGNM O KH 9O P!' NHM!' M %G M OPGN TP ' 7 I P!+

%7 1' % G G 8 M!O MG M ' !' G I P G N ' I MT AP GM O N 'AP M M GHP 'G ' N KM!! N AP OP! PO AJN LPMKP G M Q PMN I MUP ' 7 KJKU 9OG+

27 1' #T '#!O N I MUPG I P!' HMNP !P M! NHP +

)7 1' &PMG !8 APKMJGP NHPT NHP!'9PGG !PPO !P M! NHP + HP M G 7 ' I T I !PT+ 2 H LP N ' GPP & I M!G MG KHPML MG 9GK M!G+ HPT M P G !Q 'NHPT M P G !Q+ '2!' !' !' !+

3 3' 2+S& I P+ ',&('

K JG &((

7 'XP HPM '! N 7 H I '!P NHP '!PPO P 7PM 'H I 8 " G P I PO PG M P NM I P %NHP L PGP!N LPMKP #!O]J PN!PGG %NHP LP L9P ' H KH AP7 P XP P !' 9O HJ T+ "P P O ' P I MUP H G 7 P!OG 9JGH NHMN NHP 9O Q PG P998 H ' MNHP 'HMO ' H JQH NHPT NHP I GP9 PG O O GJ77P 'AT %N 'APHP9O 5GGP!N JG !J I AP G LPGNP !Q GN PPNG 'NHM!' GPP 1J 'N MOPG I P!'G !Q !Q !' NHP 'GH LG 'M!O Q !Q #A JN NHP '7J!KN !G 7 P!O9T+

' (

%&' XP GN O N %N !'Q O N I P+ 2G NH G P!P! JG\
7 ' % G HP '%N G HP '1' HP G Q !' I GN U !O 7 9MNP+
"M 9 'G [
E ' "M 9 N 'T J A NH[
K+ 4 J' 9M!JG G ! N I JKH I GGPO AJN NH H G 7 P!OG8 NHP K I I ! PM9NH O NH GNM!O8 M!O G ' J9O O ' P P HP I P M!Q T MN N+
; P!+ #99%G P998 M!O I QHN HM P APP!' I JKH APNNP ' 7 HP K J9O HM P NP I L GPO+
+ K+ XHP P G HP 'HPM 'T J\
P!+ MT '2 'HPM '! NH !Q8 H G I NHP 'M!O H G 7P HPM ' ! NH !Q 7 I 'H I+F

' I SM L !K M9 O ' ''
' '' SK9PM PO+
' (' M9 !P J9O PMO %(' "P NH !UG NHP GP M!N MG ! N I PM!N N 'NM9U MAG 9JNP ! !GP!GP+ XHT NHP!'O PG NHP NHP 'GP M!N MGU NHP I PM! !Q 7 NHP 7 !P O
H 3 $ ' ' HP Q !M9 HMG $ ' # H KH G PNM !PO !' I GN I OP I 'PO N !G8 AJN P GH J9O KP NM !9T PMO 8 ' '" $ ' # '$ '" $ '

' ' ! ' >!& ' N CP!G+

' HP Q OG L PGP P T J A NH [
7 ' : O P%P!' J '!P QHA J G+
% &' : O P%P!' N 'T J M99 'Q O P%P!' N 'T J M99+
' ' 1J GP9 PG' J ' PG 'M!O KH 9O P!' !' J 'U!PKG '
P A J!O N 'L MT 7 'T J A NH+
7 ' / P 'M!O NH P [
% &' OM P P99 'U !O !P QHA J G' X P GH%O 9M!JG " MO 9 %O T J MG P O O+
' 'NHP Q OG UPPL T J[
%! ' ' OM P P99 '7M P P99+ =: 4 & ' N CP!G+
7 ' H G G M HMLL P 'M!O I P K I P9T N I P HM!' HP!' NHPGP 7P99 G M!' MA JN NHP GN PPNG+
T !Q ' !7JG !+
% &' M JG M K JG MG
#' NHT 77 KP ' %NHP M 8 AJN !G 9P!N 1%P K I P NH L OP 'M I A N JG LMGN M99 NH !U !Q ' P97 9 !Q S
7 ' # !O M77PKN !Q !P G 9P NH !P X NH JN MGG GNM!KP+
E ' 2 NH !U ! N G +
7 ' XP GH J9O AT NH G 'N 'M99 J '9M I P!NMN !+
27 HP HMO Q !P 7 NH K !GJ9 '7 J!O N G +
% &' HP Q OG HM P P99 L P P!NPO N 'M!O & I P NG GM7P M!O GN 99 NH JN H I+

' " O 9P+

6 "' X NHT N AJ!PG
HP P G M G9M P ' H I ' P HM P LJN !' L G ! &PL NG 'NHP 9GKPG NH N 'GP P M9 L P G # P P!NP %O !' NHP & I M!' NP N PG8 # !O NH NHP OPPLPGN I M9 KP 7 NHP M ' 5PGN T HMN 9 PG AP7 P NHP I+

E ' % G #J7 O JG XH 'HPM !Q 7 J ' M K JG%AM! GH I P!N+ H JGNG 7 NH H G H !G MQM !' !N 'NHP 9O XH KH P P !GHP99%O HP!' M K JG GN O 7 '& I P # !O OJ GN ! N !KP LPPL JN+
7 ' I P ' HMN NM9U T J 7 M K JG\
% &' : 'GPP NH G J I J P ' H LL%O+S2N KM!! N AP HP 9GKPG OM P A PMU NH JG+ ;<
;E ' M!! N AP[
XP HM P PK O NHMN P T P99 N KM!8
!O NH PP PWM I L9PG 7 NHP 9 UP HM P APP!'
X NH !' I T MQP+ JN PMG !' NH NHP 7P99 +
P7 P T J LJ! GH H I ' HP P HP HPM O NH G / PGN T J GHM99 KHM!KP N ' H L T J '!7 I MN !
!O APMN NHP I PGGP!QP ' H 'A OG AP M P
17 HMN G N 'AP O PMOPO+
7 ' P99 ! N I P
2 U! 'NH G KM!! N AP+
% &' N L GG A9P+

' ' PGGP!QP +

E --' HP ! A9PG '!Q PMN PM !PGN!PGG 'M P Q !Q #99 N 'NHP GP!MNP H JGP ' G I P !P G G K I P F HMN NJ !G NHP 'K J!NP!M!KPG+ %
7 ' % G NH G G9M P8S
: ' H L H I '%7 P NHP LP L9P%G PTPG SH G M G !Q[NH !Q AJN H G PL N[
E --' 4PG ' NHT G +
HP G9M P%G PL N G GPK !OPO8 M!O I P+
P 7PM 7J9 ' G OP9 P %O+

' XP L !N NXG O M9 QJP !' L GP MG !' NHP Q !M9+ 2N G O !M 9T L !NPO MG NP!'9 !PG 7A9M!U TP GP 'M7NP ' MLP99+
F ' HP Q !M9 HMG (' HP M9NP MN !' N ' (' MG AT & P' H KH P MO LN ' !' K I I !' NH NHP ' PKP!N PO N G+ 4PN P J! 99 !Q9T Q P JL (' HP PMOP ' 99 P I P I AP ' + M I LAP99%G 7 !P I MQP S
6' I !Q P P!NG KMGN NHP 'GHMO G AP9A P+R
1/+ , ' ' g 4R6

7 ' X HMN' I P' 7PM 7J9' \
E --' 2N' G' GL UP' 7 PP9T' JN' 7' I M!T' I JNHG
@" 'L AMA9P' 2' O' ! N' U! 'NHMN' M K JG
? !%O' NH' #J7 O JG' 9PMOG' M' L P' %QM !GN' & I P8
#!O' G' P P!QP' MG' GLMK JG' MG' APN PP!'
HP' T J!Q%GN' M!O' 9OPGN' NH !Q+
7 ' H G' G' I GN' 9 UP9T' [
% 0 ' &M G%O' !9T' NHMN' NHP' PMUP' G N' I MT' GH'
: O' M K JG' H I P' MQM !+
7 ' HP' P T' N KU' ! %N+
E ' H G' G' J!9 UP9T
" P' M!O' #J7 O JG' KM!' ! ' I P' MN !P D
HM!' 9P!NPGN' K !N M PNT+

0 ' ! ' PGGP!QP +

E --' 4 J' M P' GP!N' 7 'N 'NHP' GP!MNP' 8
#' 7PM 7J9' M I T' 9PO' AT' M JG' M K JG
#GG K MNPO' NH' #J7 O JG' MQPG'
L !' J 'NP N PG8 M!O' HM P' M9 PMOT
1%P A I P' NHP ' MT' K !GJ I %O' NH' 7 P' M!O' N U'
X HMN' 9MT' AP7 P' NHP I +

' (

! ' 1 'T J' HM P' I MOP' Q O' U[
E ' X HMN' !P G' \ HMN' !P G' \
! ' 4K7K' HM P' H 9L' N ' M GH' T J ' !' OMJQHNP G ' M!O'
' I P9N' NHP' K NT' 9PMOG' JL !' T J 'LMNPG8
' GG' EAB' J PG ' N FAHABD8N' CA' E B' HA G R
J. ' X HMN%G' NHP' !P G' \ HMN%G' NHP' !P G' \
! ' 4 J 'NP I L9PG' AJ !PO' !' NHP 'KP I P!N8 M!O'
4 J '7 M!KH GPG' HP P !' T J' GN O' K !7 !%O'
2!N 'M!' MJQP %G' A P+
6J. ' - MT' ! 'T J '!P G' S
4 J' HM P' I MOP' 7M ' U' 2' 7PM ' I P' S - MT 'T J '!P G' \
27' M K JG' GH J9O' AP' E !%O' NH' 9GK M!G S
! $ T' 27[
" P' G' NHP 'Q O8 HP' 9PMOG' NHP I '9 UP' M' NH !Q'
MOP' AT' G I P' NHP 'OP NT' NHM!' !MNJ P
HMN' GHMLPG' I M!' APNNP ' M!O' NHPT' 7 99 'H I
#QM !GN' JG' A MNG ' NH' ! ' 9PGG' K !7 OP!KP'
HM!' A TG' LJ GJ !Q' GJ I I P 'AJNNP 79 PG+
1 'AJNKHP G' U 99 !Q' 79 PG+
E ' 4 J' HM P' I MOP' Q O' U' +
4 J 'M!O' T J 'ML ! I P!8 T J' NHMN' GN O' G ' I JKH'
L !' NHP' KP' 7' KKJLMN !' M!O'
HP' A PMNH' 7' QM 9 K PMNP G' 2
! ' " P%99' GHMUP' T J '& I P' MA JN' T J 'PM G+
L O' #G' " P KJ9PG' O O' GHMUP' O !' I P99 '7 J N
4 J' HM P' I MOP' 7M ' U[
% &' JN' G NH G' N JP 'G ' \
! ' # T8 M!O' T J%99' 9 U' LM9P'
P7 P' T J' 7 !O' N' NHP +' #99' NHP' PQ !G'
5 'G I 9 !Q9T' P 9N8 M!O' H ' PG GN+
P' I KU$O' 7 ' M9 M!N' Q! M!KP+
#!O' LP GH' K !GNM!N' 7 9G+' XH ' G%N' KM!' A9M I P' H I' \
4 J 'P!P I PG 'M!O' H G '7 !O' G I PNH !Q' !' H I +
E ' X P' M P' M99' J!O !P ' J!9PGG'
HP' ! A9P' I M!' HM P' I P KT+
! ' XH 'GHM99' MGU' N' \
HP' N AJ!PG' KM!! N' O %N' 7 'GHM I P8 NHP' LP L9P'
5PGP P' GJKH' L NT' 7' H I ' MG' NHP' 97+
5 PG' 7' NHP' GHPLHP OG' 7 'H G' APGN' 7 P!OG' 7' NHPT'
H J9O' GMT ' 6' P' Q O' N ' & I P R' NHPT' KHM Q%O' H I ' P P!'
#G' NH GP' GH J9O' O 'NHMN' HMO' OPGP %O' H G' HMNP
#!O' NHP P !' GH %O' 9 UP' P!P I PG+
% G' N JP
27' HP' P P' LJNN !Q' N ' I T' H JGP' NHP' A M!O'
HMN' GH J9O' K !GJ I P' N '2' HM P' ! N' NHP' 7MKP

' SAP' PK !K 9PO< '

'GMT' 6' PGPPKH' T J ' KPMGP+R S 4 J' HM P' I MOP' 7M ' HM!OG '
4 J' M!O' T J 'K M7NG' [T J' HM P' K M7NPO' 7M '2
! ' ' 4 J' HM P' A JQHN
#' N P I A9 !Q' JL !' & I P ' GJKH' MG' MG' !P P '
' !KMLMA9P' 7' HP9L+
' MT' ! N' P' A JQHN' N+
E ' " 9' X MG' N' P\' X P' 9 %O' H I 8' AJN' 9 UP' APMGNG+'
#!O' K M O9T' ! A9PG ' QM P' MT' J!N ' T J ' K9JGNP G+
X H ' O O' H N' H I ' JN' %NHP' K NT+
! ' JN' 2' 7PM +
HPT%99' M 'H I ' !' MQM !+' J99JG' #J7 O JG
HP' GPK !O' !M I P' 7' I P!' APTG' H G' L !NG'
#G' 7' HP' P P' H G' 77 KP ' S 5 PGLP MN !'
2G' M99' NHP' L 9 KT ' GN P!QNH ' M!O' OP7P!KP+
HMN' & I P' KM!' I MUP' MQM !GN' NHP I +

' ' !!,'D N CP!G+

E ' " P P' K I P' NHP' K9JGNP G+ S
#!O' G' #J7 O JG' NH' H I ' \S 4 J' M P' NHPT'
HMN' I MOP' NHP' M 'J! H 9PG I P ' HP!' T J' KMGN'
4 J 'GN !U !Q ' Q PMGT' KMLG ' !' H N !Q'
#N' 9M!JG% PW 9P+' 'HP%G' K I !Q8
#!O' ! N' M' HM 'JL !' M' G 9O P %G' HPMO
X H KH' 99' ! N' L P' M' H L' 8 MG' I M!T' K WK I AG
#G' T J' NH P 'KMLG' JL ' 99' HP' NJ I A9P' O !+
#!O' LMT' T J' 7 'T J ' KPG+' % G' ! ' I MNNP 8
27' HP' K J9O' AJ !' JG' M99' !N 'O!P' K M9+
X P' HM P' OPGP %O' N+
' %OM NH ' P' HPM '7PM 7J9' !P G+
' ' AD' @HG' A J H' K?DC
FGH' 2' ?N ' L?H F' F@ '2' ?N' 8C J ? ' K CE
%' ' # !O' G ' O O' 2+
)' ' # !O' G ' O O' 2 8 M!O' N ' GMT' NHP' N JNH ' G ' O O' P T'
I M!T' 7' JG' HMN' P' O O' P' O O' 7 'NHP' APGN8 M!O' NH JQH'
P' 99 !Q9T' K !GP!NPO' N 'H G' AM! GH I P!N 'TPN' N' MG' MQM !GN'
J ' 99+
! ' 4 J' M P' Q O9T' NH !QG ' T J' KPG[
D ' 4 J' HM P' I MOP
: O' U ' T J' M!O' T J ' K T' 9 D HM99' JG' N 'NHP' ML N 9' \
! ' ' ?E8 J F?C' GM G W' 9: 4 & ' &' "' <
7 ' : ' I MGNP G ' QPN' T J' H I P ' AP' ! N' O G I MT%O+
HPGP' M P' M' G OP' NHMN' J9O' AP' Q9HO' N 'HM P'
H G' N JP ' H KH' NHPT' G 'GPP I ' N '7PM +' : 'H I P+
#!O' GH ' ! ' G Q!' 7' 7PM +
' ' HP' Q OG' AP' Q O' N ' JG' 2 I P' I MGNP G ' 9P N%G' '
H I P+' 2' P P 'GM O' P' P P' %NHP' !Q' HP!' P' AM! GHPO'
H I +
%' ' 'O O' P' M99+' JN' K I P' 9P N%G' H I P+
+ 4 & ' N CP!G+
% &' 2' O ' ! N' 9 UP' NH G' !P G+
7 ' '2+
% &' / PN%G' N 'NHP' ML N 9 S%X J9O' HM97' I T' PM9NH'
X J9O' AJT' NH G' 7 'M' 9 P' [
7 ' MT ' 9PN' JG' Q +' + 4 &

3 3' 22 F ' ,# ' '- '" - '. ! '& I P+

' % ' "' -' / PJNP!M!N+

&.$' 5 'NHPT' GN 99' 79T' N 'NHP' & I M!' \
? &' 2' O ' ! N' U! ' HMN' NKHK M7N%G' !' H I' 8 AJN'
4 J 'G 9O P G' JGP' H I' MG' NHP' Q MKP' %7 P' I PMN+
HP 'NM9U' MN' NMA9P ' M!O' NHP 'NHM!UG' MN' P!O8
#!O' T J' M P' OM UP!%O' !' NH G' MKN !' G +
3 P!' AT' T J ' !+
&.' ' 2' KM!! N' HP9L' N' ! 8
!9PGG ' AT' JG !Q' I PM!G ' 2' 9M I P' NHP' 7 N
17' J 'OPG Q!+' " P' APM G' H I GP97' I P' L JO9 P
3 P!' N ' I T' LP G ! ' NHM!' 2' NH JQHN' HP' J9O'
X HP!' 7 GN' 2' O O' P I A MKP' H I ' ' 4 PN' H G' !MNJ P

J I LHM ! N9T' N PMO' !' NHT' K J ! N T%G' J !' 8
! O' APM ' NHP' LM9 I ' 7 ' HM !Q' A M P9T' GHPO'
HT' 7P' M ! O' KH 9O P ! %G' A9 O+' >! ' I TGP97 ' G !
2' LJ L GP' ! N' N ' M N' !' 7 NJ ! P' N 99'
HPGP' M G' OPNP I !P ' 7' 2' KM ! ! N' LP GJMOP' NHPP'
&MNHP ' N ' GH ' M' ! A9P' Q MKP' N ' A NH' LM NG'
HM !' GPPU' NHP' P ! O' 7' !P ' NH J' GHM9N' ! ' G !P '
M KH' N ' MGGMJ9N' NHT' K J ! N T' NHM ! ' N ' N PMO'
@ JGN' N ' C' NH J' GHM9N' ! N ' !' NHT' I NHP %G' I A+
HMN' A JQHN' NHPP' N ' NH G' 9O+
> ' #T ' M ! O' I !P+
HMN' A JQHN' T J' 7 NH' NH G' A T ' N ' UPPL' T J ' ! M I P'
/ !Q' N ' N I P+
%#' GHM99' ! N' N PMO' !' I P' 8
2%99' J !' M MT' N 99' 2' M I ' A QQP ' AJN' NHP ! ' 2%99' 7 QHN+
' ! ' 7' M' I M ! %G' NP ! OP ! PGG' N ' AP+
&P] J PG' ! ' KH 9O' ! ' I M ! %G' 7MKP' N ' GPP+
2' HM P' GMN' N ' 9 !Q+' = - 3
! ' MT ' Q ' ! N' 7 I ' JG' NHJG+
27' N' P P' G ' NHMN' J ' P] JPGN' O O' NP ! O
' GM P' NHP' & I M ! G ' NHP PAT' N ' OPGN T
HP' 9GKPG' H I ' T J' GP P ' T J' I QHN' K ! OP I !' JG+
#G' L G ! JG' 7' T J ' H ! J ' 8 J ' GJ N
2G' NHMN' T J' PK !K 9P' NHP I ' H 9P' NHP' 9GKPG
MT' GMT ' 6' H G' I P KT' P' HM P' GH %O N H P ' & I M ! G
6' H G' P' PKP %O M ! O ' PMKH' !' P NHP ' G OP
: P' NHP' M99 HM 9' N ' NHPP ' M ! O' K T ' 6' P' A9PGG%O
O ' I MU !Q' JL' NH G' LPMKP[R' H J' U ! %GN ' Q PMN' G !+
HP' P ! O' 7' M %G' J ! KP NM !8 AJN' NH G' KP NM !+
HMN' 7' NH J' K !] JP ' & I P ' NHP' AP ! P7 N'
X H KH' NH J' GHM9N' NHP PAT' PML' G' GJKH' M' ! M I P+
X H GP' PLPN N !' 99' AP' O QQ%O' NH' KJ GPG' 8
X H GP' KH ! K9P' NHJG' N S HP' I M !' MG' ! A9P+
JN' NH' H G' 9MGN' MNNP I LN' HP' L%O' N' JN8
5 PGN T%O' H G' K J ! N T8 M ! O' H G' ! M I P' P I M ! G'
' NHP' P ! GJ !Q' MQP' MAH %O+R' LPMU' N ' I P ' G !
H J' HMGN' M77PKNPO' NHP' 7 !P' GN M ! G' 7' H ! J +
' I NMNP' NHP' Q MKPG' 7' NHP' Q OG8
' NPM ' NH' NHJ ! OP ' NHP' OP' KHPPUG' %NHP' M +
! O' TPN' N ' KHM QP' NHT' GJ9LHJ ' NH' M' A 9N'
HMN' GH J9O' AJN' P' M ! ' MU+' X HT' O GN' ! N' GLPMU' \
H ! U%GN' NH J' N' H ! J MA9P' 7 ' M' ! A9P' I M ! '
N 99' N ' P I P I AP ' !QG' 9S5 MJQHNP ' GLPMU' T J
" P' KM PG' ! N' 7 ' T J ' PPL ! Q+' LPMU' NH J ' A T '
- P HMLG' NHT' KH 9O GH ! PGG' 99' I P' H I ' I P'
HM !' KM !' J ' PMG !G+ SD HP P' G' ! ' I M !' !' NHP' 9O'
P' A J ! O' N ' H G' I NHP 8 TPN' HP P' HP' 9PNG' I P' L MNP+
/ UP' !P' %NHP' GN KUG+' H J' HMGN' ! P P ' !' NHT' 9 7P'
H %O' NHT' OPM ' I NHP ' M ! T' K J NPGT8
X HP !' GHP' @L ' HP ! [' 7 ! O' 7' ! ' GPK ! O' A O+
" MG' K9JKU%O' NHPP' N ' NHP' M G ' M ! O' GM7P9T' H I P
/ MOP !' NH' H ! J +' MT ' I T' P] JPGN%G' J ! EJGN+
! O' GLJ !' I P' AMKU ' JN ' 7' N' AP' ! N' G +
H J' M N' ! N' H ! PGN8 M ! O' NHP' Q OG' 99' L9MQJP' NHPP+
HMN' NH J' PGN M ! %GN' 7 I ' I P' NHP' OJNT' H KH'
' M' I NHP %G' LM N' AP9 !QG+ S " P' NJ !G' M MT
5 !' 9MO PG[9PN' JG' GHM I P' H I ' NH' J ' U ! PPG+
' H G' GJ ! M I P' 9M ! JG' %9 !QG' I P' L OP'
HM !' L NT' N ' J ' L MTP G+' 5 !' # ! ' P ! O
H G' G' NHP' 9MGN8 S ' P' 99' H I P' N ' & I P
! O' O P' M I !Q' J ' ! P QHA J G+ S MT ' APH 9O' JG
H G' A T ' NHMN' KM ! ! N' NP99' HMN' HP' J9O' HM P+
JN' U ! PP9G ' M ! O' H 9OG ' JL' HM ! OG ' 7 ' 7P99 GH L+
5 PG' PMG !' J ' LPN N !' NH' I P' GN P ! QN'
HM !' NH J' HMGN' N ' OP ! T%N+ S I P' 9PN' JG' Q
H G' 7P99 ' HMO' M' 9GK M ! ' N ' H G' I NHP 8
" G' 7P' G' !' 9 ' M ! O' H G' KH 9O
/ UP' H I ' AT' KHM ! KP SD4PN' Q P' JG' J ' OPGLMNKH
2' M I ' HJGH%O' J ! N 9' J ' K NT' AP' M7 P+
! O' NHP !' 2%99' GLPMU' M' 9 NN9P+

' SK I P' N ' M ! ' P ! O+
')*

1' I NHP ' I NHP [
= ! " 3' 1 / 2#' (5' ' "-$ - '
X HMN' HM P' T J' O !P' 9 PH 9O ' NHP' HPM P ! G' O ' LP+
HP' Q OG' 9 U' O ! ' M ! O' NH G' J ! ! MNJ M9' GKP ! P'
HPT' 9MJQH' MN+' 1' I T' I NHP ' I NHP [1' [
4 J' HM P' !' M' HMLLT' KN T' N ' & I P
JN ' 7 ' T J ' G ! SAP9 P P' N ' 1 ' AP9 P P' N+
GN' OM ! QP JG9T' T J' HM P' NH' H I ' L P M 9%O+
27' ! N' I GN' I NM9' N ' H I +' JN ' 9PN' N' K I P8 S
#J7 O JG ' NH JQH' 2' KM ! ! N' I MUP' N JP' M G+
2%99' 7 M I P' K ! P ! P ! N' LPMKP+' ' Q O' #J7 O JG
X P P' T J' ! ' I T' GNPMO ' J9O' T J' HM P' HPM O'
#' I NHP ' 9PGG' \ ' Q M ! NPO' 9PGG ' #J7 O JG' \
& . ' MG' I %O' NHM9+
! ' 2' OM P' AP' G !' T J' P P
! O' G ' N' G' ! ' 9 NN9P' NH ! Q' N ' I MUP'
! P' PTPG' N ' G PMN' K I LMGG !+' JN ' Q O' G +
X HMN' LPMKP' T J%99' I MUP ' MO GP' I P ' 7 ' I T' LM N+
2%99' ! N' N ' & I P ' 2$99' AMKU' NH' T J8 M ! O' L MT' T J+
NM ! O' N ' I P' !' NH G' KMJGP+ S 1' I NHP [7P' '
&L' ')' M I ' Q9MO' NH J' HMGN' GPN' NHT' I P KT' M ! O' NHT' H ! J '
N' O 77P P ! KP' !' NHPP ' JN' 7' NHMN' 2%99' U'
TGP97' M' 7 I P ' 7 NJ ! P+' = "
= ' / MO PG' ' ' - 3 -' !' '
! ' #T ' AT' M ! O' AT8
= !' 1 / 2#' 9& : / 2#' B +'
JN' P' 99' O ! U' N QPNHP 8 M ! O' T J' GHM99' APM '
#' APNNP ' N ! PGG' AMKU' NHM !' OG ' H KH' P+
1 !' 9 UP' K ! O N !G ' 99' HM P' K J ! NP GPM9%O+
I P ' P ! NP ' NH' JG+' / MO PG ' T J' OPGP P'
' HM P' M' NP I L9P' AJ 9N' T J ' M99' NHP' G OG'
2 !' 2NM9T ' M ! O' HP ' K ! 7POP MNP' M I G+
J9O' ! N' HM P' I MOP' NH G' LPMKP+' = 4 &

0 3' 2 +S& I P+' ' ,&('
') 4 ' "' (

E ' PP' T J' T ! O% K Q !' %NHP' ML N 98 T ! O% K !P _
GN ! P' \
7 ' X HT ' HMN' 7' NHMN' 9
E ' 27' N' AP' L GG A9P' 7 ' T J' N ' O GL9MKP' N' NH' T J '
9 NN9P' 7 ! QP ' NHP P' G' G I P' H LP' NHP' 9MO PG' 7' & I P ' PGLP_
K M99T' H G' I NHP ' I MT' L P M 9' NH' H I +' JN' 2' GMT' NHP P' G'
! ' H LP' ! %N 8 LJ ' NH MNG' M P' GP ! NP ! KPO ' M ! O' GNMT' JL !'
PWPKJN !+
7 ' 2G %N' L GG A9P' NHMN' G ' GH N' M' N I P' KM !' M9NP ' NHP' K !_
O N !' 7' M' I M !' \
E ' HP P' G' O 77P P ! KT' APN PP !' M' Q JA' M ! O' M' AJNNP 79T' 8
TPN' T J ' AJNNP 79T' MG' M' Q JA+' H G' M K JG' G' Q !'
7 I' I M !' N ' O MQ ! ' HP' HMG' ! QG8 HP%G' I P' NHM !' M'
K PPL ! Q' NH ! Q+
7 ' " P' 9 PO' H G' I NHP ' OPM 9T+
E ' ' O O' HP' I P ' M ! O' HP' ! ' I P' P I P I AP G' H G'
+ I NHP ' ! ' NHM !' M ! ' P QHN' TPM ' 9O' H GP+' HP' NM N ! PGG'
7' H G' 7MKP' G J G' LP' Q MLPG+' X HP !' HP' M9UG ' HP' I PG%
9 UP' M !' P ! Q ! P ' M ! O' NHP' Q J ! O' GH ! UG' AP7 P' H G' N PMO ! Q+'
" P' G' MA9P' N ' L P KP' M' K G9PN' NH' H G' PTP8 NM9UG' 9 UP' M'
U ! P99 ' M ! O' H G' HJ I ' G' M' AMNNP T+' " P' G NG' !' H G' GNMNP '
MG' M' NH ! Q' I MOP' 7 ' #9PWM ! OP +' X HMN' HP' A OG' AP' O !P'
G' 7 ! GHPO' NH' H G' A OO ! Q+' " P' M ! NG' ! NH ! Q' 7' M' Q O'
AJN' PNP ! NT ' M ! O' M' HPM P ! ' N ' NH !P' !+
7 ' 4PG' I P KT' 7' T J' PL N' H I ' N J9T+
E ' 2' LM !N' H I ' !' NHP' KHM MKNP +' M U' HMN' I P KT'
H G' I NHP ' GHM99' A !Q' 7 I ' H I ' HP P' G' ! ' I P' I P KT'
!' H I ' NHM !' NHP P' G' I 9U' !' M' I M9P' N QP 8 NHMN' GHM99' J '
L ' K NT' 7 ! O' M ! O' M99' NH G' G %9 !Q' 7' T J+
7 ' HP' Q OG' AP' Q O' J ! N ' JG[
E 0' ' !' GJKH' M' KMGP' NHP' Q OG' 99' ! N' AP' Q O' J ! N '
JG+' X HP !' P' AM ! GHPO' H I ' P' PGLPKNPO' ! N' NHP I ' ' M ! O'
HP' PNJ ! !Q' N ' A PMU' J ' ! PKUG ' NHPT' PGLPKN' ! N' JG+

, ,

'2+

g' ' R='(' ' ' $;' '$ ' ' '0$ '

(' NG ODLG' CJA' H BDDGOCAH' A>' CFG "A@?H' KMGL@?H' ? ?H C CFG K?CDD@?H ' >'CFG GOAHN FG ?E R

= .G07B G' CMG' @A C K?CC A>' CFG ?D7LMG' M?HN' J1CFH' CFG CGDDCADE A>' "A@G' J? ' LGOA@G' FG?CFE ?HN' L?DGH' >AD' M?0(' A>' KMAB FH '>AD CF?C CFGE F?N' HA'C@G HAD' @G?H' CA' 07B G' 0ADH' CA' LG' LDAB FC' CFG@' ABC' A>' ACFGD' 0ABHCDG' CA' AJ' LE' DG? AH' A>' CFGD' J?D ' JFDOF' @?NG CFG G CDG@G NG?DCF CFGE F?N' ?@A 'CFG@' A J' CFA G LB E'KD?CCMGD ' CF?C AB FC CFG KGAKMG8' AAN' J1MH' LE' BOF' >M?CCGDH ' JADN ' KGD-0GP1H ' DG?C' O?DO1CE' A>' 0ADH' CA' LG' J1CFH' CFG OCCE R ?HN' CFAB F CFGDG F?N' LGGH' KMGHCE' GHAB F' EGC CFG 0A@@AH' KGAKMG F?N' HA' @AHGE' CA' LBE' 1CR CFGE' KDG?N' ?LDA?N' >?M G C?MG ' ?HN' DB@ABD ' ? ?H C CFG' HALDMCE' C F?C CFGE' 1H' DGPGH G' A>' CFG KGAKMG ' F?N' KD?OC GN' ?HN' KDAOBDGN' CFG G CDG@G' NG?DCF ?@AH ' CFG@ I

' ') R L ' i 2

F?(KGDG' F? ' >AMMAJGN' MBC?DOF' PGDE' OMA GME' 1H' F1 ' H?DD?C1PG' A>' CFG

FC@ GM>' CA' DGSA1OG' ?HN' FAHABD' FGD ' LBC ?C FGD' NG 1DG' CAA(' ?' J1>G ?M A' LE' JFA@' FG' F?N' CJA' 0F1MNDGH ' ?HN' EGC' HGPGD' MG>C F1 ' @ACFGD8 ' FAB G CFGDG>ADG I

J?D? ? ?H C CFG) AM OG ' R

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CA' C?E' F□@' .BC' FG' MAA(□H' ?LABC' F□@' ?HN' GG□H' FG' J?' GHCGDGN' CFG' O□CE' J□CF' PGDE' >GJ' @GH' CA' FGMK' F□@' ?HN' KGDOG□P□H' FG' J?' GHP□DAHGN' LE' F□' GHG@□G' CF?C' ?CFGDGN' DABHN' ?LABC' CA' GC' BKAH' F□@' N□N' CF□H ' ?' □C' □' JD□CCGH' JAHNGD>BM' ?HN' □HODGN□LMG' ?' JGMM' >AD' CFG' >ADOG' A>' F□' F?HN' ?' ?M A' >AD' CFG' ? □M□CE' A>' F□' LANE' ?HN' J□CF' ?' JAHNGD>BM' OABD? G' ?HN' D8?M□?HCHG ' FG' @?NG' ?' M?HG' CFDAB F' CFG' @□N C A>' CFG@' ?HN' APGDCFDGJ' ?M A' CFA G' FG' M?□N' ?C' CF?C' A@G' FG' @?NG' DBH' CA' CFG' >BDCFG C' K?DC' A>' CFG' O□CE' ?HN' ACFGD' >AD' >G?D' FG' @?NG' E□GMN' CFG@ GMPG ' ?HN' CA' MGC' >?MM CFG□D' JG?KAH' LG>ADG' F□@' .E' CF□' @G?H ' &?DC□B ' CF?C' J?' ACCGH' ABC' F?N' A@G' MG□ BDG' CA' LD□H' CFG' "A@?H ' J□CF' @ADG' ?>GCE' □HCA' CFG' O□CE' #FG' O□CE' LG□H' C?(GH' □H' CF□' ADC CFG' @A C' K?DC' A>' CFG' AMN□GD' LG ?H' □HOAHC□HGHCME' CA' KA□M' CA' O?DDE' ?J?E' ?HN' CA' MAA(' BK' CFG' LAACE' CFGE' F?N' JAH' .BC' &?DC□B ' J?'@?DPGMMAB ?H DE' J□CF' CFG@ AJLG□C' ODE' ?HN' ?E' CA' CFG@' JF?C' FG' OABMN PGDE' >GJ' A>' CFG@' JABMN' FG?D(GH' CA' F□@' FGDG>ADG' C?(□H' CFA G' CF?C' J□MM□H ME' A>>GDGN' CFG@ GMPG ' CA' >AMMAJ' F□@' FG' JGHC' ABC' A>' CFG' O□CE' ?HN' CAA(' F□' J?E' CAJ?DN' CF?C' K?DC' JFGDG' FG' BHNGD CAAN' CFG' DG C' A>' CFG' ?D@E' J? 'G FADC□H '?HN' GHCDG?C□H 'CFG@' LE' CFG' J?E' CF?C' >AMMAJGN' F□@' HAC' CA' LG' >?□HC FG?DCGN' ?HN' A>C' FAMN□H ' BK' F□ ' F?HN ' CA' FG?PGH ' FG' LG AB FC' CFG' AN ' CA' LG' D?O□AB ' ?HN' >??PABD?LMG' BHCA' F□@' CF?C' FG' @□ FC' OA@G' □H' C□@G' CA' CFG' L?CCMG ' ?HN' □H' ?' 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G' #FGH' &?DC□B ' JFGH' LACF' ?D@□G ' O?@G' ?M@A C' CA' SA□H ' ?NP?HOGN' F□@ GM>' ?' AAN' K?OG' LG>ADG' F□ ' OA@K?HE' ?HN' JGHC' A' >□GDOGME' CA' □PG' OF?D G' AH' CFG' P?J?DN' CF?C' O?@G' D□ FC' ? ?□H C' F□@' CF?C' CFGE' OABMN' C?HN' HA' MAH GD' □H' F□ ' F?HN ' FG' @?NG' BOF' ?' M?HG' CFDAB F' CFG@' ?HN' AKGHGN' ?' K? ? G' □HCA' CFG' L?CCMG' A>' CFG' GHG@□G ' . BC' CFG' CJA' J□H ' A>' G□CFGD' □NG' CBDHGN' AHG' CA' CFG' ACFGD' CA' OA@K? ' F□@' □H' LGCJGGH' CFG@' JF□OF' CFG' OAH BM' A@□H□B ' KGDOG□P□H ' FG' GHC' CF□CFGD' CD?□ FC' A>' CFG' LG C' AMN□GD ' FG' F?N' ?LABC' F□@' A' CFG' L?CCMG' J?' @?DPGMMAB ' LMAANE' ?LABC' &?DC□B ' ?HN' □H' ?' 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' BCCGDME' APGDCFDAJH' ?HN' HB@LGD' A>' CFG@' M?□H' ?HN' C?(GH' KD□ AHGD ' #FG' HG C' @ADH□H ' LGC□@G ' &?DC□B ' JGHC' CA' CFG' OAH BM' ?HN' CFG' ACFGD' "A@?H ' J□CF' F□@' #FGDG' CFG' OAH BM' A@□H□B ' A□H ' BK' CA' F□ ' 0F?□D' A>' C?CG' □H' CFG' KDG GHOG' A>' CFG' JFAMG' ?D@E' ?PG' CF?H(' CA' CFG' AN ' >AD' A' DG?C' MAD□AB ' ?HN' KDA KGDAB ' ?' P□OCADE' #FGH' FG' K?(G' CA' &?DC□B ' JFA G' P?M□?HCHG ' FG' OA@@GHNGN' LGEAHN' CFG' @AAH' LACF' >AD' CF?C' FG' F□@ GM>' ?J' F□@' NA' J□CF' F□ ' GEG ' ?' ?M A' >AD' CF?C' &?DC□B ' F?N' DGKADCGN' BHCA' F□@' A' □H' CFG' GHN' FG' J□MMGN' &?DC□B ' CF?C' FG' FABMN' OFAA G' ABC' A>' ?MM' CFG' FAD G' CFGE' F?N' C?(GH' A>' CFG□D' GHG@□G ' ?HN' A>' ?MM' CFG' AAN ' CFGE' F?N' JAH' VJFGDGA>' CFGDG' J?' DG?C' CADG ' CGH' A>' GPGDE' ADC' JF□OF' FG' M□(GN' LG C' LG>ADG' ?HE' N□ CD□LBC□AH' FABMN' LG' @?NG' CA' ACFGD' .G □NG ' CF□ ' DG?C' FAHABD?LMG' A>>GD' FG' F?N' @?NG' F□@' FG' ?PG' F□@' □H' CG C□@AHE' CF?C' FG' F?N' JAH' CF?C' N?E' CFG' KD□OG' A>KDAJG ' ?LAPG' ?MM' ACFGD' ?' AANME' FAD G' J□CF' ?' O?K?D□ AH' ?HN' ?MM'

>BDH□CBDG' CA' F□@' JF□OF' CFG' JFAMG' ?D@E' LGFAMN□H ' N□N' @?DPGMMAB ME' KD?□ G' ?HN' OA@@GHN' .BC' &?DC□B ' CGKK□H ' >ADCF' CAMN' CFG' OAH BM' FG' @A C' CF?H(>BMME' ?OOGKCGN' CFG' □>C' A>' F□ ' FAD G' ?HN' J?' ?' M?N' @?H' LG □NG ' CF?C' F□ ' GDP□OG' F?N' NG GDPGN' F□ ' GHGD?M8 ' OA@@GHN?-C□AH' ?HN' ?' >AD' F□ ' ACFGD' A>>GD' JF□OF' J?' D?CFGD' ?' @GDOGH?DE' DGJ?DN' CF?H' ?H' FAHABD?LMG' DGOA@KGH G' FG' JABMN' F?PG' HAHG' A>' □C' LBC' J?' OAHCGHCGN' CA' F?PG' F□ ' GQB?M' K?DC' J□CF' CFG' ACFGD' AMN□GD ' HME' CF□ ' D?OG' V ?□N' FG ' ' OD?PG' ?HN' LG GGOF' EAB' CA' D?HC' @G' ?@AH ' CFG')AM OG ' CFGDG' □ ' ?H' AMN' >D□GHN' ?HN' FA C' A>' @□HG' ?H' FAHG C' JG?MCFE' @?H' ?HN' HAJ' ?' KD□ AHGD' JFA' M□P□H ' LG>ADG' □H' DG?C' JG?MCF' □H' F□ ' AJH' OABHCDE' M□PGCF' HAJ' ?' KAAD' KD□ AHGD' □H' CFG' F?HN ' A>' F□ ' GHG@□G ' ?HN' EGC' HACJ□CF C?HN□H ' ?MM' CF□ ' F□ ' @□ GDE' ?HN' @□ >ADCBHG' □C' JABMN' NA' @G' DG?C' KMG? BDG' □>' ' OABMN' ?PG' F□@' >DA@' CF□ ' AHG' N?H GD' CA' (GGK' F□@' >DA@' LG□H ' AMN' ? ' ?' M?PG ' #FG' AMN□GD ' FG?D□H ' &?DC□H 8 JADN ' @?NG' ?' @?DPGMMAB ' DG?C' FABC' ?@AH ' CFG@ >CGD CF□ ' FABC' ?HN' HA□ G' A>' CFG' ? G@LME' J?' A@GJF?C' ?KKG? GN' CFG' OAH BM' A@□H□B ' LG ?H' CA' KG?(' □H' CF□ ' ADC;H S ' O?HHAC' OA@KGM' &?DC□B ' CA' C?(G' CFG G' □>C ' JG' A>>GD' F□@' □>' FG' J□MM' HAC' DGOG□PG' CFG@' LBC J G' J□MM' □PG' F□@' BOF' ?' DGJ?DN' >AD' CFG' HALMG' GDP□OG' FG' F?CF' NAHG' ?' FG' O?HHAC' DG>B G' #FGDG>ADG' JG' NA' ADNGD' ?HN' NGODGG' CF?C' FGHOG->ADCF' FG' LG' O?MMGN' AD□AM?HB ' BHMG ' F□ ' P?M□?HC' ?OC ' F?PG' JAH' F□@' CF?C' H?@G' LG>ADG' ABD' HA@□H?C□AH' HN' A' GPGD' □HOG' FG' C□MM' L?DG' CFG' CF□DN' H?@G' A>' AD□AM?HB I

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! -2+ '(+**C + , -2 ;*2(% B-2+ +:-,+:%(%,-+%-,0 ;-(*'+* *-
B-+%,@%J *2:%;-(- -,+** '*'B-((*,-,0 @:*%2 -,0 +**
'@:<7%,*7%2 +* (% ; -,0 *B ,*,-(*,%* '-: <: ,0 -,0
<2%-+ @*'2-<%'+:-+ -@C%0 +:% <2-7 +1 -,0 - -9 +1 +:-+ (*<*++%,
;+:.'0< %,+* %-2,<-,0 2%-(*,;::@:*,1 (+*9% **C%0 *2
,-<*7%2,*2* (+-+%J -,0 +:-+ 2% % 9%2%0 ,*+:*; ,%((((
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' R = .'$ ' ' D/

,' A &?DCB '0?@G ?HN KDG GHCGN F@ GM>CA ?H JGD CFGD ?00B ?-
CAH '? ?H C F@ ' ?HN CFG KGAKMG FGMN CFGD KG?OG '?HN ?PG ?CCGHCPG
G?D CA FG?D JF?C FG JABMN ?E .BC JFGDG CFGE CFAB FC CA F?PG
FG?DN PGDE FB@LMG ?HN MAJME JADN OA@G >DA@ F@ ' FG LG ?H HAC
AHME CA B G F ' JAHCGN LAMNHG A> KG?(H 'VJF0F A>C GM>J?' PGDE
DAB F ?HN BHKMG? ?HC ' ?HN NN @ADG ? D?P?CG F ' ?00B ?CAH CF?H
KBD G F ' HHAOGHOE ' LBC ?M A ?PG F@ GM> H F ' JADN ' CA CFBHNGD '
?HN MAA(' CFGDGJCF?M A D@ME ' ?' CFAB F FG @?NG HA DGO(AH H 'A>
CFG @?CCGD ' #F ' CDDGN OA?M '?@AH ' CFG KGAKMG ' JFA JGDG H JAH-
NGD>BM >BDE ?C C ' ?HN CFGD F?CG ?HN @?MOG DGJ A CAJ?DN F@ CF?C
CFGE OABMN FAMN HA MAH GD ' LG?D ' HAD GHNBDG F ' LD?PGDE ?HN O?DGMG '
LAMNHG ' FGDGBKAH OH B ' CFG ODBGMMG C ?HN CABCG C A> CFG
CDLBHG ' ?>CGD FG F?N JF KGDGN ? MCCMG JCF F ' OA@K?H AH ' NN
AKGHME KDAHABHOG ' H CFG >?OG A> ?MM CFG KGAKMG ' &?DCB ' ? ' OAH-
NG@HGN LE CFG CDLBHG ' CA NG ' #FGH 'KDG GHCME ' FG OA@@?HNGN CFG
?GNMG ' CA ?KKDGFGHN F@ ' ?HN O?DDE F@ CD? FC CA CFG DAO('#?DKG?H '
?HN CA O? C F@ FG?NMAH ' NAJH CFG ?@G ' FGH CFG XNMG ' O?@G
CA M?E F?HN ' BKAH &?DCB ' CA NA CF?C CFGE JGDG OA@@?HNGN ' NPGD '
A> CFG KGAKMG CFG@ GMPG ' CFAB FC C CAA ODBGM ?HN PAMGHC ?' NGGN I

' R ='# ' ' '" $: 7F

,' FGH CFGE O?@G CA CGMM CFG PAOG ' A> CFG CDLG ' CFGDG JGDG CFDGG
PAOG ' ANN JFOF OAHNG@HGN F@ CA LG L?H FGN >AD GPGD ' >CGD
NGOM?D?CAH A> CFG GHCGHOG ' CFG KGAKMG @?NG BOF SAE ' ? ' CFGE HGPGD
DGSAOGN @ADG >AD ?HE L?CCMG CFGE F?N JAH BKAH CFGD GHG@G ' CFGE
JGDG A LD?PG ?HN MPGME ' ?HN JGHC FA@G A SAOBHNME >DA@ CFG
? G@LME '>AD CDB@KF A> CF ' GHCGHOG ' #FG GH?CG ? ?H ' H OAH-
CD?DE @?HHGD ' JGDG ? ' ?N ?HN FG?PE 'DGKGHCH ' CFG@ GMPG ' LGEAHN
@G? BDG CF?C CFGE F?N HAC D?CFGD NGCGD@HGN CA F?PG NAHG ?HN B>-
>GDGN ?HECFH ' JF?C AGPGD ' LG>ADG CFG 0A@@AH KGAKMG FABMN A
?DDA ?HME ?HN ABCD? GAB ME F?PG ?LB GN CFGD ?BCFADCE I

'2 +

)' ' R ='! : 3 ' '

#FG NGK?DCBDG A> ADAM?HB '>DA@ "A@G ' CFB ' NG ODLGN LE
MBC?DOF R

=' FGH FG J? ' OA@G FA@G CA F ' FAB G ? ?H '?HN F?N C?(GH F '
MG?PG A>F ' @ACFGD ?HN JG>G '>HNH ' CFG@ JGGKH '?HN CD(H 'ABC
>AD ADDAJ '?HN F?N ?M A OA@>ADCGN ?HN KGD B?NGN CFG@ CA LG OAH-
CGHC JCF F ' OF?HOG ' FG JGHC @@GNCGME CA CFG ?CG A> CFG OCE '
?OOA@K?HGN JCF ?' DG?C HB@LGD A> K?CDOO?H ' CF?C LDAB FC F@
CFCFGD '>DA@ JFGHOG FG JGHC AH F ' J?E JCF CFDGG AD >ABD A> F '
>DGHN ' AHME ' C?(H ' HACFH ' JCF F@ ' HAD DGQBG CH ' ?HECFH ' A>
?HE @?H ' A FG DG@?HGN ? >GJ N?E 'H CFG OABHCDE ?C F ' FAB G '
CBD@AMGN JCF BHNDE ADC '?HN (HN ' A>CFAB FC ' BOF ? ' CFG >DG A>
F ' OFAMGD NN CD BK I

:' ') R ='&' ' ' ' $ '& 7

#FG GHCDE A> ADAM?HB ' HCA CFG ='GHG@E OCE I ?HN CFG HCGDPGJ
LGCJGGH CFG CJA DP?M O?KC?H ' ?DG @A C D?KF O?MME CAMN LE
MBC?DOF R

='C J? ' GPGH CJM FC JFGH FG GHCGDGN CFG OCE A> HCB@ ' ?HN
@?HE KGAKMG @GC FC@ H CFG CDGGC ' LBC HA @?H (HGJ FC@ ' A FG
JGHC NDGOCME CA #BMMB ' B>NB 8FAB G ' ?HN JFGH FG O?@G CFCFGD FG
AC FC@ BK CD?H FC CA CFG OF@HGE FG?DCF ' ?HN ?C FC@ NAJH ' ?HN
K?(G HAC ?' JADN CA ?HE @?H ' F >?OG ?MM @B>>MGN APGD ' #FGE A>CFG
FAB G ' KEH ' FC@ ' JAHNGDGN JF?C FG FABMN LG ' ?HN EGC CFGE NBD C
HAC LN FC@ D G ' AD MM >?PABDGNME @B>>MGN ?HN N B GN ? ' FG J? '
EGC CFGDG ?KKG?DGN ?' OGDC?H @?SG CE H F ' OABHCGH?HOG ?HN H F '
MGHOG ' JFGDGBKAH CFGE JGHC CA #BMMB ' JFA J? ' ?C BKKGD ' CA CGMM
FC@ A> CFG CD?H G N B H ' A> CF ' @?H ' #BMMB ' DA G KDG GHCME
>DA@ CFG LA?DN ?HN OA@H ' CAJ?DN F@ '? (GN F@ JF?C FG J? '
?HN JFGDG>ADG FG O?@G ' #FGH &?DCB ' BH@B>>MGN F@ GM>' ?HN ?>CGD
FG F?N K?B GN ?JFMG '@?(H ' HA ?H JGD ' FG ?N BHCA F@R >CFAB
(HAJG C @G HAC EGC '#BMMB ?HN GGH ' @G ' NA C HAC KGDF?K ' LGMGPG
@G CA LG CFG @?H ?@ HNGGN ' @B C A> HGOG CE LGCD?E @E GM> CA
LG CF?C ?@ ?@ ?B &?DCB JFA F?CF NAHG CA CFE GM> K?D-
COBM?DME ?HN CA ?MM CFG)AM OG GHGD?MME DG?C FBDC ?HN @ OFG>'
JFOF O?HHAC NGHE >AD @E BDH?@G A> ADAM?HB ' CF?C LG?D >AD
 HGPGD F?N ACFGD LGHG>C HAD DGOA@KGH G A> CFG CDBG ?HN K?H>BM
GDPOG F?PG NAHG ?HN CFG G CDG@G N?H GD F?PG LGGH H ' LBC CF
AHME BDH?@G ? AAN @G@ADE ?HN JHG A> CFG @?MOG ?HN N -
KMG? BDG CFAB FABMN C LG?D @G HNGGN CFG H?@G AHME DG@?HGCF
JCF @G >AD CFG DG C CFG GHPE ?HN ODBGMCE A> CFG KGAKMG A> "A@G
F?PG C?(GH >DA@ @G LE CFG B>>GD?HOG A> CFG N? C?DNME HALMCE
?HN @? CD?CG JFA F?PG >AD ?(GH @G ?HN MGC @E @ GDE GDPG CFE CBDH
?HN A B G C ? ' @E GDPOG @?E LG ?' LGHG>C CA CFG)AM OG KDA@ -
H CFGG CF?C JMM > FC JCF LGCCGD AAN JMM >AD ?MM EAB CF?H NN
JFGH J? ? ?H C EAB (HAJH CF?C CFGE > FC @ADG P?M?HME JFA
(HAJ CFG >ADOG A> CFG GHG@E CF?H BOF ? ' F?PG HGPGD KDAPGN C'
HN >C LG A CF?C CFAB N?DG HAC ?HN CF?C CFAB ?DC JG?DE CA KDAPG
>ADCBHG ?HE @ADG CFGH ?@ ?M A JG?DE CA MPG ?HE MAH GD ' HN C
JGDG HA J NA@ H CFGG CA ?PG CFG M>G A> F@ JFA F?CF LGGH FGDG-
CA>ADG CFE @ADC?M GHG@E ?HN JFA G GDPOG H J O?H HACFH ' FGMK
HAD KMG? BDG CFGG ' #BMMB FG?DH ' JF?C FG ?N ' J? ' ?' @?DPGMMAB '
M?N @?H ?HN C?(H ' F@ LE CFG F?HN ' FG ?N BHCA F@R C?HN BK '
 &?DCB ?HN LG A> AAN OFGGD '>AD H KDA>>GDH ' CFE GM> BHCA B '
CFAB NAG C B ' DG?C FAHABD ' ?HN LE CF ' @G?H ' CFAB @?EG C FAKG
?M A A> DG?CGD CFH ?C ?MM CFG)AM OG F?HN ' A FG >G? CGN F@
>AD CF?C C@G ?HN GHCGDC?HGN F@ H CFG FAHABD?LMG C @?HHGD FG
OABMN I

' +

I' ' H '0 ' ' ' 'D 0' /

G OAHCHBG ABD G CD?OC '>DA@ ADCF8 ' MBC?DOF R

='A CFGE ?MM ? DGGN CA GCFGD CA GHN ?@L? ?NAD ' BHCA F@ ' CA
MGC F@ BHNGD C?HN FAJ 'F ' OABHCDE@GH NN O?MM F@ FA@G ? ?H '
?HN DG CADGN F@ CA ?MM F ' AAN '?HN LG AB FC F@ CA NGMPGD CFG@
>DA@ CF ' J?D ' #FG ?@L? ?NAD ' CF?C JGDG GHC JGDG &?DCB 8 '
>?@M?D >DGHN ' ?HN ?OQB?HC?HOG ' JFA MAA(GN ?C CFG MG? C >AD ?'
OABDCGAB ' JGMOA@G A> F@ ' ? ' A> CFGD >?@F?D >DGHN ?HN (H @?H '
AJLGC CFGE >ABHN HACFH ' MG '>AD ?C CFGD OA@H ' CFGE JGDG
LDAB FC CFDAB F CFG O?@K CA CFG KM?OG JFGDG FG J? ' GC H F ' OF?D
A> C?CG JCF ?' @?DPGMMAB ' ?HN ?H BH KG?(?LMG @?SG CE F?PH ' CFG
OFG>G C @GH A> CFG)AM OG '?LABC F@ ' A FG OA@@?HNGN CFG@ CA
NGOM?DG AKGHME CFG O?B G A> CFGD OA@H ' JFOF CFGE NGMPGDGN H
CFG @A C FB@LMG ?HN MAJME JADN ' CFGE KA LME OABMN NGP G '?HN
JCF ?MM @ANG C OABHCGH?HOG ?HN LGF?PABD ? DGG?LMG CA CFG ?@G '
FGH CFGE F?N NAHG CFGD @G ? G ' >AD CFG HSBDE CFGE F?N NAHG
F@ FG ?H JGDGN CFG@ PGDE FACME ?HN H DG?C OFAMGD ' LBC ? ' GHGD?M
A> CFG)AM OG ' FG J MMGN CFG@ CA DG CADG BHCA CFG)AM OG '?MM CFGD
M?HN ' ?HN O CG ' CFGE F?N C?(GH >DA@ CFG@ H >AD@GD J?D ' ?HN

GG,

@ADGAPG□ ' CF?C CFGE FABMN □PG CFG@ CFG M□(G FAHABD ?HN >DGGNA@ A>' "A@G ? ' CFGE F?N LG>ADG □PGH CA CFG $?C□H ' AD ACFGDJ□ G CFGE F?N HA ACFGD @G?H CA GHN CF□ ' J?D □> CFGE N□N HAC D?HC CFG G FAHG C ?HN SB C OAHN□C□AH ' A>' KG?OG I

' H ,'Z% ' 0 ' ' /

,' FG CAA (' FGD N?B FCGD □H M?J ' ?HN & ?DC□H 8 ' OF□MNDGH ' J□CF FGD ' ?HN ' LG□H ' ?OOA@K?H□GN J□CF ?MM CFG ACFGD "A@?H M?N□G ' CFGE JGHC □H CDAAK CA GCFGD BHCA CFG) AM OG 8 O?@K ' JFA@ ' JFGH CFGE ?J ' CFGE A>' CFG@ GMPG ' N□N LACF K□CE ?HN DGPGDGHOG FGD ' ?HN CFGDG J? ' HAC ?' @?H ?@AH ' CFG@ CF?C AHOG NBD C ?E' ?' JADN BHCA FGD AJ ' J? ' & ?DC□B ' GC CFGH □H F□ ' OF?□D A>' C?CG ' J□CF ?MM CFG FAHABD ' A>' ?' GHGD?M ' ?HN JFGH FG F?N K□GN CFG JA@GH OA@□H ' ?>?D A>>' FG @?DPGMMGN JF?C CFG @?CCGD @G?HC ' LBC ?>CGDJ?DN ' (HAJ□H ' F□ ' J□>G JF□OF O?@G >ADG@A C ' FG NGCGD@□HGN ?C CFG >□D C CA KGD □ C □H F□ ' AL C□H?CG ?HN □H>MG □LMG D?HOABD ' . BC APGDOA@G □H CFG GHN J□CF H?CBD?M ?>>GOC□AH ' ?HN LG□H ' ?MCA GCFGD ?MCGDGN CA GG CFG@ ' F□ ' FG?DC JABMN HAC GDPG F□@ CA C?DDE CFG□D OA@□H ' CA F□ ' 0F?□D ' LBC ' OA@□H ' NAJH □H F? CG ' FG JGHC CA @GGC CFG@ ' ?HN >□D C FG (□ GN F□ ' @ACFGD ' ?HN G@LD?OGN FGD ?' KDGCCE JF□MG ' CFGH F□ ' J□>G ?HN M□CCMG OF□MNDGH ' ?HN H?CBDG A' JDAB FC J□CF F□@ CF?C CFG CG?D ' >GMM >DA@ F□ ' GEG ' ?HN FG OABMN HAC (GGK F□@ GM>' >DA@ @?(□H ' @BOF A>' CFG@ ' LBC E□GMNGN CA CFG ?>>GOC□AH A>' F□ ' LMAAN ' ?' □> FG F?N LGGH P□AMGHCME O?DD□GN J□CF CFG >BDE A>' ?' @A C J□>C DBHH□H ' CDG?@' >CGD FG F?N CFB ' MAP□H ME DGOG□PGN CFG@ ' ?HN KGDOG□P□H ' CF?C F□ ' @ACFGD) AMB@H□?' JABMN LG □H CA KG?(' CA F□@ ' FG O?MMGN CFG 0F□G>G C A>' CFG OABHO□M A>' CFG) AM OG ' CA FG?D JF?C FG JABMN ?E' #FGH FG K?(G □H CF□ ' ADC R < >' JG FGMN ABD KG?OG V@E AH ' ?HN NGCGD@□HGN HAC CA KG?(' CFG C?CG A>' ABD KAAD LAN□G ' ?HN KDG GHC □ FC A>' ABD D?□@GHC ' JABMN G? □ME LGCD?E CA CFGG JF?C M□>G JG F?PG MGN ?C FA@G ' □HOG CFE G □MG ?HN ?LANG ?LDA?N ' LBC CF□H (' HAJ ' J□CF CFE GM>' FAJ ' @BOF @ADG BH>ADCBH?CG CF?H ?MM CFG JA@GH M□P□H ' JG ?DG 0A@G F□CFGD ' OAH □NGD-□H ' CF?C CFG □ FC JF□OF FABMN LG @A C KMG? ?HC CA ?MM ACFGD CA LGFAMN ' K□CG>BM ADCBHG F?CF @?NG @A C >G?D>BM CA B ' @?(□H ' @E GM>' CA GG @E AH ' ?HN @E N?B FCGD FGDG FGD FB L?HN ' LG □G □H ' CFG J?MM ' A>' F□ ' H?C□PG OABHCDE ' A' ? ' CF?C JF□OF □ ' CFG AHME OA@>ADC CA ?MM ACFGD □H CFG□D ?NPGD □CE ?HN @□ GDE ' CA KD?E BHCA CFG AN ' ?HN CA O?MM CA CFG@ >AD ?□N ' □ ' CFG AHME CF□H ' JF□OF KMBH GCF B ' □HCA @A C NGGK KGDKMG □CE ' AD JG O?HHAC V?M? ' CA GCFGD KD?E LACF >AD P□OCADE CA ABD OABHCDE ' ?HN >AD ?>GCE A>' CFE M□>G ?M A' ' LBC ?' JADMN A>' D□GPAB ' OBD G ' EG? ' @ADG CF?H ?HE @ADC?M GHG@E O?H FG?K BKAH B ' ?DG >ADO□LME JD?KKGN BK □H ABD KD?EGD ' AD CFG L□CCGD AK A>' @A C F?DN OFA□OG □ ' A>>GDGN CFE J□>G ?HN OF□MNDGH ' CA >ADG A' AHG A>' CFG CJAR G□CFGD CA MW G CFG KGD AH A>' CFE GM>' AD CFG HBD G A>' CFG□D H?C□PG OABHCDE ' AD @E GM>' @E AH ' ?@' NGCGD@□HGN HAC CA C?DDE C□MM >ADCBHG □H @E' M□>GC□@G NA @?(G ?H GHN A>' CF□ ' J?D ' AD □>' ' O?HHAC KGD B?NG CFGG D?CFGD CA NA' AAN BHCA LACF K?DC□G ' CF?H CA APGDCFDAJ ?HN NG CDAE CFG AHG ' KDG>GDD□H ' MAPG ?HN H?CBDG LG>ADG CFG @?M□OG ?HN O?M?@□CE A>' J?D ' CFAB F?MC GG @E AH ' ?HN CDB C BHCA □C ' CFAB F?MC HA AAHGD @?DOF >ADJ?DN CA ? ?BMC CFE OABHCDE ' LBC CFE >AAC F?MM CDG?N BKAH CFE @ACFGD8 ' JA@L ' CF?C LDAB FC CFGG >□D C □HCA CF□ ' JADMN ' HN ' @?E HAC NG>GD CA GG CFG N?E ' G□CFGD CF?C @E AH LG MGN KD□ AHGD □H CD□B@KF LE F□ ' H?CBD?M OABHCDE@GH ' AD CF?C FG F□@ GM>' NA CD□B@KF A>' CFG@ ?HN A>' F□ ' H?CBD?M OABHCDE ' AD □>' □C JGDG A CF?C @E DGQBG C CGHNGN CA ?PG CFE OABHCDE □H NG CDAE□H ' CFG) AM OG ' ' @B C OAH>G ' CFAB JABMN C F?DNME ?HN NABLC>BMME ' DG AMPG AH CF?C ' AD ? ' CA NG CDAE CFE H?CBD?M OABHCDE ' □C □ ' ?MCA-GCFGD BH@GGC ?HN BHM?J>BM ' A JGDG □C HAC SB C ' ?HN MG ' FAHABD?LMG ' CA LGCD?E CFA G CF?C KBC CFG□D CDB C □H CFGG ' . BC @E AHME NG@?HN OAH □ CGCF CA @?(G ?' ?AM NGM□PGDE A>'?MM GP□M ' JF□OF NGM□PGDGCF GQB?M LGHG>□C ?HN ?>GCE LACF CA CFG AHG ?HN CFG ACFGD ' LBC @A C FAHABD-?LMG >AD CFG) AM OG ' AD □C F?MM ?KKG?D CF?C ' F?P□H ' P□OCADE □H CFG□D F?HN ' CFGE F?PG A>' KGO□?M >?PABD D?HCGN B ' □H BM?D D?OG ' KG?OG ' ?HN ?@□CE ' ?MLG□C CFG@ GMPG ' F?PG HA MG ' K?DC A>' LACF CF?H J G ' A>' JF□OF AAN ' □>' A' □C OA@G CA K? ' CFE GM>' □ ' CFG AHME ?BCFAD ' ?HN A' F? C CFAB CFG AHME FAHABD ' . BC □>' □C >?□M ' ?HN >?MM ABC OAHCD?DE ' CFE-GM>' ?MAHG NG GDPGNME F?MM O?DDE CFG F?@G>BM DGKDA?OF ?HN LBDNGH A>' G□CFGD K?DCE ' A' CFAB F CFG GHN A>' J?D LG BHOGDC?□H ' EGC CF□ ' HACJ□CF C?HN□H ' □ ' @A C OGDC?□H R CF?C ' □>' □C LG CFE OF?HOG CA OAH-QBGD ' CF□ ' LGHG>□C F?MC CFAB DG?K A>' CFE AANME OAHQBG C ' CA LG OFDAH□OMGN CFG KM? BG ?HN NG CDAEGD A>' CFE OABHCDE ' HN □>' >ADCBHG APGDCFDAJ ' CFGG ' CFGH CFG JADMN J□MM ?E ' CF?C CFDAB F NG □DG CA DGPGH G CFE KD□P?CG □HSBD□G ' CFAB F? C >AD GPGD BHNAHG CFE AAN >D□GHN ' JFA' N□N @A C MAP□H ME ?HN OABDCGAB ME DGOG□PG CFGG 8 & ?D

/ / 2

C□B ' ?PG AAN G?D BHCA F□ ' @ACFGD8 ' JADN ' J□CFABC □HCGDDBKC□H ' FGD KGGOF ?C ?MM ' ?HN ' ?>CGD FG F?N ?□N JF?C FG JABMN ' FG FGMN F□ ' KG?OG ?' KDGCCE JF□MG ' ?HN ?H JGDGN HAC ?' JADN ' GDGBKAH FG LG ?H ? ?□H CA KG?(' BHCA F□@ ' ?HN ?□N R < & E AH ' JFE NA C CFAB HAC ?H JGD @GW NA C CFAB CF□H (' □C AAN ?MCA GCFGD CA □PG KM?OG BHCA CFE OFAMGD ?HN NG □DG A>' DGPGH G ' ?HN CF□H (G C CFAB □C HAC FAHG CE >AD CFGG CA D?HC CFE @ACFGD8 ' DGQBG C □H A' JG□ FCE ?' O?B G'W NA C CFAB C?(G □C FAHABD?LMG >AD ?' HALMG @?H CA DG@G@LGD CFG JDAH ' ?HN □HSBD□G ' NAHG F□@ ' ?HN NA C HAC ' □H M□(G O? G ' CF□H (' □C ?H FAHG C HALMG @?H8 ' K?DC CA LG CF?H (>BM >AD CFG AANHG ' CF?C K?DGHC ' NA FAJ CA CFG□D OF□MNDGH ' ?O (HAJMGN □H ' CFG NBCE ?HN DGPGDGHOG CFGE AB FC CA LG?D BHCA CFG@ W A' @?H M□P□H ' □ ' @ADG LABHN CA FACP F□@ GM>' CF?H (>BM □H ?MM K?DC ' ?HN DG KGOC ' CF?H CFE GM>' JFA A' BH□PGD ?MME FAJ G C ?MM □H D?C□CBNG ' & ADGAPGD ' @E AH ' CFAB F? C ADGME C?(GH A>' CFE OABHCDE ' G ?OC□H ' D□GPAB ' K?E@GHC ' BKAH CFG@ □H DGPGH G A>' CFG □HSBD□G ' A>>GDGN CFGG ' LG □NG ' CFAB F? C HAC F□CFGDCA FAJGN CFE KAAD @ACFGD ?HE OABDCG E ' ?HN CFGDG>ADG □C □ ' HAC AHME FAHG C ' LBC NBG BHCA @G ' CF?C ' J□CFABC OA@KBM □AH ' ' FABMN ' ALC?□H @E A' SB C ?HN DG? AH?LMG DGQBG C A>' CFGG ' . BC □HOG LE DG? AH ' O?HHAC KGD B?NG CFGG CA □C CA JF?C KBDKA G NA ' NG>GD @E M? C FAKGW8 HN JFCF CFG G JADN ' FGD GM>' F□ ' J□>G ?HN OF□MNDGH ' >GMM NAJH BKAH CFG□D (HGG ' LG>ADG F□@ ' &?DC□B ' GG□H ' CF?C ' OABMN DG>D?□H HA MAH GD ' LBC JGHC CD?□ FC ?HN M□>C FGD BK ' ODE□H ' ABC ' < F ' @ACFGD ' JF?C F?PG EAB NAHG CA @ GW8 HN ' FAMN□H ' FGD F?DN LE CFG D□ FC F?HN ' < F ' @ACFGD8 ?□N FG ' <EAB F?PG JAH ?' F?KKE P□OCADE >AD EABD OABHCDE ' LBC @ADC?M ?HN BHF?KKE >AD EABD AH ' >AD ' GG @E GM>' P?HQB□ FGN LE EAB ?MAHG8 #FG G JADN ' LG□H ' KA(GH AKGHME ' FG K?(G ?' M□CCMG ?K?DC J□CF F□ ' @ACFGD ?HN J□>G ' ?HN CFGH MGC CFG@ DGCBDH ? ?□H CA "A@G ' >AD A' CFGE N□N DGQBG C F□@ ' ?HN A' DG@?□H□H ' □H O?@K CF?C H□ FC ' CFG HG C @ADH□H ' FG N□ MAN GN ' ?HN @?DOFGN FA@GJ?DN □HCA CFG) AM OG 8 OABHCDE ? ?□H I

') R =' % .' 'G' ' ' $ ' ' R:

=' AJ ' JFGH &?DC□B ' J? ' DGCBDHGN ? ?□H □HCA CFG O□CE A>' HC□BH >DA@ F□ ' PAE? G ' #BMMB ' CF?C F?CGN ?HN OABMN HA MAH GD ?L□NG F□@ >AD CFG >G?D FG F?N A>' F□ ' ?BCFAD□CE ' AB FC N□PGD ' @G?H ' CA @?(G F□@ ?J?E ' CF□H (□H ' CF?C ' □>' FG MGC M□K CF?C KDG GHC C□@G ' FG FABMN HGPGD DGOAPGD CFG M□(G ?HN >□C AOO? □AH ? ?□H ' FGDG>ADG #BMMB ' F?P□H ' KDAOBDGN @?HE ACFGD A>' F□ ' OAH>GNGD?OE ' DGQB□DGN &?DC□B ' @□ FC LG NGKA GN >DA@ F□ ' G C?CG ' CA DGHNGD BK ?OOABHC CA CFG) AM OG ' A>' F□ ' OF?D G ?HN APGDH@GHC ' &?DC□B ' >G?D□H ' CA LGOA@G ?' KD□P?CG @?H ? ?□H ' BHNGD #BMMB ' LG□H ' GHGD?M VJFA G ?BCFAD□CE J? ' DG?CGD ' ACFGDJ□ G ' CF?H ?HE ACFGD ?@AH ' ?MM CFG) AM OG ' ?H JGDGNR FG J? ' J□MM□H ' CA □PG BK F□ ' OF?D G ' ?HN JABMN DG □ H □C □HCA CFG F?HN ' A>' CFG MADN ' A>' CFG) AM OG ' □>' CFGE N□N ?MM OA@@?HN F□@ ' ? ' LE ?MM CFG□D OA@@?HN@GHC FG DGOG□PGN □C ' ?HN ' @ADGAPGD ' CF?C FG JABMN HAC DG>B G GPGH ?C CF?C KDG GHC CA □PG BK ?H ?OOABHC BHCA CFG KGAKMG ' □>' CFGE JABMN C?DDE CFG FG?D□H ' A>' □C #FG KGAKMG FGDGBKAH O?MMGN ?' OA@@AH OABHO□M ' □H JF□OF ? G@LME CFGDG JGDG OGDC?□H D?CAD ?KKA□HCGN ' CF?C C□DDGN BK CFG OA@@AH KGAKMG ? ?□H C F□@ ' ?HN JFGH CFGE F?N CAMN CFG□D C?MG ' &?DC□B ' DA G BK CA @?(G CFG@ ?H JGD ' AJ ' HACJ□CF C?HN□H ' CFG @BC□HAB ' KGAKMG @?NG ?' @?DPGMMAB ' DG?C HA□ G ' EGC ' JFGH CFGE ?J ' F□@ ' >AD CFG DGPGDGHOG CFGE L?DG BHCA F□ ' P?M□?HCHG ' CFGE QB□GCGN CFG@ GMPG ' ?HN ?PG F□@ ?BN□GHOG CA ?MMG G J□CF MG□ BDG JF?C FG OABMN >AD F□ ' KBD ?C□AH ' &ADGAPGD ' CFG FAHG CG C @GH A>' CFG HC□?CG ' ?HN JFA @A C DGSA□OGN □H KG?OG ' FAJGN LE CFG□D OABHCGH?HOG CF?C CFGE JABMN FG?D F□@ J□MM□H ME ' ?HN SBN G ?M A' ?OOADN□H ' CA CFG□D OAH O□GHOG ' FGDGBKAH #BMMB ' >G?D□H ' CF?C □>' FG N□N MGC F□@ KG?(' FG JABMN KDAPG F□ ' □HHA ' OGHOE CA CFG KGAKMG ' LGO?B G ' ?@AH C ACFGD CF□H ' FG F?N ?H GMAQBGHC CAH BG ' LG □NG ' CF?C ' CFG >□D C AAN GDP□OG FG F?N NAHG CA CFG KGAKMG A>' CFG) AM OG ' N□N J□H F□@ @ADG >?PABD CF?H CFG G M? C ?OOB ?C□AH ' OABMN KBDOF? G F□@ N□ KMG? BDG ' ?HN >BDCFGD@ADG ' CFG A>>GHOG CFGE M?□N CA F□ ' OF?D G J? ' ?' CG C□@AHE A>' CFG AAN J□MM CFGE AB FC F□@ ' >AD CFGE JABMN HGPGD F?PG CFAB FC FG F?N NAHG CFG@ JDAH ' >AD CF?C FG CAA (' HAC CFG O□CE A>' "A@G ' □>' CFGE F?N HAC LGGH PGDE HG?D C?(□H ' A>' □C LE @G?H ' A>' F□ ' ?KKDA?OF ?HN OAHNBOC□AH R ' >AD CFG G O?B G ' #BMMB ' CFAB FC FG @□ FC HA MAH GD NGM?E F□ ' KDG-CGHOG ?HN GHCGDKD□ G ' HG□CFGD CA C?DDE >AD CFG @BC□H□H ' ?HN D□ □H ' A>' CFG OA@@AH KGAKMG ? ?□H C F□@ ' JFGDG>ADG CFA G CF?C JGDG A>' CFG OAH K□D?OE LG ?H CA ODE ABC CF?C FG J? ' HAC CA LG FG?DN ' ?HN CF?C CFGE JABMN HAC B>>GD ?' CD?□CAD CA B BDK CED?HH□O?M KAJGD APGD CFG CD□LG A>' CFG) AM OG ' JFA JABMN HAC E□GMN BK F□ ' C?CG ?HN ?BCFAD□CE ' HN □H ?E□H ' CFG G JADN ' CFGE ?MM >GMM BKAH F□@ ' ?HN (□MGN F□@ □H CFG @?D(GC KM?OG ' HAHG A>' CFG KGAKMG AHOG A>>GD□H ' CA DG OBG F□@ I

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BDCABC' 0?MMGN' ;' JF□M□ J? ,>? CGHGN' LG>ADG' J□CF' ?' LBO(MG' ?HN' F?N' ?' FAAN' ?CC?OFGN' CA' □C = ' C' J? ' GHGD?MME' @?NG' A5' JAAM' ?HN' NEGN' LM?O(' AD' LDAJH' H' CFG C□@G A5' □OGDA' □C' J? ' ?' N□ D?OG' DGHOF' ;' J? ' A' 0?MMGN' >DA@' F?PH ' LGGH' AD□ □H?MME @?NG' A5' >AD' GH?CAD' CA' ?NAK□ BOF ?' F?L□C ' LB□ □C J? ' ?>CGDJ?DN ' JADH' LE' CFG' F□ FGD' ADNGD ' #FG' " $ ' J? ' ' □@□M?D' PG C@GHC' ?M A' J□CF' ?' MG?CFGD' C' >AMMAJ GN CFG MCHG' CFG ?LGNE' ?HN' CF□ ' KGDBM□?D□CE' J? ' KDG GDPGN' H' □C ' ?KKG?P-A5' CFG' FB@?H' LANE U?HN' CF□ ' KGDBM□?D□CE' J? ' KDG GDPGN' H' □C ' ?KKG?P-?HOD' J FGH' □C J? ' ?>CGDJ?DN ' @?NG' A5' @GC?M' C' CAK ' CFG' QB?DG ?KGDCBDG' >AD' CFG' CFDA?C' J? ' B?DNGN' LE' CFG ;' L?HN' AD' KM?CG' A5?LD? ' ' ?HN' CFG' FABMNGD ' JGDG M□ (GJ□ G KDACGCCGN' LE' KGOG ' @?NG ;' ?HN' CFG' FABMNGD ' JGDG M□ (GJ□ G KDACGCCGN' LE' KGOG ' @?NG CA' M□K' APGD' G?OF' ACFGD' #FG' ?HN' J□CF' ?' PGDE' @□HBCG' ?OOABH□' A5' CFG □HNJ>>GDGHCME AMELJB ' F?' >BDH□ FGN' B ' J□CF' ?' PGDE' @□HBCG' ?OOABH□' A5' CFG @□MC?DE GQB□K@GH□' ;' CFG "A@?H ' A5' F□ ' C□@G ' ?HN' □□' □ ' >DA@' F□ ' NG ODK□CAH' ?HN' HAC' >DA@' CFG C?GBG ' JF□OF' F?PG' LGGH' GHGD?MME H?@□ ' ?' KGDA' @BMMGB '□KF GO? □B@' O?M□ ' ?' AM□?' □□' □ ' >DA@' F□ ' L? G?' Y0' #FG' ' J? ' CFG' ?HN?M' A5' CFG "A@?H' AMN□GDE]' BOF ' F?N' H?□M ' AD' K□(G ' ?' C□' CFG' LACCA@' #FG' □ ' BKKA GN' LE' A@G' CA' LG' CFG' LAAC' JADH' LE' CFG' GH?CAD ' CFG $ ' J? ' ?M A' ?' (□HN' A5' LAAC' OAPGD□H ' CFG' >AAC' GHC□DGME' OOADN□H ' CA' KK□?HB ' □C J? ' A5' JF□CG' MG?C?FGD' ?HN' JADH' AD□ □H?MME' LE' CFG' CFGH□?H' ?HN' □G ?HND□?H' KD□G CFAAN' ?C' ?OD□>□OG ' □C J? ' JADH' □H "A@G' LE' JA@GH ?HN' G>>G@□H?CG' KGD AH ' GCDAH□B ' JFA' JADC' □C ?HN' O?MMGN' F□@ GM5' ? AMN□GD ' J? ' ? ' (GN' LE' ?' MG □AH?DE' □5' □H' F□ ' ?D@E' AMN□GD ' @?DOFGN' J□CF CFG' KF?O? □B@ R

X' <%' 7%+*' ,'%S%2@+',7%(+2*B:e@-(-+' +%(- 9',-,'FO

#FG' ' □ ' NG ODLGN' LE' %□AH' ? □B ' ? ' OA@□H ' BK' CA' CFG @□NNMG' A5' CFG MG ' CFAB F' □C N□N' HAC' OAPGD' CFG JFAMG' >AAC' LBC' AHME CFG AMG' M□(G' ?' ?HN?M' □C J? ' A5' ?' DGN' OAMABD' ?HN' AD□ □H?ME' JADH' LE' CFG' ML?H' (□H

#FG' ;' JF□OF' %□AH' ?E '□C DG G@LMGN' LACF' □H' OAMABD' ?HN' >?' F□AH' □ ' NG ODLGN' LE' □NAH□B ' KAMM□H?D□ ' ?' F?P□H ' ?' M□ ?CBDG ??C?OFGN' CA' CFG' JAMG' JF□OF' K?' GN' LGCJ5GH' CFG' DG?C?HN' GOAHN' CAG ' ?HN' CFGH' N□P□NGN' □HCA' CJA' L?HN ' HN')□D □M' CGMM' B ' CF?C' □C J? ' JADH' LE' CFG' #ED□?H' P□D □H Z

#FG' ?D@ABD' A5' CFG' "A@?H ' ?C' CFG' 0A@@GH0G@GHC' A5' CFG' DGKBLM□D' 0AH □ CGN' ?OOADN□H ' CA' $□PE ' A5' CFG ;' CFG ;' CFG ;' CFG ;' M□(G' CFG ;' ?CCD□G' ;' ?HN' □HCDANBOGN' LE' GDP□B ' #BMM□B ' #FG' ;' M□(G' CFG ;' ?AD' DG?PG ' ?HN' CFG ;' ?M' A5' LD? ' #F□ ' J? ' CFG i□DB O?H' DGHOF' ;' J? ' A' 0?MMGN' >DA@' F?PH ' LGGH' AD□ □H?MME @?NG' A5' ?' NEGN' LM?O(' AD' LDAJH' H' CFG C□@G A5' □OGDA' □C' J? ' ?' N□ D?OG' ?HN' □HCDANBOGN' LE' GDP□B ' #BMM□B ' #FG' ;' M□(G' CFG ;' ?AD' DG?PG ' ?HN' CFG i□DB O?H' DGHOF' ;' J? ' A' 0?MMGN' >DA@' F?PH ' LGGH' AD□ □H?MME @?NG' A5' ?' NEGN' LM?O(' AD' LDAJH' H' CFG C□@G A5' □OGDA' □C' J? ' ?' N□ D?OG' ?HN' □HCDANBOGN' LE' GDP□B ' #BMM□B ' #FG' ;' M□(G' CFG ;' ?AD' DG?PG ' ?HN' CFG ;' ?M' A5' LD? ' #F□ ' J?

LBC CFGE AAH ?L?HNAHGN C >AD CFG +DGG(' ;?H GMG ?HC @?HCMG' BHNGD JFCOF CFGE JADG ?' CBHD NG OGHN'H ' HF D?OG>BM >AMN ' CA CFG >GGC' 0?MMGN CFG :: 0?MMGN CFG JFCOF CFGE FBG ?HN' $BCOG A;' CFG FGDL ' JCCF JFCOF CFGE 3 '$ " ;>DA@ CFG FBG ?HN' $BCOG A;' CFG FGDL ' JCCF JFCOF CFGE JGDG' C?HGN' #FG' D? G >AD' DGGH ?HN' PGD@CMCAH' J? ' A;' ¡ 3 NBD?-CAH' >AD' EKDC?H' ?HN' #GDCBMM?H' CHPG FCH ' ? ?H C MB BDE' H?@G K?DCCOBM?DME CFA G OAMABD ' ? ' @A C ? DGG?LMG CA' CFG JA@GH ' ?HN' &?DCC?H' ?KGMM?' JFA' JDACG CH CFG >C>CF OGHCBDE 'GPGH' ?E '= MADCN?@' NC OAMADG@QBG PG CG@'FGDLCN?' K?MM?' OA>CG BGD?C I' C' L?HQBGC ' ?HN' AH'SAE>BM' OOA?' CAH ' JFCG NDG G ' JGDG @?NG B G A>¢¢ @AH ' CFG @?HE' OAMABD ' CH DGQBG C JCF' GHCMG JA@GH' PCN' DGO(AH ' =' ?MLGHCG ' DA ? 'R a]P' FC' ' P' 61 ß ?HN' ?C P ' 1 ' FG ?E S

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H' #CLBMMB ' JG @GGC JCCF CFG' >AMACJCH 'K? ? G R

?PCH 'CFB ' CPGH ?' (GCOCF A;'CFG GHGD?M OA CB@G'@ A;'CFG "A@?H ' J'M KDAOGGN' CA' HACCOG' BOF KGOBM?DCCG ? ' ?DG DGQB CCG CA' NC - CCH BC F' CFG ND?@?C' KGD AH?G A;'CFG "A@?H' KM?E ' A;' F?(KGDG #FG' NDG ' A;' CFG ?HOCGHC' "A@?H' OAH BM ' OAH C CGN' A;' CFG CBHCO' 0?MMGN '>DA@' CC ' ADH?@GHC' 3 ;' CFG ' 8 'Q ' LADNGDGN JCCF KBDKMG ' ?HN' CFG DGN' ?HN?M ' 0?MMGN' ' >' ?MM' CFG NC KBCGN' KACHC ' LG>ADG ?MMBNGN' CA' CF?C JFCOF F?' AOO? CAHGN' CFG @A C OAHCDA-PGD E' C ' CFG NC CH BC FCH ' @?D(' A;' CFG GH?CAD:?M' ?HN' GQBG CD?H' OM? G

AD' (HC FC

' 6' #O' NM9PG GN 9M' PN' OPI GGM' K K'J I OMNM' LM99M+R S" ' 9 A;' ;' MN+' ;'==+ +' %' * ;' -1(@* ' (%2%O' % % ' -+%' - * ' -(+:%' * -' -'O' +:%' 7*-2 %(* ' B %-('2%' <%' %2%' -2%' 1' O%(@2 9%O' ', +' %%' - (*' -'B-' +' ,'< * ',7*@-' -','O' ,(+2' %',+-'B%2 *2 %2(* 'O' -+' *2+ @ ' ' >TN> ;' ,' ,' (+%' B2*@' '7 ++-' +%' ,'%(,'(<','%' B'O*2 (O A E ' 9' +' -9'=+ ,'O' O%(@2 9 ,'<+:%' @:-(+% -B:','%' :% (-1(A X' ++-'@*%2@%9-+'B*(+*(' (,'% %<%' @-B *(O A ' 9' + ' 6' iOP I N M I'G 9 P P]J O' IPMMLH KP' G QI 7 K'MAMM' KJI' Q IP K iKJI ' AP P+R S 5 (' ' J-' >' N IP +'L' +

' / A+' W+' KML+' WWW W+

" H GP 7 J' PMOP G H ' J9O' 9 UP' N ' L9J1O'P' IN ' NHP' OPLMHG' 7 NH G J1'7MNH IMA9P'K IN P GT'M P' PK I IPIOPO'N ' M' LP JGM9' 7NHP' PGGMTG' 7&JAPI JG M1O'OP M JG+

N N' / $ T'GLPMU iO' 7 'NH $N'JI KG' 7 'NH' LMI M OG'GMTG'NHPT' P P' 7 M' OMCC9 iQ H NPIPGG'M1O'A OP PO' NH' LJ L9P S 6' O' PGN' L MPNPMNGP+R

i' PWMKN9T'G I 9M' IP G'PIQ M PO' i' iN7MJK i+

#F?'C C J? ' ? KBDKMG' ADH?@GHC' JG' MG?DH' >DA@' MCHE'Z' ?NH' P'N'$ LBC' OAHOGDH'H ' C ' F?$ZDG CFGDG' ?DG ?M@A C ? ' @?HE' AKCH'AH ' ? ' CFGDG F?PG' LGGH' K? G ' JDCCGH' AH' CFG BLSGOC' HAC AHG' A;' CFG ?HO'GHC' F?PH ' C?(GH' CFG CDABLMG' CA' NG ODCLG' JF?C CA' CFG@' J? ' ?' @?CCGD A;' HA' OBD'A CCE' AD' LE' ?OO'NGHC' NDAKKGN' ?' F'HC' JFCOF' @C FC' GDPG ? ' ?' OMBG' CA' CFG GH@ @?' A@G' ?HC'QB?D?H ' OAHCGHN' C?C' CC' JABM' F?PG' LGGH (HAL' AD' H?M' JCCF JFCOF CFG CBH'D' J? ' CBNNGN' ?M' APGD ' ACFGD ' CF?C CC J? ' ?' >MA J GD' A@G' CF?C CC J? ' ?' >LBM?' A@G' CF?C CC J? ' ?' DLLAH' JADH' MC(G ?' @ANGDH' ADNGD' ?HN' ACFGD ' ? ?H ' CF?C CC J? ' ?' CDCKG A;' KBDKMG' JAPG H' AD' G JH' AH' CFG CBH'O ' LBC CFG G M? C ?DG' NP'NGN' ?@AH ' CFG@ GMPG ' ? ' CA' CFG NCDGOCAH HF JFCOF CF' ' CDCKG D?H U8

#FG' M6?DHGN' >GGC &AH<?BOAH ' HF F' ' HC'QB'CG i KMQBGG' K?D MG ' D BDG I' ?E ' CF?C ?C ' H?K(H ' JGGC B GN' ?NADHGN' JCF' O?MGC GPGDB I' ?E ' CF?C ?C >G? C ' H?K(H ' JGGC B GN' ?NADHGN' JCF' O?MGC O'M?P' =' OM?P?C? OAOOA' @?HCM?' I' #FG G' OM?P' JGDG' ?M A' GGH' H' CFG FGGC ' CF?C OAPGDGN' CFG LGN ' AH' JFCOF CFG ?HOCGHC ' M?E' CA' C?(G' CFGCD @G?M ' @@C?HB ' &?DGMMCHB ' ?M A' CGMM ' B ' CF?C ?' C?LMG J?' OAPGDGN' JCCF OMACF ' A' ADH?@GHCGN' ?HN' N' KA GN' H' BOF ?' @?HHGD' CF?C CFG JFAMG ?KKG?DGN' MC(G CFG $ " ' ' ' KAH' CF' ' &AH<?BOAH' H GH'DAB ME' DG@?D(' CF?C' KDG B@?H ' CFG OM?PB ' CA' LG' ?' CDCKG' AD' L?HN' A;' KBDKMG' DBHH'H ' DABHN' CFG GN G ' A;' CFG G OMACF ' C' JABMN' HAC LG' N>>COBMC' LE' M?E'H ' CFG@' AHG' APGD' CFG ACFGD' CA' CFG F?L'C' A;' ?' KD'HOG' LBC' CF?C CF' ' OABMN' HAC' LG' G>>GOCGN' K?DGN' CA' CFG GEG' JFCOF' @' FC A;' OABD G' LG' PGDE' KDAKGDME' OA@-A;' KBDKMG' CA' CFG FAJ' HACF'H ' LBC' CFCD' LADNGD ' ?HN' CFGDGLE' KDG GH?' ?' @?' ACFGD' CA' FA J' HACF'H ' LBC' CFCD' LADNGD ' ?HN' CFGDGLE' KDG GH?' ?' @?' FBHC'H J?COF ' C' FC' GHGD?MME' LGGH' NG ODCLGN' ? ' ?' @?MM' AMGH L?MM' LBC' BHMG ' CFG AHG' JG' F?PG' GGH' FC' LGGH' LE' ?OO'NGHC' @BOF 0A@'KDG GN' AD' >M?CCGHGN' JG' FABMN' ?E' CFGE' JGDG' HAC' @ADG' MALBM?D CF?H' ?H' AMN >?' FAHGN' J?COF' &?ODALB' ?E ' CFGE' JGDG' A@G-C@G ' H' CFG F?KG' A;' ?' FG?DC' ?HN' CF?C CFGE' >DGQGBGHCME' OAHC?'HGN KDG GDP?C'DPG ' ? ?'H C GHPE' 'Y O ' H' ?DD'PH ' ?C CFG G' A;' KBLGDCE

JF□OF' J?L' >ABDCGGH ' EABCF ' ?L?HNAHGN' CFG' LBMM?' ?HN' G 0F?H GN' CFG' ' 8 ' >AD' CFG' ' .' JF□OF' J? ' ?M A' O?MMGN' CFG' ' 3 ' ?HN' " ' ;' 3 .' □H' ?MMB □AH' CA' CFG' KGD□AN' A>' M□>G' ?C' JF□OF' CFGE' F?N' ?DD□PGN ' ?HN' " .' LGO?B G' ?C' CFG' ?@G' C□@G ' □>' CFGE' JGDG' KBK□MM□ ' CFGE' ?CC?□HGN' >BMM' KAJGD' APGD' CFG□D' KDAKGDCE ' ?HN' JGDG' DGMG? GN' >DA@' CBCGM?' #FGDG' □ ' HA' ? OGDC?□H□H ' CFG' ? G' A>' EABH ' &?DO□B ' □H' CFG' CD? GNE' A>' AD□AM?HB ' ' LBC' ? ' FG' AHME' ?KKG?D ' □H' CFG' OGHG' LG>ADG' CFG') AM O□?H' O?@K' JFGH' FG' □ ' LDAB FC' CA' BKKM□O?CG' F□ ' >?CFGD ' FG' FABMN' JG?D' HACF□H ' LBC' ?' LM?O (' CBH□O ' CFG' CA ?' ?HN' ?MM ADH?@GHC ' LG□H ' M?□N' ? □NG' □H' @ABDH□H ' ?HN' C□@G ' A>' KBLM□O' O?M?@□CE >' 0BM□B ' ?G ?D' JG' MG?DH' CFG' >AMMAJ□H ' >?OC ' DGM?C□PG' CA' F□ ' NDG ' ?HN' KGD AH?M' ?KKG?D?HOG ' BGCAH□B ' CGMM ' B ' CF?C' FG' J? ' C?MM ' >?□D ' OA@KMG □AHGN ' DABHN M□@LGN ' D?CFGD' >BMM >?OGN ' ?HN' J□CF' LM?O (' GEG ' ' CF?C' FG' ALC?□HGN' >DA@' CFG' GH?CG' KGD@□ □AH' CA' JG?D' OAH C?HCME' ?' M?BDGM' ODAJH' V%□AH' ? □B ' ?E ' AH' ?OOABHC' A>' F□ ' L?MNHG ' CF?C' FG' J? ' DG@?D(?LMG' □H' F□ ' NDG ' JG?D□H ' CFG' M?C□OM?P□?H' CBH□O' J□CF' MGGPG ' CA' □C ' F?P□H ' ?CFGD□H ' ?LABC' CFG' JD□ C ' ?HN' ?MJ?E ' F?N' □C □DNGN' D?CFGD' MAA GME ' JF□OF' M?CCGD' O□DOB@ C?HOG' ?PG' AD□ □H' CA' CFG' G KDG □AH' A>' BMM?' ,' .GJ?DG' A>' CFG' MAA G OA?CGN' LAE I' AD' =' A>' CFG' @?H' JFA' □ ' A' □MM' □DC I' %□AH' ? □B ' ?NN ' CF?C' FG' F?N' ?M A' CFG' D□ FC' CA' JG?D' ?' DAE?M' DALG' □H' ? G@LM□G ' !U' CF?C' FG' JADG' ?' DGN' ? F' ?HN' CFG' O?MOG□' @BMMG□' GPGH' AH' ADN□H?DE' N?E ' CA' FAJ ' F□ ' NG OGHC' >DA@' CFG' ML?H' (□H ' ' C?CBG' A>' 0BM□B ' ?G ?D' ?D@GN ' □ ' GH D?PGN' □H' "A □ ' =' "?OAMC?' N□' C?CBG' HC□OFG' G' &ANGDHG I' >AM□A ' "A@G ' 7/ ' K□ ' 5' ' ?M A' AHG' A>' OC?P□?HB ' AD' B B CB ' ?G ?DR CFG' M?CCGD' C?CBG' F?P□H ' LGGH' AHOG' □H' CFG' KA G □AH' A>' CFG' OGMGLD?CGN' &?DQB□ ' &?>>G□ ' OC?P□B ' ?M>GOCGN' □@KM□O□CE' □H' F□ ' ?KKG?D?HOG ' ?HN' FB@□-M□CE' □H' F□ ' OAHNBOC4 ?HN' OAH □ CGHCME' J□CF' CF□ ' NG OD□KC□AH ' JG' >□HN' F□ ' ?D@ABD' A>' CFG' KM?□HG C' (□HN' □ ' MAD□O?' AD' OB□D? ' □ ' GHC□DGME' J□CFABC' ADH?HSGHC ' G OGKC' CFG' CJA' DAPP ' A>' KM?CG ' ?C' CFG' LACCA@ ' #FG' CFAD? ' □ ' K?DCME' F□NNGH' LE' CFG' K?MBN?@GHCB@' JF□OF' J? ' JADH' LE' CF□ ' G@KGDAD' ?HN' LE' 0BM□B ' CG ?D' A>' ?' @BOF' M?D GD' □TG' CF?H' CFA G' A>' F□ ' BOOG AD ' MCFAB F' FG' □ ' J□CFABC' CFG' O□HOCBD?' AD' LGMC ' FG' FAMN ' □H' F□ ' D□ FC' F?HN' CFG' K?D? AH□B@' ?' FADC' JADN ' JF□OF' ? ' CFG' H?@G' □@KADC ' J? ' >? CGHGN' CA' □C

BGCAH□B ' CGMM ' B ' CF?C' OC?P□B ' J? ' □H' FG□ FC' >□PG' >GGC' H□HG' □HOFG ' A>' ?' OA@KMG □AH' LGCJGGH' LDAJH' ?HN' >?□D ' F□ ' F?□D' ?' M□CCMG' OBDMGN' ?HN □HOM□H□H ' CA' EGMMAJ ' G' F?N' OMG?D' LD□ FC' GEG ' @?MM' G?D ' ?HN' ?H' ?QB□M□HG' HA GR F□ ' GEGLDAJ ' @GGC□H ' G' JADG' F□ ' CA ?' HG□CFGD' CAA' O?HCE' HAD' CAA' >BMM ' ?HN' CFG' OM?PB ' A>' F□ ' CBH□O' HG□CFGD' DG@?D(?LME' LDA?N' HAD' H?DDAJ ' □ ' FAG ' JGDG' ?' M□CCMG' CF□O(GD' □H' CFG' AMG' CF?H' OA@@AH ' CA' @?(G' F□@' ?KKG?D' C?MMGD' CF?H' FG' J? ' H' CFG' J□HCGD' FG' JADG' ?' CF□O(' CA ?' ' CBH□O ' ?' F□DC ' ?' >M?HHGM' CA@?OFGD ' ?HN' JD?KKGD ' AH' F□ ' MG ' ?HN' CF□ F ' G' OABMN' HAC' LG?D' CFG' J□HCGD8 ' BH ' ?HN' HGPGD' J?M(GN' □H' CFG' AKGH' ?□D' J□CFABC' ?' LDA?N LD□@@GN' F?C' AH' F□ ' FG?N

DA@' CFG' C□@G' A>' ?□B ' &?D□B ' CFG' GH?CAD ' JADG' LM?O(' LAAC ' AD' LB (□H ' DG?OF□H ' CA' CFG' @□NNMG' A>' >FG' MG C' J□CF' CFG' MGCCGD' ' □H' □MPGD' AD' □PADE' BKAH' CFG@' AD' D?CFGD ' CFG' >□ BDG' A>' ?' F?M> @AAH' ^ AD' ODG OGHC '\è #FGDG' □ ' AHG' GH D?PGN' □H' &AHC>?BOAH ' >DA@' CFG' O?L□HGC' A>' ' □DOFGD ' C' J? ' JADH' ?LAPG' CFG' FGGM ' ?C' CFG' FG□ FC' A>' CFG' ?H(MG'$ LBC' CF□ ' M? C' FAHABD ' □C □ ' OAHSGOCBDGN ' J? ' AHME' D?HCGN' CA' BOF' ? ' JGDG' NG OGHNGN' >DA@' CFG' FBHNDGN' GH?CAD ' GMGOCGN' LE' "A@BMB

H' OAHOMB □AH ' □C' @?E' HAC' LG' ?@□ ' CA' ?E' ?' >GJ' JADN ' DG KGOC□H ' CFG' KBDKMG' A>' CFG' ?HO□GHC ' +□LLAH' ?E ' =' □C' J? ' A>' ?' N?D(' O? C' ? ' NGGK' ? ' LBMM ß LMAAN I' V GG' ?M A' DG □NGHC' +A BGC8 ' = D□ □HG' NG ' $A□ ' GC' NG ' DC I' K?DC' □□' ' 2' O' 2' KK ' 6/ ' 2 5 ' .BC' CM□GDG' JGDG' GPGD?M' ADC ' A>' KBDKMG ' ?HN' G?OF' FBG' J? ' >? F□AH?LMG' □H' □C ' CBDH ' =' H' @E' EABCF I' ?E ' ADHGM□B ' GKA ' VJFA' N□GN' NBD□H ' CFG' DG□ H' A>' B B CB R M□HE ' □ ' 31 ' =' CFG' P□AMGC' KBDKMG' J? ' >? F□AH?LMG' ?HN' AMN' >AD' ?' FBHNDGN' NGH?D□□' CFG' KABHN ' A@G' C□@G' ?>CGDJ?DN ' CFG' DGN' KBDKMG' A>' #?DGHCB@' O?@G' □HCA' PA BG ' ?HN' CA' CF□ ' BOOGGNGN' CFG' DGN' #ED□?H' CJ□OG' NEGN ' JF□OF' J? ' HAC' CA' LG' LAB FC' BHNGD' AHG' CFAB ?HN' NGH?D□□ I' GDG ' CFGH ' JG' F?PG' CFDGG' ADC ' A>' KBDKMG' JADH' NBD□H ' CFG' M□>G' A>' AHG' @?H ' #FG' DGN' KBDKMG' □ ' @GHC□AHGN' LE' &?ODAL□B ' FG' ?E ' CFG' DGNHG ' A>' CFG' KBDKMG' LADNGD' A>' CFG' CA ?' KD GCG C?' J? ' ?N@A-H□CADE' CA' CFA G' JFA' ? B@GN' □C' CA' KDG GDPG' CFG' @ANG CE' A>' NG@G?HABD' LGOA@□H ' EABH ' HALMG@GH ' ?HN') □D □M' ?E ' CF?C' CFG' ?OD□>□O□H ' KD□G C' FABMN' OAPGD' F□ ' FG?N' J□CF' KBDKMG ' J□CFABC' HAC□O□H ' JFGCFGD' □C ' FBG' LG' DGN' AD' P□AMGC ' HNGGN ' KBDKMG' J? ' ?' CGD@' ?KKM□GN'

' KP ' M9G ' GMTG' NHMN' MPGM ' GMN' !' NHP' GN M ' !' M' LJ L9P' N QM ' !' M' Q 9OP!' GPMN ' K !PO ' 6' POPAMN' !' GN G' K 99PQM' NJJG ' M I KNJG' N QM' LJ LJ PM ' !' GP99M' MJ PM ' K !MNJG+R S 90 ' ' ≠ + N ' &JAP! !G' NH !UG' 9 P' P' NHP' G9PP PO' NJ! K' 7 ' NHP' GM I P' PMG !' N ' GH ' H G' OPGKP!N ' NH JQH' NH GP' I !M KHG ' 7 I ' NHP' EM!G ' N ' H I ' J I M!JG' AEPKNG ' !' Q 9 ' MG' M' L! 7' 7' NHP ' P77P I !MKT S

6 ' 3N' NJ! K I ' I M! KMG' PN' HMAP!N' PO I KJ9M' I N G+R S A2 ' W≠ +

-P99 AJ ' PN' 9MNJ I ' OP I G N' LPKN P' K9M J I +R S % ' 9 A≠ ≠ MN+≠ ≠ ≠

"P!KP' M9G ' ('(%' ≠' N ' APK I P' M' GP!MN ' MG' NHPT' NHP!' PWKHM!QPO' !P' G N' 7' KHMJGGJ P' 7 ' M! NHP +S &1' $ ' ' W ≠ + d HP P7 P' KM99PO' 6' KM9KP ' ' +. S# ($ (' MLJO' -H 9 GN MNJG+ @ HP' K PGKP!N' G' GPP!' JL !' NHP' GNM!O+ OG' 7' NHP' & I M!' KP!NJ PG ' L AMA9T' N ' OP! NP' NHP' !J I AP ' +

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P HJ!Q NH MPGM %G N LH PG+ 2%9G MA JN
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HPGP Q !Q 7PMNHP G L9JKU%O 7 I MPGM %G !Q
X 9G I MUP H I 79T M! O !M T L NKH8
XH P9GP J9O \ M MA P NHP P 7 I P!
;#!O UPPL JG M9G !' GP 9P 7PM 7J9!PGG+ 9 4 & $

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al- NM!O T J O PKN9T !#!N ! JG% MT
XHP!HP O NH! I H G K J GP+ #!N ! JG S
MPGM I T9 O+
! 1(O QPN! N !T J GLPPO #!N ! JG
N JKH M9LHJ ! M 7 J P9OP G GMT
HP AM P! N JKHPO !NH G H 9T KHMGP+
HMUP 77NHP GNP 9P KJ GP+D
2 GHM9G P I P I AP
XHP! MPGM GMTG 65 NH G R N G LP 7 I %O+
-PN !8 M!O 9PM P! KP P I !T JN+ =E&-
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2HPM M N !QJP GH 99P NHM!M99 NHP I JG K+
T MPGM LPMU8 MPGM G NJ !%O N HPM +
7!! P M P NHP OPG 7 M KH+
*) XHMN I M!' G NHMN\
% & #'G NHGMTP A OG T J AP M P NHP OPG 7 M KH+
-PN H I AP7 P I P8 9PN I P GPP H G 7MKP+
-OP99 KON!P7 I NHP NH !Q / U JL !' MPGM +
-XHMN GMT%GN NH J N I P ! \ LPMU !KP MQM !+
7!! P M P NHP OPG 7 M KH
-"P G M O PM I P 8 9PN JG 9PM P H I 8SLMGG+
=7 4 & ' (& "'
-XH 99 T J Q GPP NHP OP 7NHP K J GP F
% & N2+
-2L MT T J O +
% 2 M I ! N QM I PG I P 2 O 9MKU G I P LM N
17NHMN]J KU GL N NHMN G !'#!N !T+
/PN I P ! N H !OP MGG JG T J OPG PG8
2%9G 9PM P T J+
-JNJG 2 O AGP P T J ! 7 9MNP
2HM P ! N7 I T J PTPG NHMN QP!N9P!PGG
#!O GH 7 9 P MG 2 MG !N N HM P
4 J APM N GNJAA !' M!O N* GN M!QP M HM!O
1 P T J 7 P!O NHMN 9 PG T J+
% & MGG JG
P ! N OPKP %O 27 2 HM P P 9%O I T 9 U
2NJ !' NHP N JA9P 7 I T K J!NP!M!KP
P P9T JL !' I TGP97+ PWPO 2 M I +
17 9MNP NH LMGG !G 7G I P O 77P P!KP+
!KPLN !G !9T L LP N I TGP97
XH KH Q P G I P G 9 LP HMLG N I T APHM J G
JN 9PN ! N NHP P7 P I T Q O 7 P!OG AP Q P %O 8
@# I !Q H KH !J I AP MGG JG AP T J !P8
K !GN JP M!T 7J NHP I T !PQ9PKN+

HM!' NHMN L JNJG NH H I GP97 MN M +
O QPNG NHP GH G 79 P N NHP I P!+
-HP!' JNJG 2 HM P I JKH I GN U T J LMGG !8
T I PM!G HP P 7 NH G A PMGN 7 I !P HMNH AJ PO
H JQHNG 7 Q PMN M9JP NHT K Q NMN !G+
P9G I P Q O JNJG KM!' T J GPP T J 7MKP\
% & MGG JG 7 NHP PTP GPPG ! N NGP97+
JN AT P79PKN !' AT G I P NHP NH !QG+
-% G EJGN
#!O N G P T I JKH 9M I P!NPO JNJG
HMN T J HM P ! GJKH I G MG 9G NJ !'
4 J H OOP!' NH !PGG !N T J PTP+
HMN T J I QHN GPP T J GHMO + 2 HM P HPM O+
XHP P I M!T 7NHP APGN PGLPKN !' & I P
@3WKPLN I I NM9 MPGM GLPMU !Q 7 JNJG
#!O Q M! !Q J!OP !PMNH NH G MQP%G T UP+
"M P GH%O NHMN ! A9P JNJG HMO H G PTPG+
% & 2!N HMN OM!QP G J9O T J 9PMO I P MGG JG
HMN T J J9O HM P I P GPPU !N I TGP97
O NHMN H KH G ! N !' I P\
-HP P7 P Q O JNJG AP L PLM %O N HPM
#!O G !KP T J U! T J KM!! N GPP T J GP97
P9G MG AT P79PKN !' 2 T J Q9MGG
X 9G I OPGN9T O GK P N T J GP97
HMN 7 T J GP97 H KH T J TPN U! ! N 7+
#!O AP ! N EPM9 JG !' I PD QP!N9P JNJG
XP P 9 M K I I !' 9MJQHP O JGP
GNM9P NH O !M T MNHG I T9 P
P P T!P L NPGNP 8 7 T J U!
HMN 2 O 7M !' !' I P!' M!O HJQ NHP I HM O+
#!O M7NP GKM!OM9 NHP I 8 7 T J U!
HMN 2 L 7PGG I TGP97 !' AM!]JPN !Q
M9G NHP JN NHP!' H 9O I P OM!QP JG+
=> !& - "'- !&+
% & XHMN I PM!G NH G GH JN !Q \ 2 O 7PM NHP LP L9P
H GP I GM 7 NHP U !Q+
-#T O T J 7PM N \
HP!' I JGN 2 NH !U T J J9O ! N HM P N G +
% & 2 J9O ! N MGG JG8 TPN 2 9 P H I P9G
JN HP P7 P O T J H 9O I P HP P G 9 !Q \
XHMN G N NHMN T J J9O I LM N N I P\
27 N AP MJQHN N M O NHP QP!P MG Q O+
PN H ! J ! !P PTP M!O OPMNH %NHP NHP +
#!O 9G 9 U !A NH !O 77P P!N9T
O 9PN NHP Q OG G GLPPO I P MG 2 9 P
HP !M I P 7H ! J I P NHM!' 2 7PM OPMNH+
-2 U! NHMN NJP N AP !T J JNJG
#G P9G MG 2 O U! T J JN M O 7M J +
XP99 H ! J G NHP GJAEPKN 7 I T GN T+S
2 KM!! N NP99 HMN T J M!O NHP I P!'
H !U 7NH G 9 7P 8 AJN 7 I T G !Q9P GP97
2 HMO MG 9 P7 ! N AP MG 9 P N AP
2!M P 7GJKH M NH !Q MG 2 I TGP97+
2 MG A I 7 PP MG MPGM 8 G P P T J
XP A NH HM P 7PO MG P998 M!O P KM!' A NH
3!OJ P NHP !NP %G K 9O MG P9G MG HP
O !KP JL !' M M M!O QJGNT OMT+
HP N JA9PO AP KHM7 !Q NH HP GH PG
MPGM GM O N I P 65M %GN NH J MGG JG !
/PML !' NH I P !N NH G M!Q T 79 O+
#!O G I N T !OP L !N\RS L !' NHP O+
#KK JN PO MG 2 MG 2 L9J!QPO !+
#!O AMOP H I 7 99 ' G !OPPO HP O O+
HP N P!N M %O 8 M!O P O O AJ77PN N
X NH 9JGNT G !P G8 NH !Q N MG OP
#!O GNP I I !Q N NH HPM NG 7K !N P GT+
JN P P P K J9O M P NHP L !N L L G%O D

F HP % NH JN NHP L PL G N !' HMG M!' PWM I L9P !' NHP 9MNP N !QG
7 9N ! S
6 XH GHM9G GL PMO H G M T 79 QHN
LA !P NH !OP7MN QMA9P !QG
1 P NHP MGN MA JLN P P HP
HP HMLLT G9P+R

HM9 GLP P%G N I P !N NHP = I OP I GLPPKH+

PPGM ' K PO ' 6 " P9L ' I P ' MGG JG ' ' 2 ' G ! U+R
2 ' MG E ! PMG ' J ' Q PMN M ! KPGN +
5 O 7 I ' NHP 79M I PG 7 T JL ! ' H G GH J9OP '
HP 9O # ! KH GPG APM ' G ' 7 I ' NHP M PG 7 AP '
5 O 2 ' NHP N PO MPGM ' # ! O NH G I M ! '
2G ! ' APK I P M Q O 8 M ! O MGG JG G
' PNKHPO K PMNJ P ' M ! O I JGN AP ! O H G A OT
27 MPGM ' KM P9PGG9T AJN ! O ! ' H I +
" P HMO M 7P P ' HP ! ' HP MG ! ' LM !
! O ' HP ! ' NHP 7 N MG ! ' H I ' 2 O O I M U
" ' HP O O GHMUP ' $N G N JP ' NH G Q O O O GHMUP
" G K M O 9 LG O O 7 I ' NHP ' K 9 J ' 79T8
! O NHMN GM I P PTP H GP AP ! O O NH M P NHP 9O
5 O 9 GP H G 9JGN P ' 2 O O HPM ' H I ' Q M ! '
#T ' M ! O NHMN ! QJP 7 H G NHMN AMOP NHP & I M ! G
M U H I ' M ! O NP H G GLPPKHPG ! ' NHP ' A UG
9MG[N K PO ' 6 : P I P G I P O ! U ' N ! JG R
G M G KU Q 9+ 4P Q OG ' N O NH M I MCP I P
' I M ! ' 7 GJKH M 7PPA9P NP I LP ' GH J9O
' QPN NHP GNM N 7 NHP I MEPGN K 9O+
! O APM ' NHP LM9 I ' M9 ! P+ =7 !& ' > !& -
% & ' # ! NHP ' QP ! P M9 GH JN '
2 ' O ' AP9 P P NHMN NHPGP MLL9MJGPG M P
O ' G I P ! P ' H ! J G NHMN M P HPML%O ! ' MPGM +
-' X HT ' I M ! ' HP O NH APGN OP NHP ! M ' 9O+
/ UP M 9 GGJG8 M ! O P LPNNT I P ! '
X M9U J ! OP ' H G HJQP 9PQG ' M ! O LPPL MA JN
' 7 !O J GP9 PG O GH ! J MA9P Q M PG+
P ! ' MN G I P N I P M P I MGNP G 7 NHP ' 7MNPG
HP 7MJ9N ' OPM ' JNJG ' G ! N ! ' J ' GNM G+
JN ! ' J GP9 PG ' NHMN P M P J ! OP 9 ! QG+
JNJG ' M ! O MPGM ' X HMN GH J9O AP ! ' NHMN MPGM ' N
X HT GH J9O NHMN ! M I P AP G J ! OPO I P NHM ! ' T J G \
X NP NHP I ' N QPNHP ' T J G G MG 7M ' M ! M I P8
J ! O NHP I ' N O NH APK I P NHP I JNH MG P998
X P QH ' NHP I ' N G MG HPM T8 K !EJ P NH NHP I
JNJG 99 GNM N M GL N MG G ! ' MG MPGM + =7 !&
' ! ' NHP ! M I PG 7 M99 NHP Q OG MN !KP
L ! ' HMN I PMN O NH NH G J ' MPGM 7PPO+
HMN HP G Q ! ' G ' Q PMN \ #QP ' NH J M N GHM I %O [
& I P ' NH J HMGN 9 GN NHP A PPO 7 ! A9P A9 OG[
X HP ! ' P ! N NHP P AT M ! ' MQP ' G ! KP NHP Q PMN 79 O+
JN N MG 7M I %O NH I P NHM ! ' NH ! P I M ! ' \
X HP ! ' K J9O NHPT GMT ' N 99 ! ' NHMN NM9U%O 7 & I P
HMN HP ' OP M99GD P ! K I LMGG%O AJN ! P I M ! ' \
' G N & I P ! OPPO ' M ! O I ' P ! JQH+
X HP ! ' NHP P G ! ' N AJN ! P ! 9T I M ! +
; [T J M ! O 2 HM P HPM O J ' 7MNHP G GMT+
HP P MG M JNJG ! KP NHMN J9O HM P A U%O
HP PNP ! M9 OP 9 N ' UPPL H G GNMNP ! ' & I P
G PMG 9T MG M U ! Q+
% & ' HMN T J O ' 9 P I P ' 2 M I ' ! NH ! Q EPM9 JG 8
X HMN T J J9O U I P N ' 2 HM P G I P M I ' 8
" ' 2 HM P NH JQHN 7 NH G ' M ! O 7 NHPGP N I PG
2 GHM99 PK J ! N HP PM7NP 8 7 ' NH G L PGP ! N
2 J9O ! N ' G ' NH 9 P 2 I QHN P ! N PMN T J
P M ! T 7J NHP ' I %O+ X HMN T J HM P GM O
2 99 K ! G OP 8 HMN T J HM P N ' GMT
2 99 NH LMN P ! KP HPM 8 M ! O 7 ! O M N I P
NH I PPN N ' HPM ' M ! O M ! G P ' GJKH H QH NH ! QG+
99 NHP ! ' I T ! A9P 7 P ! O ' KHP ' JL ! ' NH G 8
JNJG HMO MNHP ' AP M 99MQP +
HM ! ' N ' PLJNP H I GP97 M G ! ' 7 & I P
! OP ' NHPGP HM O K ! O N ! G MG NH G N I P
2G 9 UP N ' 9MT JL ! ' JG
-' ' M I ' Q9MO NHM+ ' I T PMU OG
" M P GN JKU AJN NHJG I JKH GH ' 7 7 P 7 I ' JNJG+

B ' ' "" -'

% & ' HP QM I PG M P O ! P ' M ! O PPGM ' G PNJ ! ! Q+

' & ')% ! ' NHP Q ! M98 KHM ! QPO AT & P N ' 8 ''%

-' # G NHPT LMGG AT ' L9JKU MGKM AT NHP G9PP P8
! O HP 99 ' M7NP ' H G G J ' 7MGH ! ' NP99 T J
X HMN HMNH L KPPOPO NHT ! NP N OMT+
% & ' ' 99 O ' G S JN ' 9 U T J ' MGG JG
HP M ! Q T GL N O NH Q9 ' ! ' MPGM %G A +
! O M99 NHP PGN 9 U 9 UP M KH OOP ! ' N M ! '
M9LHJ ! M%G KHPPU G LM9P8 M ! O KP '
/ UG NH GJKH 7P PN M ! O GJKH 7 P T PTPG+
G P HM P GPP ! ' H I ' ! ' NHP ML N 9
P ! Q K GG%O ! ' K !7P P ! KP AT G I P GP ! MN G+
-' MGKM 99 NP99 JG HMN NHP I MNNP ' G+
-' # ! N ! JG+
' MPGM +
#-' / PN I P HM P I P ! ' MA JN I P NHMN M P 7MN8
9PPU HPMOPO I P ! ' M ! O GJKH MG G9PPL % ! QHNG
4 ! O% MGG JG HMG M 9PM ! ' M ! O HJ ! Q T 9 U8
" P NH ! UG N ' I JKH ' GJKH I P ! ' M P OM ! QP JG+D
' OPM ' H I ' ! N ' MPGM ' HP%G ! N OM ! QP JG8
" P G M ! A9P & I M ! ' M ! O P99 Q P ! +
;--' $X J9O HP P P 7MNNP S JN 2 ' 7PM ' H I ' ! N8
4 PN 7 I T ! M I P P P 9 MA9P N ' 7PM
2 O ' ! N U ! ' NHP I M ! ' 2 GH J9O M O
' G ! ' MG NHMN GLM P MGG JG+ " P PMOG I JKH8
" P G M Q PMN AGP P ' M ! O HP 9 UG
>J NP NH JQH NHP OPPOG 7 I P ! ' ' HP 9 PG ! ' L9MTG+
G NH J O GN ' # ! N ! T8 HP HPM G ! ' I JG K
P9O I ' HP G I 9PG 8 M ! O G I 9PG ! ' GJKH M G N
G 7 HP I KU%O H I GP97 ' M ! O GK ! %O H G GL N +
HMN K J9O AP I %O N ' G I 9P MN M ! TNH ! Q+
JKH I P ! ' MG HP AP ! P P ' MN HPM N%G PMGP+
X H 9PG NHPT APH 9O M Q PMNP ' NHM ! ' NHP I GP9 PG8
! O NHP P7 P M P NHPT P T OM ! QP JG+
2 MNHP ' NP99 NHPP HMN G N ' AP 7PM %O+
HM ! ' HMN 2 ' 7PM ' 7 ' M9 MTG 2 M I ' MPGM +
I P ! ' I T QHN HM ! O ' 7 ' NH G PM ' G OPM7+
! O NP99 I P N J9T HMN NH J NH ! U%GN 7 H I +
= 4 & ' D # &' "" -' ' ' - 5-' ("
- ' 4 J LJ99%O I P AT NHP K9 MU ' X J9O T J GLPMU
NH I P \
% &$ # T ' MGKM8 NP99 Jh HMN HMNH KHM ! K%O N OMT <
HMN MPGM ' 9 UG G ' GMO \
- "' X HT ' T J P P NH H I ' P P T J ! N
% & ' 2 GH J9O ! N NHP ! ' MGU MGKM HMN HMO KHM ! K%O+
- ' X HT ' NHP P MG M K ! ' 77P PO H I ' M ! O AP ! Q
77P PO H I ' HP LJN N AT N NH NHP AMKU 7 H G HM ! O ' NHJG '
M ! O NHP ! ' NHP LP L9P 7P99 M GH JN ! Q+
% & ' X HMN MG NHP GPK ! O ! GP 7 ' \
- ' X HT ' 7 ' NHMN N +
% & ' HPT GH JNPO NH KP ' X HMN MG NHP 9MGN K T 7 ' \
- ' X HT ' 7 ' NHMN N +
% & ' X MG NHP K ! ' 77P %O H I ' NH KP \
- ' #T ' I M T ' MG%N ' M ! O HP LJN N AT NH KP ' P P T
N I P QP ! N9P ' NHM ! ' NHP 8 M ! O MN P P T LJNN ! Q AT ' I ! P
H ! PGN ! P QHA J G GH JNPO+
-' X H ' 77P PO H I ' NHP K ! ' \
- ' X HT ' # ! N ! T+
% & ' P99 JG NHP I M ! ! P ' 7 N ' QP ! N9P MGKM+
- ' 2 ' KM ! ' MG P99 AP HM ! QPO MG NP99 NHP I M ! ! P ' 7 N $
N MG I P P 7 9P T+ 2 ' O O ! N I M U N+ 2 GM ' M U
! N ! T 77P ' H ! ' M K ! 8 STPN %N MG ! N M K ! ' ! P NHP '
%N MG ! P 7 NHPGP K ! PNG 8 S M ! O ' MG 2 N 9O T J ' HP LJN N AT
! KP8 AJN 7 ' M99 NHMN ' N ' I T NH ! U ! Q ' HP J9O 7M ! ' HM P %
HMO N+ HP ! ' HP 77P PO N N ' H I ' MQM ! 8 NHP ! ' HP LJN N AT
MQM ! ' AJN ' N ' I T NH ! U ! Q ' HP MG P T 9 MNH N ' 9MT H G
7 ! QP G 77 N+ # ! O NHP ! ' HP 77P PO N NHP NH O N I P8 HP
LJN N NHP NH O N I P AT ' M ! O GN 99 MG HP P7JGPO N ' NHP
MAA9P I P ! N H NPO ' M ! O K9MLLPO NHP ' KHMLLPO HM ! OG ' M ! O
NH P ' JL ' NHP ' G PMNT ! QHNKMLG ' M ! O JNNP PO GJKH M OPM9
7 GN ! U ! Q A PMNH APKMJGP MPGM ' P7JGPO NHP K ! ' NHMN
N HMO M9 I GN KH UPO MPGM 8 7 ' HP G ! PO ' M ! O 7P99 O !
MN N ' # ! O 7 ' I ! P ! ' LM N ' 2 OJ GN ! N 9MJQH ' 7 ' 7PM ' 7
LP ! ! Q I T 9 LG M ! O PKP ! Q NHP AMO M +

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-$ JN G 7N 2 L MT T J X HMN \ 5 O MPGM G !\
- " P 7P99 O !' !' NHP I M UPN L9MKP M ! O 7 M I PO MN
I JNH M ! O MG GLPPKH9PGG+
% & $ G P T 9 UP HP HMNH NHP 7M99 ! Q G KU ! PGG+
- MPGM HMNH N ! N8 AJN T J M ! O 2
! O H ! PGN MGKM P HM P NHP 7M99 ! Q G KU ! PGG+
- 2 U! ! N HMN T J I PM ! AT NH M N8 AJN 2 M I
GJ P MPGM 7P99 O !+ 27 NHP NMQ MQ LP L9P O O ! N K9ML
H I M ! O H GG H I MKK O ! Q MG HP L9PMGPO M ! O O GL9PMGPO
NHP I MG NHPT JGP N O NHP L9MTP G ! NHP NHPMN P 2 M I
! N JP I M ! +
% & X HMN GM O HP HP ! HP KM I P J ! N H I GP97\
- M T AP7 P HP 7P99 O ! HP ! HP LP KP PO
NHP K I I ! HP O MG Q9MO HP P7JGPO NHP K ! HP L9JKUPO
I P LP H G O JA9PN M ! O 77P PO NHP I H G NH MN N KJN+ S
! 2 HMO APP ! M I M ! 7 M ! T KKJLMN ! 7 2 J9O ! N
HM P NMUP ! H I MN M O 2 J9O 2 I QHN Q N HP99
M I ! Q NHP QJPG SM ! O G HP 7P99+ X HP ! HP KM I P N
H I GP97 MQM ! HP GM O+ 27 HP HMO O ! P GM O M ! TNH ! Q
M I GG HP OPG PO NHP GH LG N NH ! U N MG H G !7 I NT+
H PP 7 J P ! KHPG HP P 2 GN O K PO 6 # 9MG Q O
G J9[RSM ! O 7 QM P H I NH M99 NHP HPM NG JN NHP P%G
! HPPO N AP NMUP ! 7 NHP I 8 7 MPGM HMO GNMAAPO NHP
I NHP G NHPT J9O HM P O ! P ! 9PGG+
% & # ! O M7NP NHMN HP KM I P NHJG GMO M MT \
- #T+
5 O KP GMT M ! TNH ! Q \
- #T HP GL UP : PPU+
- HMN P77PKN \
- MT M ! 2 NP99 T J NHMN+ 2%9G ! P%P 9 U T J % NHP
7MKP MQM ! JN NH GP NHMN J ! OP GN O H I G I 9PO MN !P
+M ! NHP M ! O GH U NHP HPMOG AJN 7 I ! P ! LM N
N MG : PPU N I P+ 2 K J9O NP99 T J I P ! P G N
M J99JG M ! O O9M JG 7 LJ99 ! Q GKM 7G 77 MPGM %G I MQPG
M P LJN N G 9P ! KP+ OM P T J P99+ HP P MG I P 7 9P T
TPN 7 2 K J9O P I P I AP N+
- X 99 T J GJL NH I P N ! QHN MGKM \
- 2 M I L I GPO 7 NH+
- X 99 T J O ! P NH I P N I \
- #T 7 2 AP M9 P M ! O T J I ! O H 9O M ! O T J
O ! ! P NH NHP PMN ! Q+
- : O8 2 99 PWLPKN T J+
- < * .. 9 4 &
% & X HMN M A9J ! N 7P99 G NH G Q ! N AP [
" P MG] J KU I PNN9P HP ! HP P ! N GKH 9+
- G HP ! ! PWPKJN !
17 M ! T A 9O ! A9P P ! NP L GP+
" P P HP LJNG ! NH G NM OT 7 I +
H G JOP ! PGG G M GMJKP N H G Q O N+
X H KH Q PG I P ! GN I MKH N O QPGN H G OG
X NH APNNP MLLPN NP+
% & # ! O G N G+ O NH G N I P 2 99 9PM P T J
I 7 T J L9PMGP N GLPMU NH I P
2 99 K I P H I P N T J8 7 T J 99
I P H I P N I P M ! O 2 99 M N 7 T J+
% -' 2 99 O G SN 99 NHP ! NH ! U 7 NHP 9O+
+ 4 +
X P99 JNJG NH J M N ! A9P8 TPN 2 GPP
HT H ! J MA9P I PNM9 I MT AP JQHN
O I NHMN N G O GL G%O HP P7 P %N G I PPN
HMN ! A9P I ! OG UPPL P P NH NHP 9 UPG
O H G 7 I NHMN KM ! ! N AP GPOJK%O \
MPGM O NH APM I P HM O J HP 9 PG JNJG
27 2 P P JNJG ! M ! O HP P P MGG JG
" P GH J9O ! N HJ I J I P+ 2 99 NH G ! QHN+

2 ! GP P M9 HM ! OG ! ! MN H G ! O G NH +
G 7 NHPT KM I P 7 I GP P M9 K N CP ! G+
X N ! QG M99 NP ! O ! Q N NHP Q PMN L ! !
HMN & I P H 9OG 7 H G ! M I P8 HP P ! AGKJ P9T
KPGM %G M I A N ! GHM99 AP Q9M ! KPO M N
! O M7NP NH G 9PN PPGM GPMN H I GJ P8
O P 99 GHMUP H I GP OMTG P ! OJ P+ + 4

3 3 222+ S - 7

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: O P P ! MGKM JQHN T J MPGM H I P \Đ
X HT M P T J A PMNH9PGG \ M ! O HT GNM P T J G \
- # P T J ! N I $O HP ! M99 NHP G MT 7 PM NH
HMUPG 9 UP M NH ! Q J ! 7 I \ 1 KP
2 HM P GPP ! NP I LPGNG HP ! NHP GK 9O ! Q ! OG
" M P %O NHP U ! NNT MUG8 M ! O 2 HM P GPP !
HP M I A N JG KPM ! G P99 M ! O MQP M ! O 7 M I +
AP PWM9NPO NH NHP NH PMN%! ! Q K9 JOG8
JN ! P P N 99 N ! QHN ! P P N 99 ! +
5 O 2 Q NH JQH M NP I LPGN O LL ! Q 7 P+
3 NHP NHP P G M K 9 GN 7P ! HPM P ! 8
1 P9GP NHP 9O N GMJKT NH NHP Q OG+
2 ! KP ! GPG NHP I N GP ! O OPGN JKN !+
X HT GM T J M ! TNH ! Q I P !OP 7J9 \
- #' K I I ! G9M P @T J U ! H I P99 AT G QHN
" P9O JL H G 9P7N HM ! O H KH O O 79M I P M ! O AJ !
/ UP N P ! NT N KHPG E ! %O 8 M ! O TPN H G HM ! O
N GP ! G A9P 7 7 P P I M ! %O J ! GK KH%O+
PG OPG @Z HM P ! N G ! KP LJN JL I T * =
QM ! GN NHP ML N 9 2 I PN M 9 !+
X H Q9M %O ĐJL ! I P M ! O P ! N GJ 9T AT
X NH JN M ! ! T ! Q I P 8 M ! O NHP P P P O M !
L ! M HPML M HJ ! O PO QHMGN9T I P !+
M ! G7 I PO NH NHP 7PM 8 H G P NHPT GM
P ! M99 ! 7 P M9U JL M ! O O ! NHP GN PPNG+
! O TPGNP OMT NHP A O 7 ! QHN O O G N+
3 P ! MN ! ! OMT JL ! NHP I M UPN L9MKP
" N ! Q M ! O GH PU ! Q+D X HP ! NHPGP L O Q PG
5 G K ! E ! N9T I PPN 9PN ! N I P ! GMT
6 HPGP M P NHP PMG ! G S HPT M P ! MNJ M98R
O 2 AP9 P P NHPT M P L NP ! N JG NH ! QG
! N NHP K9 I MNP NHMN NHPT L ! N JL ! +
2 ! OPPO N G M GN M ! QP O GL GPO N I P
JN I P ! I MT K ! GN JP NH ! QG M7NP N7 P 7MGH !
9PM ! 7 I NHP LJ L GP 7 NHP NH ! QG NHP I GP9 PG+
I PG GPGM N NHP ML N 9 N I \
- " P O NH 8 7 HP O O A O # ! N ! JG
P ! O O N 1 ' HP J9O AP NHP P N I +
: O ! QHN NHP ! MGKM NH G O GNJ APO GUT
2G ! N N M9U ! +
- % * .. + 4 6

&
- X H %G NHP P \
- #' & I M ! +
- $ MGKM AT T J
- 4 J PM G Q O MGG JG HMN ! QHN G NH G \
- #' P T L9PMG ! Q ! QHN N H 9 PGN I P ! +
- X H P P U ! P NHP HPM P G I P ! MKP G \
- H GP NHMN HM P U ! ! NHP D NH G 7J99 7 7MJ9NG
O I T LM N 2 HM P M9U%O MA JN NHP GN PPNG

JA I NN !Q' I P' J !N ' NHP' LP 9 JG' ! QH%8
#!O' NHJG' J !A MKPO' MGKM' MG' T J' GPP+
" M P' AM %O' I T' A G I' N ' NHP' NHJ!OP GN !P
#!O' HP!' NHP' K GG' A9JP' 9 QH%! !Q' GPP I %O' N ' LP!'
HM%' G' ! ' 79PP !Q' NP99 %M9P+ " 9O' I T' HM!O
P' 7MK%' JG$' 7 ' PO PGG' 7' M99' %HPGP' Q P7G8
#!O' 2' % 99' GP%' NH G' 7 %' 7 I !P' MG' 7M'
#G' H ' Q PG' 7M %HPGN+
- HP P%G' M' AM QM !' I MOP+
'U! 'T J' MGKM' 2' HM P' I %O' M9 PMOT'
I P' KP %M !' 7' NHP' ! A9PGN I !OPO' & I M!G
'J!OP Q ' %H' I P' M!' P!%P L GP'
1 7H I J MA9P OM!QP JG' K !GP]JP!KP8
HM%' GH J9O' AP' !' M' & I M!' T J' O ' M!%+
1 ' P9GP' T J' JGP' ! %8 4 J' 9 U' LM9P' M!O' QMCP+
#!O' LJ%' !' 7PM ' M!O' KMG%' T J GP97' !' !OP +
'GPP' NHP' GN M!QP' I LMN P!KP' 7' NHP' HPM P!G
J%' 7' T J' J9O' K !G OP ' %HP' N JP' KMJGP'
X HT' M99' %HPGP' 7 PG ' HT' M99' %HPGP' Q9 O !Q' QH GNG+
X HT' A OG' M!O' APMGNG ' 7 I ']JM9 NT' M!O' U !O8
X HT' 9O' I P!' 7 9G ' M!O' KH 9O P!' KM9KJ9MNP8
X HT' M99' %HPGP' NH !QG' KHM!QP' 7 I ' %HP ' O !M!KP+
HP ' !M%J PG ' M!O' L P 7 I PO' 7MKJ9% PG
V ' I !GN JG']JM9 NT S HT' T J' GHM99' 7 !O+
HM%' HPM P!' HM%N' !7JGMO' %HP I ' %H' NHPGP' GL NG+
' I MUP' %HP I ' !GN J I P!NG' 7'7PM ' M!O' M I !Q'
!N ' G I P' I !GN JG' GNMNP+
'K J9O' 2 ' MGKM' !M I P' N ' %HPP' M' I M!'
GN' 9 UP' %H G' O PMO7J9' ! QH%8
HM%' %HJ!OP G ' 9 QHNP!G ' LP!G' Q M PG ' M!O' M G'
#G' O %H' %HP' 9 !' ! ' %HP' ML N 9
#' I M!' ! ' I QH%N P ' %HM!' %HTGP97 ' I P+
2!' LP G !M9' MK%' !' 8 TP%' L O Q JG' Q !+
#!O' 7PM 7J9' MG' %HPGP' GN M!QP' P JL%' !G' M P+
' $ G' MPGM' %HM%' T J' I PM!' ' 2G' N' ! N ' MGG JG' \
-' / P%' N' AP' H ' N' G' 7 ' & I M!G' !
"M P' %HP G' M!O' 9 I AG' 9 UP' N ' %HP ' M!KPGN G+
J%' P' %HP' H 9P' [J ' 7M%HP G% I !OG' M P' OPMO+
#!O' P' M P' Q P !%O' %H' J ' I %HP G% GL G' 8
1 J ' T UP' M!O' GJ77P M!KP' GH ' JG' I M! GH+
-' 2!OPPO' %HPT' GMT' %HP' GP!MN G' N I '
PM!' N ' PGNMA9 GH' MPGM ' MG' M' U !Q
#!O' HP' GHM99' PM ' H G' K !' AT' GPM' M!O' 9M!O+
2!' P P T' L9MKP ' GM P' HP P' !' 2NM9T+
-' 2' U! ' HP P' 2' 99' PM ' %H G' OMQQP ' %HP!8
MGG JG' 7 I ' A !OMQP' 99' OP9 P ' MGG JG
HP P !' TP' Q OG' T J' I MUP' %HP' PMU' I GM' GN !Q8
HP P !' TP' Q OG' T J' NT M!NG' O ' OP7PMN
'GN !T' N P ' ! ' M99G' 7' APMNP!' A MGG+
'M 9PGG' OJ!QP !' ! ' GN !Q' 9 !UG' 7' !+
M!' AP' PNP!N P' N ' %HP' GN P!QN%' 7' GL N
J%' 9 7P' AP !Q' PM T' 7' %HPGP' 9O9T' AM G+
P P '9MKUG' L P ' N ' O G I GG' %GP97+
27' 2' U! ' %H G' U! .' M99' %HP' 9O' APG OPG+
HM%' LM N' 7' NT M!!T' %HM%' 2' O ' APM '
4 J' HM P' QH%' P9' K !KP %PO+ / P%' JG' Q +
O ' %HP' AMGP' I M%NP ' N ' 99J I !' M%P'
X P' 9' M' NH !Q' MG' MPGM [J N ' 1 ' Q P7[
X HP P' HMG%' NH J' 9PO' I P ' 2 ' LP HMLG ' GLPMU' NH G'
P7 P' M' 99 !Q' A !O I M!' ' %HP!' 2' U!

3 3' 2+S ' - ' JNJGGG' & "

+

% & ' X HM%' / JK JG' [H [S
2' KM!! N ' AT' %HP' L Q PGG' 7' %HP' G%M G+

D HP' Q !M%' HMG' %' % ' I P' J9O' PMO' %' 0 ; ' AJ%' %HP' JGP' G' %HP'
! J!' ' !' %HP' GP!GP' 7 -- (* G' L AMA9T' K9PM P +
1/ ' 22') ' f'
2
6' P I A ' OT' M' LM %T' ' 7MK% ' !+R

' F (%' ' ? H!G ' !' K ' !G OP G' %HM%' %HP' PWL PGG !' HP P' I PM!G' (' ' ' AP'
(%* ' !' %G' ! M%' GP!GP' ' Q ! M%' GP!GP' G N ' AP' O ! Q8 ' AJ%' M9 ! P' GJQQPGN%' %HM%' N' I PM!G'

B '/JK JG+

?& ' M99$Ø T J' I T9 Ø
% &' :PN I P M' NML P ' i' I T' GNJOT' /JK JG
XHPI' N' G 9 QHNPO'K I P' MIO' KM9§' I P' HP P+
9: 4
?& '2' 99'IT9 O+
% &' 2N' I JGN'AP'AT' H G'OPMNH' MIO'7 'IT'LM N
2'UI 'i'LP i M§'KMJGP'N 'GLJ i'MN'H I +
JN'7 'NHP'QPIP M9+ "P' J9O'AP'K iØ' S
"' 'NHMN' I QHN'KHMIQP'H G'iMNJ P'%G'NHP']JPGN i+
2N' G'NHP'A QHN'OMT'NHMN'A iQG'7 NH'HP'MOOP 8
#iØ'NHMN'K M PG' M T' M9U iQ+' i'H I'\S HMN8S'
#iØ'NHPI';2'Q MIN' P'LJN'M'GN iQ' i'H I +
HMN'MN'H G' 99'HP' I MT'O 'OMIQP' NH+
HP'MAJGP' 7Q' PMNIPGG' G HPI'N'O GE iG
&PI GP'D7 I'L P '#iO'N 'GLPMU'N JNH' 7 MPGM
2'HM P'i N'UI i' HPI'H G'M77PKN iG G MT%Ø'
P'NHMI'H G' PMG i+' JN'%N G'M'K I I i'L 7
HMN'9 9 IPGG G T JIQ'MI A N i%G 9MOOP
XHP PN 'NHP'K9 I AP JL M Ø'NJ iG'H G'7MKP
JN' HPI'HP' IKP'MNNM iG'NHP'JLI GN' JIO+
"P'NHPI'JIN 'NHP'9MOOP'NJ iG'H G'AMKU+
/ UG' i'NHP'K9 JOG'GK i IQ'NHP'AMGP'OPQ PPG'
T' H KH'HP'O O'MGKPIO' ' MPGM'I MT8
HPI'9PGN'HP' I MT'L P piN+' #iO'G iKP'NHP']JM PQ'
X 99'APM'i 'K 9 J'7 'NHP'NH iQ'HP' G+
OMGH i' N'NHJG'8 NHMN' HMN'HP' G'MJQI piNPO+
X J9O' JI'N 'NHPGP'MIO'NHPGP'PWN pI N PG'
#iO'NHP P7 P'NH iU'H I'MG'M'GP LPiN%G PQQ+
XH KH'HMNKH%O' J9O'MG'H G'U iO'Q 'I GKH p JG'8
#iO'U 99'H I' i'NHP'GHP99+

'/JK JG+

?& ' M99$Ø T J' I T9 Ø
% &' :PN I P M' NML P ' i' I T' GNJOT' /JK JG
XHPI' N' G 9 QHNPO'K I P' MIO' KM99' I P' HP P+
9: 4
?& '2' 99'IT9 O+
% &' 2N' I JGN'AP'AT' H G'OPMNH' MIO'7 'IT'LM N
2'UI 'i'LP i M§'KMJGP'N 'GLJ i'MN'H I +
JN'7 'NHP'QPIP M9+ "P' J9O'AP'K iØ' S
"' 'NHMN' I QHN'KHMIQP'H G'iMNJ P'%G'NHP']JPGN i+
2N' G'NHP'A QHN'OMT'NHMN'A iQG'7 NH'HP'MOOP 8
#iO'NHMN'K M PG' M T' M9U iQ+' i'H I'\S HMN8S'
#iO'NHPI';2'Q MIN' P'LJN'M'GN iQ' i'H I +
HMN'MN'H G' 99'HP' I MT'O 'OMIQP' NH+
HP'MAJGP' 7Q' PMNIPGG' G HPI'N'O GE iG
&PI GP'D7 I'L P '#iO'N 'GLPMU'N JNH' 7 MPGM
2'HM P'i N'UI i' HPI'H G'M77PKN iG G MT%Ø'
P'NHMI'H G' PMG i+' JN'%N G'M'K I I i'L 7
HMN'9 9 IPGG G T JIQ'MI A N i%G 9MOOP
XHP PN 'NHP'K9 I AP JL M Ø'NJ iG'H G'7MKP
JN' HPI'HP' IKP'MNNM iG'NHP'JLI GN' JIO+
"P'NHPI'JIN 'NHP'9MOOP'NJ iG'H G'AMKU+
/ UG' i'NHP'K9 JOG'GK i IQ'NHP'AMGP'OPQ PPG'
T' H KH'HP'O O'MGKPIO' ' MPGM'I MT8
HPI'9PGN'HP' I MT'L P piN+' #iO'G iKP'NHP']JM PQ'
X 99'APM'i 'K 9 J'7 'NHP'NH iQ'HP' G+
OMGH i' N'NHJG'8 NHMN' HMN'HP' G'MJQI piNPO+
X J9O' JI'N 'NHPGP'MIO'NHPGP'PWN pI N PG'
#iO'NHP P7 P'NH iU'H I'MG'M'GP LPiN%G PQQ+
XH KH'HMNKH%O' J9O'MG'H G'U iO'Q 'I GKH p JG'8
#iO'U 99'H I' i'NHP'GHP99+

'GLPMU'MIO'GN UP'¥ 1'& I P[2' I MUP'NHP'L I GP+
27'NHP' PO PGG' 99'7 99 'NH J' PKP PGN'
HT'7J99'LPN N i'MN'NHP'HMIO' 7' JNJG'[

B ' '@ '

?& ' ' M KH' G MGNPO'7 J NPPI'OMTG+
= i "2
% ' % G Q O+ : 'N 'NHP'QMNP' G I PA OT'UI KUG+
= 4 ' '@ '(
IKP' MGG JG'7 GN O O' HPN' I P' MQM iGN' MPGM'
2'HM P'i N G9PLN+
PN PPI'NHP'MKN iQ' 7M'O PMO7J9'NH iQ'
#iO'NHP'7 GN' I N i'M99'NHP' iNP I'G'
/ UP'M'LHMiNMG IM' 'M'H OP JG'O PMI'
HP'QPi JG'MIO'NHP' I NM9 iGN JJ piNG'
P'NHPi' i'K Ji K 98 MIO'NHP'GNMN' 7M' IMi F
/ UP'N 'M'9 NN9P'U iQO I 'GJ77P G'NHPi'
HP'iMNJ P' 7Mi' iGJ PKN i+

?& ' ' '@ '(

?& ' '%G T J'A NHP' MGG JG'FM'NHP'O +
XH 'O NH'OPG P'N 'GPP'T J+
% &' 2G'HP'M9 iP'\
?& ' 'G 'NHP P'M P'I P' NH'H I+
% &' 5 'T J'Ui 'NHPI'\
? ' ' 'G 8 NHP 'HMNG'M P'L9JK%U%O'MA JN'NHP 'PM G+'
#iO'HM97'NHP '7MKPG'AJ PO' i'NHP 'K9 MUG+
HMN'AT'i 'IPMIG2'IMTO GK P'NHPI'
T'MIT'IM U' 7'7M J +$D
/PN'NHPI'PiNP +' = 4 ' '@
% &'
HPT'M P'NHP'7MKN i+' 1' iGL MKT[
HM1 %G'NH J'N 'GH 'NHT'OMiQP JG'A 'AT'i QHN+
XHPi'P 9G'M P'I GN'7 PP'¥ 1'NHPi'AT'OMT'

HMN' MNKH7J9'KM PG'O ' !NP L GP'NHP I GP9 PG'
PN WN'T J 'PTPG'M!O' ! QHN'\
-' HM99'2' P!N PMN'M' O'\ ^' 5'2 -,
$ ' " P P'9 PG'NHP'PMGN' 5 NH'! N'NHP'OMT'A PMU'HP P'\
- ' ++
' 1 'LM O !'G ' N'O NH8 M!O'T !'Q PT'9 !PG'
HMN'7 PN'NHP'K9 JOG'M P' I PGGP!QP G' 7'OMT+
- ' 4 J'GHM99'K !7PGG'NHMN'T J'M P'A NH'OPKP %O+'
"P P'MG'2'L !N' I T'G O'NHP'GJ!'M GPG8
X H KH' G'M'Q PMN' MT'Q !Q' !'NHP'G JNH+
X P QH !Q'NHP'T JNH7J9'GPMG !' 7'NHP'TPM +
I P'N ' I !NHG'HP!KP'JL'H QHP 'N M O'NHP'! NH'
"P'7 GN'L PGP!NG'H G'7 P'8 M!O'NHP'H QH'PMGN'
NM!OG 'MG'NHP' ML N 9'O PKN9T'HP P+
% &' : P' I P'T J 'HM!OG'M99' P ' !P'AT' !P+
-' #!O'9PN'JG'G PM ' J ' PG 9JN !+
% &' ' ! N'M!' MNH' '27'! N'NHP'7MKP' 7' I P!+
HP'GJ77P M!KP' 7' J 'G J9G 'NHP'N I P%G MAJGP S
27'NHPGP'AP' I N PG' PMU 'A PMU' 77'APN I PG+
#!O'P P T' I M!'HP!KP'N 'H G' O9P'APO8
'9PN'H QH G QHNPO'NT M!!T' M!QP' !+
99' PMKH' I M!'O L'AT'9 NNP T+' JN' 7'NHPGP+
#G'2'M I 'GJ P'NHPT'O 'APM '7 P'P! JQH'
'U !O9P'K M OG 'M!O'N 'GNPP9' NH' M9 J +
HP' I P9N !Q'GL NG' 7' I P!8 NHP!'K J!N T I P!+
X HMN'!PPO' P'M!T'GLJ 'AJN' J ' !'KMJGP'
'L KU'JG'N ' PO PGG'\ HMN' NHP 'A !O+
HM!'GPK PN'& I M!G 'NHMN'HM P'GL UP'NHP' O+
#!O' 99'! N'LM9NP '\M!O' HMN' NHP ' MNH+
HM!'H !PGNT'N 'H !PGNT' P!QMQ%O+
HMN'NH G'GHM99'AP' ' P' 99'7M99'7 ' N'\
PM 'L PGNG 'M!O'K M OG 'M!O' I P!'KMJNP9 JG
19O'7PPA9P'KM !G 'M!O'GJKH'GJ77P !Q'G J9G'
HMN' P9K I P' !QG8 J!N 'AMO'KMJGPG'G PM '
JKH'K PMNJ PG'MG' I P!'O JAN' AJN'O '! N'GNM !'
HP'P P!' NJP' 7' J 'P!NP L GP+
'NHP' !G LL PGG P' I PNMG' 7' J 'GL NG
L'NH !U'NHMN' ' J 'KMJGP' ' J 'LP 7 I M!KP+
5 O'!PPO'M!' MNH'8 HP!'P P T'O L' 7'A9 O'
HMN'P P T'& I M!'APM G 'M!O'! A9T'APM G+
2G'QJ 9NT' 7'M'GP P M9'AMGNM OT+
27'HP'O 'A PMU'NHP'G I M99PGN'LM N K9P'
17'M!T'L I GP'NHMN'HMNH'LMGG%O'7 I 'H I +
-' JN' HMN' 7' KP ''D HM99' P'G J!O'H I '\
2'NH !U'HP' 99'GNM!O' P T'GN !Q' NH'JG+
- ' /PN'JG'! N'9PM P'H I ' JN+
'AT'! ' I PM!G+
E ' 1 '9PN'JG'HM P'H I 8 7 'H G'G 9 P 'HM G'
X 99'LJ KHMGP'JG'M'Q O' L ! !+
#!O'AJT' I P!%G KPG'N 'K I I P!O' J 'OPPOG8
2N'GHM99'AP'GM O'H G'EJOQ I P!N' J9%O' J 'HM!OG8
1J 'T JNHG 'M!O' 9O!PGG 'GHM99'! ' H N'MLLPM +
JN'M99'AP'AJ PO' !'H G'Q M NT+
% &' 1 '!M I P'H I '! N8 9PN'JG'! N'A PMU' NH'H I 8
O 'HP' 99'!P P '7 99 'M!TNH !Q'
HMN' NHP ' I P!'APQ !+
-' T HP!'9PM P'H I ' JN+
- ' 2!OPPO 'HP' G'! N'7 N+
' HM99'! ' I M!'P9GP'AP'N JKH%O'AJN' !9T' GPGM '\
-' 5PK JG' P99'J Q%O 8S2'NH !U' N' G'! N' I PPN'
M U'#!N !T 'G ' P99'AP9 O' 7' MPGM
H J9O' JN9 P' MPGM ' XP'GHM99'7 !O' 7'H I '
#'GH P O'K !N P 8' M!O'T J'U! 'H G$ I PM!G+
27'HP' I L P'NHP I ' I MT' P99'GN PNKH'G '7M '
#G'N 'M!! T'JG'M99' H KH'N 'L P P!N+
/PN'#!N !T'M!O' MPGM '7M99'N QPNHP +D
% &' 1J 'K J GP' 99'GPP I 'N 'A9 OT' M JG' MGG JG
'KJN'NHP'HPMO' 77' M!O'NHP!'HMKU'NHP'9 I AG8

' & !&-SD MT'K KJ I GLPKN+

F HP'LMJGP' H KH'!MNJ M99T' KKJ G'AP7 P' MGG JG' 77P G M!'M!G P 'N 'NHP' I LMG

/ UP' MNH' !'OPMNH ' M!O' P! T' M7NP M OG'
O '#!N !T' G'AJN' M'9 I A' 7' MPGM +
/PN'JG'AP'GMK 7 KP G 'AJN'! N'AJNKHP G ' M JG+
X P'M99'GNM!O'JL'MQM !GN'NHP'GL N' 7' MPGM 8
#!O' !'NHP'GL N' 7' I P!'NHP P' G'! 'A9 O
1 'NHMN' P'NHP!'K J9O'K I P'AT' MPGM %G'GL N
#!O'! N'O G I P I AP ' MPGM '[JN' M9MG
MPGM ' I JGN'A9PPO'7 ' N[#!O ' QP!N9P'7 P!OG
/PN%G U 99'H I 'A 9O9T' AJN'! N' MNH7J99T8
/PN%G KM P'H I 'MG'M'O GH'7N'7 'NHP'Q OG+
N'HP 'H I 'MG'M'KM KMGP'7N'7 'H J!OG
#!O'9PN' J 'HPM NG 'MG'GJAN9P' I MGNP G'O +
N 'JL'NHP 'GP M!NG'N 'M!'MKN' 7' MQP+
#!O'M7NP 'GPP I 'N 'KH OP'NHP I +' H G'GHM99' I MUP'
1J 'LJ L GP'!PKPGGM T 'M!O'! N'P! JG
X H KH'G 'MLLPM !Q'N 'NHP'K I I !'PTPG+
X P'GHM99'AP'KM99%O'LJ QP G' ! N' I J OP P G+
#!O'7 ' M U'#!N !T 'NH !U'! N' 7'H I '8
O 'HP'KM!'O '! ' I P'NHM!' MPGM %G'M I $
X HP!' MPGM %G'HPMO' G' 77+
-' 4PN'2'7PM 'H I '
O ' !'NHP' !Q M7NPO'9 P'HP'APM G'N ' MPGM S
% &' #9MG 'Q O' MGG JG[O ' ! N'NH !U' 7'H I '
27'HP'9 P' MPGM ' M99'NHMN'HP'KM!'O
2G'N 'H I GP97 SNMUP'NH JQHN'M!O'O P'7 ' I GM
#!O'NHMN' P P' I JKH'HP'GH J9O8 7 'HP' G'Q P!'
'GL NG 'N ' 9O!PGG 'M!O' I JKH'K I LM!T+
(' HP P' G'! '7PM ' !'H I 8 9PN'H I '! N'O P'8
O 'HP' 99'9 P' M!O'9MJQH'MN'NH G'HP PM7NP +
' = ! '- ' -
% &' -PMKP[K J!N'NHP'K9 KU+
-' HP'K9 KU'HMNH'GN KUP!'NH PP+
(' % G'N I P'N 'LM N+
-' JN' N' G'O JAN7J9'TPN
$XHPNHP ' MPGM ' 99'K I P'7 NH'N OMT' ' ! '
O 'HP' G'GJLP GN N JG'Q !' 7'9MNP8
>J NP'7 I 'NHP' I M !' L ! !'HP'HP9O' !KP'
17'7M!NMGT ' 7'O PM I G 'M!O'KP P I ! PG'8
2N' I MT'AP 'NHPGP'MLLM P!N'L O Q PG+
HP'J!MKKJGN I %O'NP ' 7'NH G'! QHN
#!O'NHP'LP GJMG !' 7'H G'MJQJ P G
MT'H 9O'H I '7 I 'NHP' ML N 9'N OMT+
' P P '7PM 'NHMN' 27'HP'AP'G ' PG 9 $O'
2'KM!' %P G MT'H I ' ' 7 'HP'9 PG'N 'HPM '
HMN'J! K !G' I MT'AP'APN MT%O' NH'N PPG+
#!O'APM G' NH'Q9MGGPG 'P9PLHM!NG' NH'H 9PG+
/ !G' NH'N 9G 'M!O' I P!' NH'79MNNP P G
JN' HP!'2'NP99'H I 'HP'HMNPG'79MNNP P G+
"P'GMTG'HP'O PG8 AP !Q'NHP!' I GN'79MNNP PO+
/PN' I P' U
O '2'KM!'Q P'H G'HJ I J 'NHP'N JP'AP!N8
#!O'2' 99'A !Q'H I 'N 'NHP' ML N 9+
-' MT ' P' 99'M99' 7'JG'AP'NHP P'N '7PNKH'H I +
% &' T'NHP'P QHNH'H J '2G'NHMN'NHP'JNNP I GN' '
' P'NHMN'NHP'JNNP I GN 'M!O'7M 9'! N'NHP!+
E ;' M JG' / QM JG'O NH'APM ' MPGM 'HM O+
XH ' MNPO'H I '7 'GLPMU !Q' P99' 7'- I LPT'8
2' !OP '! !P' 7'T J'HM P'NH JQHN' 7'H I +
% &' 'Q O' PNP99JG 'Q 'M9 !Q'AT'H I 8 %
"P'9 PG' I P' P99 'M!O'2'HM P'Q P!'H I ' PMG !G'8
P!O'H I 'AJN'H NHP ' M!O'2%99'7MGH !'H I +
-' HP' I ! !Q' K I PG' JL !' JG ' XP%99' 9PM P' T J'
JNJG S
#!O'7 P!OG 'O GLP GP'T J GP9 PG' ' AJN'M99' P I P I AP '
.XHMN'T J'HM P'GM O 'M!O'GH 'T J GP9 PG'N JP'& I M!G+
% &' : O'QP!N9P I P!'9 U'7 PGH'M!O' I P 9T8
/PN'! N' J '9 UG'LJN' !' J 'LJ L GPG8
JN'APM ' N'MG' J '& I M!'MKN G'O +

G !PO'M QJ I P!N' 7' JNJG' J9O'AP' I GN'OPK OPO9T' I M UPO'AT'M L LP ' PMOP '!'
MKN 8 TPN' - LP'M!O' NHP 'PO N G' PMO' "!'. $'N ' I MUP' JN'NHP' I PN P+
' %5' SAT'H G'H JGP+

X NH' J!N %O' GL NG' M!O' 7 I M9' K !GNM!KT
#!O' G 'Q O' I 'N 'T J' P P T' !P+6
9: 4 ' ' '& (('
T[/JK JG' [SOMGN' MG9PPL[2N' G' ! ' I MNNP '8
3!E T' NHP' H !PT HPM T' OP ' 7' G9J I AP
H J' HMGN' ! '7 QJ PG' ! '! '7M!NMG PG+
XH KH' AJGT' KM P' O M G' !' NHP' A M !G' 7' I P!'
HP P7 P' NH J' G9PPL%GN' G 'G J!O+

'

>! ' JNJG' I T' 9 O' [
% &' - N M' HMN' I PM!' T J' 9 X HP P7 P' GP' T J'! '\
2N' G' ! N' 7 'T J 'HPM9NH' NHJG' N 'K I I N'
4 J' PMU' K !O N !' N 'NHP' M K 9O' I ! !Q+
>! ' '7 'T J G' !P NHP +' 4 J' HM P' J!QP!N9T' JNJG'
N 9P' 7 I' I T' APO' #!O' TPGNP ! QHN' MN' GJLLP +
4 J' GJOOP!9T' M GP' M!O' M9U%O' MA JN+
JG !Q' M!O' G QH !Q' NH' T J 'M I G' MK GG'
#!O' HP!' 2' MGU%O' T J' HMN' NHP' I MNNP ' MG+
4 J' GNM %O' JL !' I P' NH' J!QP!N9P' 9 UG
2' J Q%O' T J' 7J NHP 8 NHP!' T J' GK MNKH%O' T J 'HPMO+
#!O' N ' I LMN P!N9T' GNM I L%O' NH' T J '7 N
4PN' 2' !G GNPO' TPN' T J' M!G P %O' ! N8
JN' NH' M!' M!Q T' M7NJ P' 7' T J 'HM!O+
: M P' G Q!' 7 ' I P' N '9PM P' T J' ' '2' O O8
OPM !Q' N 'GN P!QNHP!' NHMN' I LMN P!KP
XH KH' GPP I %O' N ' I JKH' P!U !O9PO8 M!O' NHM9
" L !Q' N' MG' AJN' M!' P77PKN' 7' HJ I J +
XH KH' G I PN I P' HMNH' H G' H J' NH' P P T' I M!+
2N' 99' ! N' 9PN' T J' PMN' ! 'NM9U' ! 'G9PPL' 8
#!O' K J9O' N' U' G ' I JKH' JL !' T J 'GHMLP+
#G' N' HMNH' I JKH' L P M 9%O' !' T J 'K !O N !
2' GH J9O' ! N' U! 'T J' JNJG+' 5PM ' I T' 9 O+
MUP' I P' MK]JM !NPO' NH' T J 'KMJGP' 7'Q P7+
% &' 2' M I' ! N' P99' !' HPM9NH 'M!O' NHMN' G' M99+
>! ' JNJG' G' GP' M!O' P P' HP' ! N' !' HPM9NH'
" P' J9O' P I A MKP' NHP' I PM!G' N 'K I P' AT' N+
% &' XHT 'G '2' O S: O' - N M 'Q 'N 'APO+
>! ' 2G' JNJG' G KU' \ M!O' G' N' LHTG KM9'
' M9U' J!A MKPO 'M!O' GJKU' JL' NHP' HJ I J G'
17' NHP' OM!U' I ! !Q' \ XHMN' G' JNJG' G KU8
#!O' 99' HP' GNPD9' JN' 7' H G' H 9PG HP' APO
'OM P' NHP' 9P' K !NMQ !' 7' NHP' ! QHN+
#!O' NP I LN' NHP' HPJ I T' M!O' !LJ QPO' M '
'MOO' J!N 'H G' G KU!PGG'9 ' I T' JNJG' 8
4 J' HM P' G I P' G KU' 77P!KP' NH !' T J' I !O+
XH KH 'AT' NHP' QHN' M!O' NJP' 7' I T' L9MKP
2' JQHN' N 'U! ' 7' #!O' JL !' I T' U!PPG
2' KHM I 'T J 'AT' I T' !KP' K I I P!OPO' APMJNT+
T' M99' T J ' G' 7'9 P' M!O' NHMN' Q PMN' '
XH KH' O O' !K L MNP' M!O' I MUP' JG' !P+
HMN' T J' J!7 9O' N ' I P' T J GP97' T J 'HM97+
XHT' T J' M P' HPM T' 8 M!O' HMN' I P!' N ! QHN'
" M P' HMO' PG N' N 'T J' 7 'HP P' HM P' APP!'
I P' G W' 'GP P!' H 'O O' H OP' NHP '7MKPG'
3 P!' 7 I' OM U!PGG+
% &' !PP9' ! N' QP!N9P' - N M+
>! ' 2' GH J9O' ! N' !PPO' 7' T J' P P' QP!N9P' JNJG+'
X NH !' NHP' A !O' 7' I M MQP' NP99' I P' JNJG
2G' N' PWKPLNPO' 2' GH J9O' U! '! 'GPK PNG'
HMN' MLLP NM !' N 'T J' \ # I' 2' T J GP97'
JN' MG' N' P P' !' G N' '9 I NMN !8
'UPPL' NH' T J' MN' I PM9G' K I 7 N' T J 'APO+
#!O' NM9U' N 'T J' G I PN I PG' \ 5 P99' 2' AJN' !' NHP' GJAJ AG'
17' T J 'Q O' L9PMGJ P' \ 27' N' AP' ! ' I P
- N M' G' JNJG%HM 9 N' ! N' H G' 7P+
% &' 4 J' M P' I T' N JP' M!O' H ! J MA9P' 7P8
#G' OPM 'N ' I P' MG' M P' NHP' JOOT' O LG'
HMN' G N' I T' GMO' HPM N+
' >! ' 27' NH G' P P' N JP 'NHP!' GH J9O' 2' U! 'NH G' GPK PN+
2' Q M!N' 2' M I' M' I M!8 AJN' NHM9

#' I M!' NHMN' 9 O' JNJG' N U' N ' 7P
2' Q M!N' 2' M I' M' I M!' 8 AJN' NHM9
#' I M!' P99 PLJNPO S MN %G' OMJQHNP +
H !U' T J' 2' M I' ! 'GN !QP 'NHM!' I T' GPW+
P !Q' G '7MNHP %O' M!O' G 'HJGAM!OPO' \
P99' I P' T J 'K J!GP9G' 2' 99' ! N' O GK9 GP' NHP I'
2' HM P' I MOP' GN !Q' L 7' 7' I T' K !GNM!KT+
: !Q' I TGP97' M' 9J!NM T' J!O'
+" P P ' !' NHP' NH QH ' M!' 2' APM 'NHMN' NH' LMN P!KP
#!O' ! N' I T' HJGAM!O%G' GPK PNG' \
% &' 1' TP' Q OG+
&P!OP ' I P' NHT' 7' NH G' ! A9P' 7P' [
+ ! ' 3' 2
" M U 'HM U' [!P' U! KUG' ' - N M 'Q ' !' M H 9P8
#!O' AT' M!O' AT' NHT' A G I 'GHM99' LM NMUP'
HP' GPK PNG' 7' I T' HPM N+
#99' I T' P!QMQP I P!NG' 2' 99' K !GN JP' N 'NHPP+
#99' NHP' KHM MKNP T' 7' I T' GMO' A G8S
/PM P' I P' NH' HMGNP+' = 4 '

' '@ '(' "' (

/JK JG' H %G' NHMN' U! KUG' \
?& ' " P P' G' M' G KU' I M!' NHMN' J9O' GLPMU' NH' T J+'
% &' M JG' / QM JG 'NHMN' PNP99JG' GLMUP' 7+S
T 'GNM!O' MG OP+S M JG' / QM JG' [H '\
? 3' JKHGM7P' Q O' I '7 I' M' 7PPA9P' N !QJP+
% &' 1' HMN' M' N I P' HM P' T J' KH GP' JN 'A M P' M JG'
' PM 'M' UP KH P7[%X J9O' T J' P P' ! N' G KU[
? 3' 2' M I' ! N' G KU' 7' JNJG' HM P' !' HM!O'
#!T' PWL9 N' NHT' NHP' !M I P' 7'H ! J+.
% &' JKH' M!' PWL9 N' HM P' 2' !' HM!O' / QM JG
" MO' T J' M' HPM9NH7J9' PM 'N 'HPM ' 7' N+
? 3' T' M99' NHP' Q OG' NHMN' & I M!G' A 'AP7 P
2' HP P' O GKM O' I T' G KU!PGG' [J9' 7'& I P' 2
M P' G !' OP %O' 7 I' H ! J MA9P' 9 !G' [
H J' 9 UP' M!' PW K GN' HMGN' K !EJ %O' JL'
T' I N 7 PO' GL N+' 'A O' I P' J!
#!O' 2' 99' GN P' NH' NH !QG' I L GG A9P8
4PM' QPN' NHP' APNNP ' 7' NHP I +' X HMN%G' N 'O '\
% &' #' L PKP' 7' U' NHMN' 99' I MUP' G KU' I P!' H 9P+'
? 3' JN' M P' ! N' G I P' H 9P' NHMN' P' I JGN' I MUP' G KU\'
% &' HMN' I JGN' P' M9G +' X HMN' N' G' I T' M JG
2' GHM99' J!7 9O' N 'NHPP' MG' P' M P' Q !Q'
' H I' N' I JGN' AP' O !P+
? 3' PN' !' T J '7 N8
#!O' NH' M' HPM N' !P '7 %O' 2' 7 99 'T J+
'O '2' U! '! N' HMN8 AJN' N' GJ77 KPNH'
HMN' JNJG' 9PMOG' I P' !+
% &' 0 99 ' I P' NHP!+' = 4 &

3 3' 22+S '- ' ' !! ' ' MPGM %G'

& " ' "' 3 3' ' D #&' ' -' 3 3!I1

-' ' HPM P!' ! ' PM NH ' HM P' APP!' MN' LPMKP' N _
! QHN'
H KP' HMNH' M9LHJ ! M' !' HP 'G9PPL' K PO' JN
6' "P9L 'H '[HPT' I J NHP ' MPGM [R XH %G' NH !' \<

' ' P M!N+

7 1' T' 9 O' \
aI-' : 'A O' NHP' L PGNG' O 'L PGP!N' GMK 7 KP
#!O' A !Q' I P' NHP ' L ! !G' 7' GJKKPGG+
7 1' 2' 99' I T' 9 O+ = 4

' " (

' XHMN' I PM!' T J' MPGM '\ H !U' T J' N ' M9U' 7 NH' \
4 J' GHM99' ! N' GN ' JN' 7' T J 'H JGP' N OMT+

%7 MPGM GHM99 7 NH8 HP NH !QG NHMN NH PMNP!%O IP
P%P 9 U%O AJN !I TAMKU8 HP!NHPT GHM99 GPP
HP 7MKP 7 MPGM NHPT M P M! GHPO+
MPGM 2 !P P GN O !KP P I ! PG+
4PN ! NHPT 7 QHN IP+ HP P G !P NH !+
PG OPG NHP NH !QG NHMN P HM P HPM O M!O GPP!+
&PK J!NG I GN H O G QHNG GPP! AT NHP MNKH+
#9 !PGG HMNH HP9LPO !NHP GN PPNG8
#!O Q M PG HM P TM !%O M!O T P9OPO JL NHP OPMO
O P KP7 P T M G7 QHN JL !NHP K9 JOG+
2!I M!UG M!O G]JMO !G M!O QHN7 I 7 M +
X H KH O CC9PO A9 O JL !NHP ML N 9
HP ! GP 7 AMNN9P HJ N9PO ! !NHP M +
" GPG O !P QH D M!O OT !Q IP!O O Q M!8 +
#!O QH GNG O O GH PU M!O G]JPM9 MA JN NHP GN PPNG+
1 PPGM [NHPGP NH !QG M P APT !O M99 JGP
#!O 2 O 7PM NHP I +
V34 X HMN KM!I AP M OPO
X H GP P!O G LJ L G%O AT NHP I QHNT Q OG \
4PN MPGM GHM99 Q 7 NH8 7 NHPGP L PO KN !G
P N NHP 9O !QP!P M9 MG N MPGM +
X HP!I APQQM G O P NHP P M P ! K IPNG GPP!8
HP HPM P!G NHP I GP9 PG A9MCP 7 NH NHP OPMNH 7L !KPG+
%7 M OG O P IM!T N IPG AP7 P NHP OPMNHG8
HP M9 M!N !P P NMGNP 7 OPMNH AJN !KP+
17M99 NHP !OP G NHMN 2 TPN HM P HPM O+
2N GPP I G N + IP I GN GN M!QP NHMN IP!GH J9O 7PM 8
PP !Q NHMN OPMNH M !PKPGGM T P!O+
X 99K IP HP!N 99K IP+

B O P M!N+
X HMN GMT NHP MJQJ P G\
7 1 HPT J9O ! N HM P T J N GN 7 NH N OMT+
-9JKU !Q NHP P!N M 9G 7M!I 77P !Q 7 NH+
HPT K J9O ! N7 !O M HPM N NH !NHP APMGN+
7 HP Q OG O NH G !GHM IP 7L M O KP
MPGM GH J9O AP M APMGN NH JN M HPM N+
27HP GH J9O GNMT MN H IP N OMT 7 7PM +
MPGM GHM99 ! N 5M!QP U! G 7J99 P99
HMN MPGM G I P OM!QP JG NHM!HP+
X P M PF N 9 !G9 NNP %O ! !P OMT+
#!O 2 NHP P9OP M!O I P NP A9P8
#!O MPGM GHM99 Q 7 NH+%
$ #9MG IT9 O+
4 J GO I G K !GJI%O !K !7 OP!KP+
5 ! N Q 7 NH N OMT M99 N IT 7PM
HMN UPPLG T J !NHP H JGP M!O ! N T J !+
X P%99 GP!O M U #!N !T N NHP GP!MNP H JGP8
#!O HP GHM99 GMT T J M P ! N P99 N OMT
/PN IP JL !IT U!PP L P M 9 !NH G+
%- M U #!N !T GHM99 GMT 2 M I ! N P998
#!O 7 NHT HJ I J 2 99 GNMT MN H IP+

(

"P P%G 5PK JG JNJG HP GHM99 NP99 NHP I G +
MPGM M99 HM 9[: O I NHT MPGM
2K IP N 7PNKH T J N NHP GP!MNP H JGP+
æ%- #!O T J M P K IP !P T HMLLT N IP+
APM IT Q PPN !Q N NHP GP!MN G+
#!O NP99 NHP I NHMN 2 99 ! N K IP N OMT

Ð 9 ' H G IMQ! 7KP!N O PWL PGGPG NHP K9MGH !Q 7 PML !G N G
L AMA9T NHP GM IP O MG$ ' # M!O HMUGLP P NH NHP A 9O!PGG 7 QP! JG
IMUPG NHP MKN !Q P NHP G J!O+
$ NPP P!G OPLM NG 7 I NHP Q !M9 !P PMO !Q $#AJN NHP
NP!GPG I QHN HM P APP!LJ L GP9T K !7 J!OPO N PL PGP!N NHP MQJP NP 7 NHP
GLPMUP + " GPG 6 !P QH R K !N !JPG NHP IMQP 7

<O P KP7 P T M G7 QHN JL !NHP K9 JOG+R

JN N IMUP $ K !G GNP!N NH NHP MKN !7 NHP 67 P T M G R + : M!N
XH NP NPG $ *M!O + P QHN9PT $ 2N G LP HMLG APNNP N PNM !
NHP Q !M9 NPWN NHM!Q !N M9NP MN !G NH JN U! !Q HP P N GN L+

M!! N G 7M9GP 8 M!O NHMN 2 OM P ! N 7M9GP 8
2 99 ! N K IP N OMT P99 NHP I G 5PK JG+
MT HP G G KU+
- HM99 MPGM GP!O M 9 P
"M P 2 !K !]JPGN GN PNKH%O I !P M I G 7M +
AP M7PM O N NP99 Q PTAPM OG NHP N JNH \
5PK JG Q NP99 NHP I MPGM 99 ! N K IP+
GN I QHNT MPGM 9PN IP U! G IP KMJGP+
/PGN 2 AP 9MJQH%O MN HP!2 NP99 NHP I G +
- HP KMJGP G !I T 99 2 99 ! N K IP 8
HMN G P! JQH N GMN G7T NHP GP!MNP+
JN 7 T J L MNP GMN G7MKN !+
PKMJGP 2 9 P T J 2 99 9PN T J U! 8
M9LHJ ! M HP P I T 7P GNMTG IP MN H IP
HP O PM I N N ! QHN GHP GM I T GNMNJP+
XH KH 9 UP M 7 J!NM ! NH M!HJ!O PO GL JNG
5O J!LJ P A9 O 8 M!O IM!T 9JGNT & IM!G
M IP G I 9 !Q M!O O O AMNHP NHP HM!OG !N+
#!O NHPGP O PG GHP MLL9T 7 M ! !QG M!O L NP!NG+
#!O P 9G I I !P!N8 M!O !HP U!PP
"MNH HPQQ%O NHMN 2 99 GNMT MN H IP N OMT+
H G O PM I G M99 M I GG !NP L PNPO8
2N MG M G !7M M!O7 NJ!MNP
4 J GNMNJP GL JN !Q A9 O !I M!T L LPG+
2! H KH G I M!T G I 9 !Q & IM!G AMNH%O+
Q! 7 PG NHMN 7 I T J Q PMN & IP GHM99 G KU
&P !Q A9 O8 M!O NHMN Q PMN IP!GHM99 L PG
O N !KNJ PG GNM !G P9 KG M!O K Q! CM!KP+
H G AT M9LHJ ! M%G O PM I G G Q! 7 PO+
%- #!O NH G MT HM P T J P99 PWL J!OPO N+
2 HM P HP!T J HM P HPM O HMN 2 KM!GMT
#!O U! N ! 8 NHP GP!MNP HM P K !K9JOPO
Q P NH G OMT M K !N I QHNT MPGM +
27T J GHM99 GP!O NHP I O T J 99 ! N K IP
HP I !OG IMT KHM!QP+ PG OPG N P P M I KU
#LN N AP P!OP %O 7 G IP !P N GMT
6 PMU JL NHP GP!MNP N 99 M! NHP N IP+
XHP!I MPGM %G 7P GHM99 IPPN NH APNNP O PM IG+R
27 MPGM H OP H IGP97 GHM99 NHPT ! N H GLP
6/ MPGM G M7 M O \R
-M O !I P MPGM 7 I T OPM OPM 9 P
T J L KPPO !Q A OG IP NP99 T J NH G8
#!O PMG !N I T9 P G9 MA9P+ 7
-" 7 9 GH O T J 7PM G GPP I ! M9LHJ ! M[
2 M I MGHM I PO 2 O O T P9O N NHP I +S
: P IP IT AP 7 2 99 Q S

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2 HM P M! H J $G NM9U ! GN P 7 T J8
;&P I P I AP NHMN T J KM99 ! I P N OMT
P !PM I P NHMN 2 I MT P I P I AP T J+
(!GM 2 99 SM!O G !PM 99 2 AP 9: - "
HMN T J APGN 7 P!OG GHM99 GH 2 HMO APP! 7J NHP +
%7 : O 7 P!OG Q ! M!O NMGNP G I P !P NH I P8
!O P 9 UP 7 P!OG 99 GN M QHN MT Q N QPNHP +
% HMN P P T 9 UP G ! N NHP GM I P 1 GPGM
HP HPM N 7 JNJG TPM !G N NH !U JL ! [9 4 &

3 3 222 F - 7 ML N 9+
$ (" 3 , ,

6 MPGM AP M P 7 JNJG8 NMUP HPPO 7 MGG JG8 K I P ! N !PM MGKM8
HM P M! PTP N ! !M8 N JGN ! N PA ! JG8 I M U P99 PNP99JG I AP 8 5PK JG
JNJG9 PG NHPP ! N8 NH J HMGN !QPO M JG / QM JG+ HP P G AJN !P I !O
! M99 NHPGP I P! M!O N G AP!N MQM !GN MPGM+ 27 NH J APPGN ! N I I NM9 9 U
MA JN T J PKJ NT Q PG MT N K !GL MKT+ HP I QHNT Q OG OP7P!O NHPP [
HT 9 P 8 = A

" P P 99 2 GNM!O N 99 GPGM LMGG M9 !Q
!O MG M GJ N 99 2 Q P H I NH G+
T HPM N 9M I P! NG NHMN NJP KM! ! N 9 P
1JN 7 NHP NPPNH 7 P I J9MN !+
27 T J PMO NH G 1 MPGM NH J I MT%GN 9 P
27 ! N NHP OMNPG NH N M N G O K !N P+ 9 4

3 3 2 F - ! , ! . - 7 $
(. ! !&- ! . JNJG+

- 1 & 2# " ' @ ' (

>!) L NHPP A T J! N NHP GP! MNP H JGP8
NMT ! N N M!G P I P AJN QPN NHPP Q !P 8
X HT O GN NH J GNMT \
?& ; U! I T P M!O I MOM I +
>! 2 J9O HM P HMO NHPP NHP P M! O HP P MQM !+
3 P 2 KM! NP99 NHPP HMN NH J GH J9OGN O NHP P+ S
K !GNM! KT AP GN !Q JL ! I T G OP [
PN M HJQP I J! NM ! %N PP! I T HPM N M! O N !QJP[
HM P M I M! %G I !O AJN M I M! %G I QHN+
" HM O N G 7 I P! N UPPL K J! GP9[S
N NH J HP P TPN \
?& MOM I HMN GH J9O 2 O \
&J! N NHP ML N 9 M!O ! NH !Q P9GP \
!O G PNJ ! N T J M!O ! NH !Q P9GP \
>! 4PG A !Q I P O ALT 7 NHT 2) O 9 U P99+
0 HP P! N G KU9T 7 NH # !O NMUP Q O ! NP
X HMN MPGM O NH HMN GJ N G L PGG N H I +
" M U A T[HMN ! GP G NHMN \
?& 2 HPM ! !P I MOM I +
>! - NHPP 9 GNP! P998
2 HPM O M AJGN9 !Q J I J 9 UP M 7 MT
!O NHP !O A I QG N 7 I NHP ML N 9+
?& NH I MOM I 2 HPM ! NH !Q+

NHGMTP +

>! I P H NHP 7P99
X H KH MT HMGN NH J APP! \
7!! # N I !P ! H JGP Q O 9MOT+
>! X HMN G%N %K9 KU \
7!! # A JN NHP ! !NH H J 9MOT+
>! 2G MPGM TPN Q !P N NHP ML N 9 \
7!! MOM I ! N TPN8 2 Q N NMUP I T GNM! O+
GPP H I LMGG ! N NHP ML N 9+
>! H J HMGN G I P GJ N N MPGM HMGN NH J ! N \
7!! HMN 2 HM P 9MOT 8 7 N 99 L9PMGP MPGM
AP G Q O N MPGM MG N HPM I P
2 GHM99 APGPPKH H I N AP7 P!O H I GP97+
>! X HT U! %G N NH J M!T HM I %G !NP! OPO N M OG
H I \
))

7!! !P NHMN 2 U! 99 AP I JKH NHMN 2 7PM I MT
KHM!KP+
: O I N T J " P P NHP GN PPN G ! M
HP NH !Q NHMN 7 99 G MPGM MN NHP HPP9G+
17 GP! MN G 7 L MPN G K I I ! GJ N G+
X 99 K O M 7PPA9P I M! M9 I GN N OPMNH
2%99 QPN I P N M L9MKP I P O M! O NHP P
LPMU N Q PMN MPGM MG HP K I PG M9 !Q 9 4
>! 2 I JGN Q !+S#T I P[H PMU M NH !Q
HP HPM N 7 I M! G[1 JNJG[
HP HPM P! G GLPPO NHPP ! NH !P P! NP L GP[
J P NHP A T HPM O I P S JNJG HMNH M GJ N
HMN MPGM 99 ! N Q M! N+S 1 2 Q 7M ! N S
&J! / JK JG M! O K I I P! O I P N I T 9 O#
MT 2 M I I P T K I P N I P MQM !
!O A !Q I P O HMN HP O NH GMT N NHPP = 4 &

3 3 2 F - ML N 98 P! MNP - 3
! 2"! . , ! , - " 3 ! ML N 98 ! 3
$ (" NHGMTP > !& -
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-1- / JG ($ ("! -

- HP OPG 7 M KH M P K I P+
7!! #T MPGM 8 AJN ! N Q !P+
" M 9 MPGM [&PMO NH G GKHPOJ9P+
PA ! JG O NH OPG P T J N %P PMO+
N T J APGN 9P GJ P NH G H G HJ I A9P GJ N+
1 MPGM PMO I !P 7 GN8 7 I !P%G M GJ N
HMN N JKHPG <GM ! PM P &PMO N Q PMN I GM +
- X HMN NLJKHPG$JG J GP97 GHM99 AP 9MGN GP %O+
5P9MT ! N MPGM 8 PMO N ! GNM! N9T+
aI- X HMN G NHP 7P99 I MO \
>&(MH Q P L9MKP+
- X HMN J QP T J T J LPN N !G ! NHP GN PPN
I P N NHP ML N 9+

+F #& - ML N 9 - .! !2 3
P! MN G - ;
>! , 2 GH T J P! NP L GP N OMT I MT NH P+
- X HMN P! NP L GP - L 9 JG \
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= "1 - ! + 3 #&+
% & X HMN GM O - L 9 JG / P! M \
- " P GH%O N OMT J P! NP L GP I QHN NH P+
2 7PM J LJ L GP G O GK P PO+
% & / U H HP I MUPG N MPGM M U H I +
- MGKM AP GJOOP! 7 P 7PM L P P! N !+S
JNJG HMN GHM99 AP O !P \ 27 NH G AP U! !
MGG JG MPGM ! P P GHM99 NJ ! AMKU+
0 2 99 G9MT I TGP97+
% & MGG JG AP K !GNM! N
- L 9 JG / P! M GLPMUG ! N 7 J LJ L GPG8
0 9 U HP G I 9PG M! O MPGM O NH ! N KHM! QP+
- PA ! JG U! G H G N I P 8 7 9 U T J JNJG
" P O M G M U # ! N !T JN 7 NHP MT+
= 4 & ") $ (G "
P! MN G ' $ -
X HP P G PNP99JG I AP \ / PN H I Q
!O L PGP! N9T L P7P H G GJ N N MPGM +
% & " P G MOO PGG%O D L PGG ! PM M! O GPK !O H I +
MGKM T J M P NHP 7 GN NHMN PM G T J HM! O+

D "" -- " S PMOT+

J. L. GÉRÔME, PINXT

J. C. ARMYTAGE, SCULPT

THE DEATH OF CÆSAR.

(JULIUS CÆSAR.)

LONDON, VIRTUE & Cº

%C$ # P' P' M99' PMOT'\' HMN' G' i 'MI GG
HMN' MPGM 'MIO' H G GPIMNP' I JGN' PO PGG
JN' NHP P%G AJN' IP' I'M99' O NH' H 9O'H G' L9MKP' 8
' I'NHP 9O'8 % G'7J i GH%O' P99' NH' I PI+
#IO' I PI'M P' 79PGH'MIO'A9 O'MIO'MLL PHPIG P8
4PN' I'NHP' IJ1AP '2'O'UI 'AJN' IP'
HMN' J1MGGM 9MA9P'H 9OG' I'H G' MIU
IGHMU%O' 7'I N I'' MIO'NHMN' 2'MI'HP+
/PN' IP'M' 9 NN9P'GH ' N SP PI' I'NH G+
HMN' 2' MG'K IGNMIN' IAP'GH J9O'AP'AMI GH%O+
#IO'K IGNMIN'O' PIM I'N 'UPPL'H I'G +
' 1' IGM S
-' "PIKP[9N'NH J'9 7N'JL' 19TILJG'\
' : PMN' MPGM S
-' 5 NH'I N' JNJG A N9PGG'UIPP9'\
- ' LPMU'HMIOG'7 'IP+
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-' ' &$% & '[S HPI'7M99' MPGM+
= -' ' pIMN G' "', I, ' ' I .&-IO'
' / AP NT[O PPO I[T MIIT' G OPMO[S
&JI'HPIKP'L K9M I %K T' N'MA JN'NHP'GN PPNG+
' IP'N 'NHP'K II I'LJ9L NG'MIO'K T' JN
6'/ AP NT'7 PPO I'MIO'PI7 MIKH GPI PIN[R
% &' -P L9P'MIO'GPIMN G'[AP'I N'M77 QHNPO8
O9T'I N8 GNMIO'GN 99 SMIAN I%G OPAN' G LMO+
' ' : 'N 'NHP'LJ9L N' JNJG+
-' #IO' MGG JG'N +
' &MG QIG' N9 PI' N' MGKM+ HP O GN AJN I'GPPI G L9MJG A9P+ JN' I'
PKN 'MGG QIG' N9 PI' N' MGKM+ HP O GN AJN I'GPPI G L9MJG A9P+ JN' I'
GJKHFKHMIOP' 7 I' NHP' Q IMJ G ILP MN P9T'KM99PO' 7 +' MPGM' I QHN' LNH
LP7PKIL L PNT'9 UN 'NHP'GPIMNP'MIO'GMT'6'# P' P'M99' PMOT'\'R
F= 8' HP' Q IMJ'HMG' SMI'PMGT I GL IN'7 '' 8
F=2I' PI';? I G I%G 6'5 6K P PG'R' NHP P' G NHP'7 99 IQ' LMGGMQP' P7P IQ' N '
HMN9 GLP P S6' MI'T'N I PG'HP'7P99 IN 'NH GP'NH IQG'K J9O'I N'PGKML'P 9MIQHNP ' MG
HPI'HP'GM O' I'NHP'LP G I' 7' IGM ' IP'GLPM9OIQ'H I ' Y IGM 'NH J'O GN' I P'
IQ%HP' PL9 PO'Y' PGM'O O'IP P' IQ'A JN' NH' EJGN'KMJGP+%R' ? IG I' NP

HPT'M P'M99'7 P'MIO'P P T IP'O NH'GH IP8
JN'NHP P%G AJN' IP' I'M99'O NH'H 9O'H G'L9MKP'8
' I'NHP 9O'8 % G'7J I GH%O' P99' NH' I PI+
#IO' I PI'M P'79PGH'MIO'A9 O'MIO'MLL PHPIG P8
4PN' I'NHP'IJ1AP '2'O'UI 'AJN' IP'
HMN' JIMGGM 9MA9P'H 9OG' I'H G' MIU
IGHMU%O' 7'I N I'' MIO'NHMN' 2'MI'HP+
/PN' IP'M' 9 NN9P'GH ' N SP PI' I'NH G+
HMN' 2' MG'K IGNMIN' IAP'GH J9O'AP'AMI GH%O+
#IO'K IGNMIN'O' PIM I'N 'UPPL'H I'G +
' 1' IGM S
-' "PIKP[9N'NH J'9 7N'JL' 19TILJG'\
' : PMN' MPGM S
-' 5 NH'I N' JNJG A N9PGG'UIPP9'\
- ' LPMU'HMIOG'7 'IP+
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-' ' &$% & '[S HPI'7M99' MPGM+
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' / AP NT[O PPO I[T MIIT' G OPMO[S
&JI'HPIKP'L K9M I %K T' N'MA JN'NHP'GN PPNG+
' IP'N 'NHP'K II I'LJ9L NG'MIO'K T' JN
6'/ AP NT'7 PPO I'MIO'PI7 MIKH GPI PIN[R
% &' -P L9P'MIO'GPIMN G'[AP'I N'M77 QHNPO8
O9T'I N8 GNMIO'GN 99 SMIAN I%G OPAN' G LMO+
' ' : 'N 'NHP'LJ9L N' JNJG+
-' #IO' MGG JG'N +

' &MG QIG' N9 PI' N' MGKM+ HP O GN AJN I'GPPI G L9MJG A9P+ JN' I'
PKN 'MGG QIG' N9 PI' N' MGKM+ HP O GN AJN I'GPPI G L9MJG A9P+ JN' I'
GJKHFKHMIOP' 7 I' NHP' Q IMJ G ILP MN P9T'KM99PO' 7 +' MPGM' I QHN' LNH
LP7PKIL L PNT'9 UN 'NHP'GPIMNP'MIO'GMT'6'# P' P'M99' PMOT'\'R
F= 8' HP' Q IMJ'HMG' SMI'PMGT I GL IN'7 '' 8
F=2I' PI';? I G I%G 6'5 6K P PG'R' NHP P' G NHP'7 99 IQ' LMGGMQP' P7P IQ' N '
HMN9 GLP P S6' MI'T'N I PG'HP'7P99 IN 'NH GP'NH IQG'K J9O'I N'PGKML'P 9MIQHNP ' MG
HPI'HP'GM O' I'NHP'LP G I' 7' IGM ' IP'GLPM9OIQ'H I ' Y IGM 'NH J'O GN' I P'
IQ%HP' PL9 PO'Y' PGM'O O'IP P' IQ'A JN' NH' EJGN'KMJGP+%R' ? IG I' NP

)
' HP' Q IMJ'HMG' L PG Q P'NH G'GLPPKH'N ' MGKM+ HP' M J1'PO N G%GG QIPO'
N'N ' MGG JG+ +' M U'NH I9KG N'G I G I'NHP'I MIP' 7 MGG JG+

% &' #D P P%G -JA9 JG'\
' "P P']JNP'K I7 JIOPO' NH'NH G' I JN I'T+
E ' NMIO'7MGN'N QPNHP '9PGN'G I P'7 PIO' 7' MPGM %G'Y
H J9O'KHMIKPS
% &' M9U'I N' 7GNMIO IQ#S-JA9 JG'Q O'KHPP 8
HP P'G I'HM I' INPIOPO'N'T J'LP G I+
'N 'I '&' I M1'P9GP' G 'NP99'NHPI '-JA9 JG+
-' #IO'9PM P'JG'-JA9 JG'8 9PGN'NHMN'NHP'LP L9P+'
&JGH IQ' I'JG'GH J9O'O'T J'MQP'G I P' I GKH P7+
% &' 5 'G'8SMIO'9PN'I ' I MI'MA OP'NH G'OPPO'
JN' P'NHP'O P G+

B ') $ (
-' XHP P' G #IN IT'\
'O9PO'N 'H G H JGP'M I MC%O'
PI' PG'MIO'KH 9O PI'GNM P'K T' JN'MIO' JI+
#G N' PP'O IGOMT'' ,
% &'OMNPG[P' 99'UI 'T J'J'L9PMGJ PG' S
HMN' P'GHM99'O P' P'UI '8 %W G'AJN'NHP'N IP+
#IO'O M IQ'OMTG' JN'NHMN' IPI'GNMIO'JL I+
-' 'XHT'HP'NHMN'KJNG' 77N' PINT'TPM G' 79 7P'
JNG' 77G' I MITTPM G' 77PM IQ'OPMNH+$
% &' : MIN'NHMN'MIO'NHPI' G'OPMNH' M'APIP7 N
'M P' P' MPGM %G'7 PIOG'NHMN'HM P'MA OQ%O'
" G'N IP' 77PM IQ'OPMNH+S N L'& IMIG'GN L+
#IO'9PN'JG'AMNHP' J'HMIOG' I' MPGM %G'A9 O'
L'N 'NHP'P9A G'MIO'APG IPM ' J'G OG'8
HPI' M9U' P'7 NH'P PI'N 'NHP' I M UPN L9MKP8
#IO' M IQ' J' PO' PML IG' %P' J'HPMOG+
/P%G'M99'K T+'-PMKP'O PPO I'MIO'/ AP NT[
-' N L'NHPI'MIO' MGH+S " ' I MIT'MQPG'HPIKP'
HM99'NH G' J'9 7NT'GKPIP'AP'MKNPO' P+
2I'GNMNPG'JIA I'MIO'MKKPING'TPN'JIUI i[
% &' " ' I MIT'N I PG'GHM99' MPGM'A9PPO' I'GL N+

PP'&PKPIN' P '&PMO IQ'MN'NHP'PIO' 7'NHP'MKN+

B ' ı

% &$ JN'HP P'K IPG'#IN IT+SXP9K IP' M U'#IN IT+
' 1'I QHNT' MPGM [5 GN'NH J'9 P'G'9 '\
P'M99'NHT'K I]JPGNG'Q9 PG'N JILHG'GL 9G+
H JIU'N 'NH G'9 NN9P'IPMGJ P\SOM P'NHPP' P99+S
2'UI 'I N'QPIN9PIPI' HMN'T J' INPIO+
XH 'P9GP'IJGN'AP'9PN'A9 O' H'P9GP'G' MIU'
27'2'ITGP97'NHP P'G I'H J'G'7N'
#G MPGM%G'OPMNH%G'H J 8 I 'I 'IGN JIPIN'
17'HM97'NHMN' NH'MG'NH GP'T J'G OG'IMOP' KH'
X NH'NHP'I GN'I A9P'A9 O' 7M99'NH G' 9O+
2'O 'APGPPKH'TP' 7T J'APM'IP'HM O+
' H 9GN'T J'LJ L9PO'HMIOG'O ' PPU'MIO'GI UP+
OJ97'9'T J'L9PMGJ P+' / P'M'NH JGMIO'TPM G
2'GHM99'I N'7 IO'ITGP97'G 'ML'N 'O P'
'L9MKP' 99'L9PMGP'IP'G 'I 'IPMI' 7OPMNH+
#G'HP P'AT' MPGM 'MIO'AT'T J'KJN'77+
HP'KH KP'MIO'IMGNP'GL NG' 7NH G'MQP+
" MO' 'MG IMIT'PTPG'MG'NH J'HMGN' JIOG+
X PPL I'9'MG'7MGN'MG'NHPT+GN PMI'7 NH'NHT'A9 O+
2N' J9O'APK IP'IP'APNNP'NHMI'N 'K9 GP'
2I'NP IG' 77 PIOGH L' NH'NH IP'PIPI PG+
4 J'GPP' P'O 'TPN'GPP'T J'AJN' J'HMIOG+
#G'AT' J'HMIOG'MIO'NH G' J'L PGPIN'MKN+
4 J'UI 'I N' HMN'T J'O '' 5 'I N'K IGPIN' 9:-" '
HMN'#IN IT'GLPMU'I'H G'7JIP M9
I 'T J'H 'IJKH'NHP'LP L9P'IMT'AP'I %O'
T'NHMN' H KH'HP' 99'JNNP'\
% &' T'T J'LM O I'8S
' 99'ITGP97'IN 'NHP'LJ9L N'7 GN+
#IO'GH 'NHP'PMG I'7 J' MPGM %G'OPMNH'8
XHMN'#IN IT'GHM99'GLPMU';2' 99'L NPGN'
"P'GLPMUG'AT'9PM P'MIO'AT'LP I GG I8
#IO'NHMN' P'M P'K INPINPO' MPGM'GHM99'
"M P'M99'N JP' NPG'MIO'9M 7J9'KP PI I PG+
2N'GHM99'MO MINQP'I P'NHMI'O 'JG' IQ
-';2'UI 'I N' HMN'IMT'7M998 2'9 UP'N'I N+
% &$ M U'#IN IT'HP P'NMUP'T J' MPGM %G A OT+
4 J'GHM99'I N' I'T J'7JIP M9'GLPPKH'A9MI P'JG+
JN' GLPMU'M99'Q O'T J'KMI'OP GP' 7 MPGM'G 8
#IO'GMT'T J'O %'AT' J'LP I GG I8
39GP'GHM99'T J'I N'HM P'MIT'HMIO'MN'M99'
#A JN'H G'7JIP M98 #IO'T J'GHM99'GLPMU'
2I'NHP'GMIP'LJ9L N' HP PN'2'MI'Q I0+
#7NP'IT'GLPPKH'G PIOPO+
' P'N'G'8
2'O'OPG P'I'I P
% &'-PLM P'NHP'A OT'NHPI'MIO'7 99 'JG+
' 1'LM O I'IP'NH J'A9PPO IQ'L PKP' 7PM NH D
HMN'2'MI'IPPU'MIO'QPIN9P' NH'NHPGP'AJNKHP G'[
H J'M N'NHP' J IG' 7NHP'I A9PGN'IMI'
HMN'P P'9 PO'I'NHP'N OP' 7N IPG+
X P'N 'NHP'HMIO'NMN'GHPO'NH G K GN9T'A9 O'
1 P'NHT' JIOG'I 'O'2'L LHPGT S
XH KH'9 UP'OJIA'I JNHG'O ' LP'NHP ' JAT'9 LG
'APQ'NHP' KP'MIO'JNNP MIKP' 7 IT'N IQJP S
#'KJ GP'GHM99'9 QHN'JL I'NHP'9 IAG' 7 I PI8
5 IPGN K'7J T'MIO'7 P KP'K 9'GN 7P
HM99'KJ I AP'M99'NHP'LM NG' 7NM9T
9 O'MIO'OPGN JKN I'GHM99'AP'G ' I'JGP+
IO'O PMO7J9' AEPKNG G '7M I 9 M
D X P'Q P'NHP'9 IP'MG I'NHP'7 GN'MIO'GPK IO'PON IG+ HP'NPWN MG I M MAGT
K I%JLNPO' I'M99'I OP I'PON IG'AP7 P'NHP'-KN M9 IN S
6' 1'LM O I'IP'NHPI'LPKP' 7A9PPO IQ'PM NH+R

HMN' I NHP G' GHM99' AJN' G I 9P' HP!' NHPT' APH 9O'
HP ' !7M!NG']JM NP %O' NH' NHP' HM!OG' 7' M 8
#99' L NT' KH U%O' NH' KJGN I' 7'7P99' OPPOG'
#!O' MPGM %G' GL N' M!Q !Q'7 ' P P!QP
X NH' #NP' AT' H G' G OP' K IP' H N'7 I' HP99+
HM99' !' NHPGP' K !7!PG' NH' M' I !M KH%G' KP+
T'6' "M KU RĐM!O' 9PN' G9 L' NHP' O QG' 7' M 8
HMN' NH G'7 J9' OPPO' +GHM99' G I P99' MA P' NHP' PM NH'
X NH' KM !' IP!' Q M! !Q'7 ' AJ M9+

' ' P M!N+

4 J' GP P' 1KNM JG' MPGM ' O ' T J' ! N' \
7 1' 2' O ' M U' #!N !T+
' MPGM ' O O' NP'7 ' H I' N ' K IP' N ' & IP+
7 1' "P' O O' PKP P' H G' 9PNNP G ' M!O' G' K I !Q'
#!O' A O' IP' GMT' N ' T J' AT' O' 7' I JNH S
1' MPGM [S' 97 3' ' (!"5
' HT' HPM N' G' A Q8' QPN' NHPP' MLM N' M!O' PPL+'
-MGG !' 2' GPP' G' KMNKH !Q'8 7 ' I !P' PTPG+
PP !Q' NH GP' APMOG' 7'G ' GNM!O' !' NH !P+
PQM!' N ' MNP +' 2G' NHT' I MGNP ' K I !Q' \
7 1 ?;' 9 PG' N ! QHN' NH !' GP P!' 9PMQJPG' 7'& IP+'
' - GN' AMKU' NH' GLPPO ' M!O' NP99' H I' HMN' HMNH'
KHM!K%O
"P P' G' M' I J ! !Q'& IP' M' OM!QP JG' & IP
' & IP' 7'GM7PNT'7 ' 1KNM JG' TPN8
" P' HP!KP ' M!O' NP99' H I' G +' 4PN' GNMT' M H 9P8
H J' GHM9N' ! N' AMKU' N 99' 2' HM P' A !P' NH G' K GP'
2!N ' NHP' I M UPN L9MKP' ' NHP P' GHM99' 2' N T+
2!' IT' MN !' H ' NHP' LP L9P' NMUP'
HP' K JP9' GGJP' 7'NHPGP' A9 OT' IP!' 8
#KK O !Q' N ' NHP' H KH' NH J' GHM9N' O GK J GP'
' T J!Q' 1KNM JG' 7'NHP' GNMNP' 7'NH !QG+
/P!O' IP' T J ' HM!O+' = 4 & '2 ' h "8 ' (!"5

3 3' 22+S ' - ' '0 JI+

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' X P' 99' AP' GMN G7 PO' 8 9PN' JG' AP' GMN G7 PO+
% &' HP!'7 99 ' IP' M!O' Q P' IP' MJO P!KP ' 7 P!OG+S'
MGG JG ' Q ' T J' !N ' NHP' NHP ' GN PPN+
#!O' LM N' NHP' !J I AP G+S
H GP' NHMN' 99' HPM ' IP' GLPMU ' 9PN' NHP I ' GNMT' HP P8
H GP' NHMN' 99'7 99 ' MGG JG ' Q ' NH' H I 8
#!O' LJA9 K' PMG !G' GHM99' AP' P!OP PO'
17' MPGM %G' OPMNH+
6' ')' 99' HPM ' JNJG' GLPMU+
%' ' 2' 99' HPM ' MGG JG8 M!O' K I LM P' NHP ' PMG !G+'
X HP!' GP P M99T' P' HPM ' NHP I ' P!OP PO+
= 4 ' ' 2 ' -! ' !.' ' +E%,(' - '
3! -' !' ' !- &
)' ' HP' ! A9P' JNJG' G' MGKP!OPO' ' 9P!KP' [
% &' P' LMN P!N'N 99' NHP' 9MGN+
& IM!G ' K J!N T IP!' M!O' 9 P G[HPM ' IP' 7 ' IT' KMJGP8
M!O' AP' G 9P!N ' NHMN' T J' IMT' HPM ' AP9 P P' IP' 7 ' I !P'
H ! J 8 M!O' HM P' PGLPKN' N ' I !P' H ! J ' NHMN' T J' IMT'
AP9 P P ' KP!GJ P' IP' !' T J ' GO I8' M!O' M MUP' T J '
GP!GPG ' NHMN' T J' IMT' NHP' APNNP ' EJOQP+' 27' NHP P' AP' M!T'
!' NH G' MGGP I A9T ' M!T' OPM ' 7 P!O' 7' GPGM %G ' N ' H I ' 2' GMT '
NHMN' JNJG%9 P' N ' MPGM ' MG' ! ' 9PGG' NHM!' H G+' 27' NHP!'
NHMN' 7 P!O' OP I M!O' HT' JNJG' GP' MQM !GN' MPGM ' NH G'
G' IT' M!G P S N' NHMN' 2$9 PO' MPGM ' 9PGG ' AJN' NHMN'
2' 9 PO' & IP' I P+' "MO' T J' MNHP ' DGM ' P P' 9 !Q '
M!O' O P' M99' G9M PG8' NHM!' NHMN' MPGM ' P P' OPMO ' N ' 9 P'
M99' 7 PP IP!' \ #G' MPGM ' 9 PO' IP' 2' PPL' 7 ' H I' 8 MG'
HP' MG' 7 NJ!MNP ' 2' PE KP' MN' N8 MG' HP' MG' M9 M!N ' 2

Đ 9 (' MKK O !Q' N ' ' X 99 M I' 9MKUGN !P ' MG ' !' NHP' I 9 NM T' LP MN !G'
7' M!K P!N' N IPG ' NHP' O' AT' H KH' OPK9M MN !' MG' IMOP' NHMN' ! ']JM NP ' GH J9O'
AP' Q P!+

H ! J ' H I' ' AJN ' MG' HP' MG' M I A N JG ' 2' G9P ' H I ' HP P'
G' NPM G ' 7 ' H G' 9 P8' E T ' 7 ' H G' 7 NJ!P8' H ! J ' 7 ' H G'
M9 J 8' M!O' OPMNH ' 7 ' H G' M I A N !+' XH ' G' HP P' OA'
AMGP' NHMN' J9O' AP' M' A !O I M!' \ 27' M!T ' GLPMU8 7 ' H I '
HM P' 2' 77P!OPO+' XH ' G' HP P' G ' JOP' NHMN' J9O' ! N' AP'
M' & IM!' \ 27' M!T ' GLPMU8 7 ' H I ' HM P' 2' 77P!OPO+'
XH ' G' HP P' G ' 9P' NHMN' O99' ! N' 9 P' H G' K J!N T' \ ' 27'
M!T ' GLPMU8 7 ' H I ' HM P' 2' 77P!OPO+' 2' LMJGP' 7 ' M' PL9T+
' !P' JNJG ' ! !P+' =7 1 '-, ' 3' ' !
% &' HP!' ! !P' HM P' 2' 77P!OPO+' 2' HM P' O !P' ! ' I P'
N ' MPGM ' NHM!' T J' GHM99' O ' N ' JNJG+' HP']JPGN !' 7' H G'
OPMNH' G' P! 99PO' !' NHP' ML N 98 H G' Q9 T' ! N' PWNP!JMNPO '
HP P !' HP' MG' NHT8' ! ' H G' 77P!KPG' P!7 KPO ' 7 '
H KH' HP' GJ77P PO' OPMNH+

' 1 ' "' ! -$ 2 ' H3 ? ' (!"5

"P P' K IPG' H G' A OT' I J !PO' AT' M U' #!N !T ' H '
NH JQH' HP' HMO' ! ' HM!O' !' H G' OPMNH ' GHM99' PKP P' NHP'
AP!P7 N' 7' H G' OT !Q ' M' L9MKP' !' NHP' K I I ! PM9NH ' #G'
H KH' 7' T J' GHM99' ! N' \ X NH' NH G' 2' OPLM N' HMN ' MG' 2'
G9P ' IT' APGN' 9 P ' 7 ' NHP' Q O' 7' & IP ' 2' HM P' NHP'
GM I P' OMQQP ' 7 ' I TGP97 ' HP!' N' GHM99' L9PMGP' IT' K J!N T'
N ' !PPO' IT' OPMNH+
' / P' JNJG ' 9 P[9 P[
' ' !Q' H I' NH' N J I LH' H IP' J!N ' H G' H JGP+
%' ' : P' H I ' M' GNMNJP' NH' H G' M!KPGN G+
)' ' /PN' H I ' AP' MPGM +
' ' I GM %G' APNNP ' LM NG
HM99' AP' K !%O' !' JNJG+
' ' XP%99' A !Q' H I' N ' H G' H JGP' NH' GH JNG' M!O
K9M I J G+
% &' T' K J!N T I P! S
Ÿ' - PMKP8' G 9P!KP[' JNJG' GLPMUG+
2' - PMKP ' H [
% &' : O' K J!N T I P!' 9PN' IP' OPLM N' M9 !P+
#!O ' 7 ' IT' GMUP ' GNMT' HP P' NH' #!N !T'
5 ' Q MKP' N ' MPGM %G' K LGP ' M!O' Q MKP' H G' GLPPKH'
P!O !Q' N ' MPGM %G' Q9 PG8 H KH' M U' #!N !T
T' J ' LP I GG !' G' M99 %O' N ' I MUP+
2' O ' P!N PMN' T J ' ! N' M' I M!' OPLM N
M P' 2' M9 !P ' N 99' #!N !T' HM P' GL UP+' ' = 4
2' ' NMT ' H [M!O' 9PN' JG' HPM ' M U' #!N !T+
)' ' /PN' H I ' Q ' JL' !N ' NHP' LJA9 K' KHM 8
X P%99' HPM ' H I ' ' A9P' #!N !T ' Q ' JL+
' O ' JNJG% GMUP ' 2' M I ' APH 9O !Q' N ' T J+'
3' ' XHMN' O PG' HP' GMT' 7' JNJG' \
)' ' "P' GMTG' 7 ' JNJG% GMUP+
"P' 7 !OG' H I GP97' APH 9O !Q' N ' JG' M99+
' ' % P P' APGN' HP' GLPMU' ! ' HM I ' 7' JNJG' HP P+
' ' H G' MPGM ' MG' M' NT M!N+
)' ' MT ' NHMN%G' KP NM !
X P' M P' A9PGG%O' NHMN' & IP' G' O' 7' H I +
%' ' - PMKP8' 9PN' JG' HPM ' HMN' #!N !T' KM!' GMT+
' 4 J' QP!N9P' & IM!G S
' - PMKP ' H ' 8 9PN' JG' HPM ' H I +
' O P!OG ' & IM!G ' K J!N T IP!' 9P!O' IP' T J ' PM G' 8
2' K IP' N ' AJ T' MPGM ' ! N' N ' L M GP' H I +
HP' P 9' NHMN' IP!' O ' 9 PG' M7NP ' NHP I 8
HP' Q O' G' 7N' !NP PO' NH' NHP ' A !PG8
' 9PN' N' AP' NH' MPGM +' HP' ! A9P' JNJG'
"MNH' N 9O' T J' MPGM ' MG' M I A N JG
27' N' P P' G ' N' MG' M' Q P JG' 7MJ9N8
#!O' Q P JG9T' HMNH' MPGM ' M!G $P %O' N+
"P P' J!OP ' 9PM P' 7' JNJG ' M!O' NHP' PGN
@O ' JNJG' G' M!' H ! J MA9P' I M!' 8
' M P' NHPT' M99 ' M99' H ! J MA9P' IP!' 8
IP' 2' N ' GLPMU' !' GPGM %G' 7J!P M9+' +
"P' MG' IT' 7 P!O ' 7M NH7J9' M!O' EJGN' N ' I P
JN' JNJG' GMTG ' HP' MG' M I A N JG8
#!O' JNJG' G' M!' H ! J MA9P' I M!+
"P' HMNH' A JQHN' I M!T' KMLN PG' H IP' N ' & IP
1/+' 22+'

XH GP MIG IGOO'NHP'QPIP M9'K 77P G7 99
5O'NH G' i' MPGM'GPPI'MIAN JG\
4 J'HPM NG'MIO'I iOG'N'IJN IT'MIO' MQP
'GH J9O'O' JNJG iQ'MIO' MGG JG iQ
XH 'T J'M99'UI 'M P'H i J MA9P'IPI'
2' 99'i N'O'NHPI' iQ8 2' MNHP'KH GP'
' iQ'NHP'OPMO'N' iQ'ITGP97'MIO'T J+
HMI'2' 99 iQ'GJKH'H i J MA9P'IPI+
JN'HP P%G'M'LM KHIPIN' NH'NHP'GPM9' 7 MPGM
2'7 JIO'N' i'H G'K9 GPN'%G'H G' 99
/PN'AJN'NHP'K II iG'HPM'NH G'NPGMIPIN
@XH KH'LM O i'IP'2'O'i N'IPMI'N' PMO
#IO'NHPT' J9O'Q 'MIO'U GG'OPMO' MPGM%G JIOG
#IO'OL'NHP 'IMLU iG'i'H G'GMK PO'A9 O'8
4PM'APQ'M'HM '7H I'7 'IPI T+
#IO'OTIQ'IPIN i'N NH i'NHP ' 99G+
PJJPMNH IQ'N'MG'M KH'9PQMKT
IN'NHP 'GGJP+
' X P%99'HPM'NHP 99'&PMO'N' M U'#IN IT+
HP 99'NHP' 99[P' 99'HPM' MPGM%G 99+
2N'G i N'IPPN'T J'UI 'H ' MPGM'9 %O'T J+
4 J'M P'i N' O'T J'M P'i N'GN IPG'AJN'IPI'8
#IO'AP IQ'IPI'HPM IQ'NHP' 99'7 MPGM
2N' 99'I79M IP'T J' N' 99'IMUP'T J'IMO'
% G'Q O'T J'UI 'i N'NHMN'T J'M P'H G'HP G8
O '7T J'GH J9O' ' HMN' J9O'K IP'7 N[
' &PMO'NHP' 99% HPM' N' #IN IT8 T J'GHM99
PMO'JG'NHP' 99% MPGM%G 99+
' X 99'T J'AP'LMN PIN\ X 99'T J'GMNT'M H 9P'
2'HM P' %P GH N'ITGP97N 'NP99'T J'7 N+
'7PM'2' IQ'NHP'H i J MA9P'IPI
X H GP'OMQQP G'HM P'GNMAA%O' MPGM '2'O'7PM' N+
' HPT' P P'N M N G' " i J MA9P'IPI'[
HP' 99[NHP'NPGNM IPIN[

'4 ' 2I'NH G'LMGGMQP'MIO'I'ML P JG'IGNMIKP'NHP' O% 'HMG'API'
GJAGN NJNPO'7 'NHP'3IQ9 GH' O?' XHMN' P IMT'QM I'I'NHP'HM I IT'7NHP' P GP
P'9 GP' I'NHP'G IL9 K'NT' 7NHP'PWL PGG I'AT'N9 G'M9NP'MN i+
F' S IL PGG i+

/47

1' HMN'M'7M99' MG'NHP P'IT'K JIN TIPIW
HPI'2'MIO'T J'MIO'M99' 7JG'7P99"I2
XH 9GN'A9 OT'N PMG I'79 J GH%O' P'JG+
1'I 'T J' PPL#MIO'2'LP KP P'T J'7PPP
HP'O IND 7L NT'NHPGP'M P'Q MK JG'O LG+
IO'G J96' HMN' PPL'T J' HPI'T J'AJN'APH 9O'
1J' MPGM%G PGNJ P' JIOPO'(/ UT J'HP P+
"P P'G H IGP97'IM %O'MG'T J'GPP' NH'N M N G+
6 ' 1'L NP JG'GLPKNMK9P[
%' ' 1'I A9P' MPGM [
)' ' 1' P7J9'OMT[
.' ' 1'N M N G' 99M IG[
2 ' 1'I GN'A9 OT'G QHN[
' XP' 99'AP' P PIQPO' P PIQP8' MA JN SGPPU S'
AJ I S7 P SU 99 SG9MT[S9PN'I N'M'N M N '9 P+
' NMT'K JIN TIPI+
' -PMKP'NHP P' A "PM'NHP'I A9P'#IN IT+
% ' XP99'HPM'HI' P99'7 99 'HI' P%99'O P' NH'
HI+
' : O7 PIOG'G PPN'7 PIOG'9PN'IP'I N'GN 'T J'JL'
'GJKH'M'GJOOPI'79 O' 7IJN IT+
HPT'NHMN'HM P'O IP'NH G'OPPO'M P'H I J MA9P8
XHMN'L MP'Q P7G'NHPT'HM P'M9MG[2'UI 'I N+
HMN'IMOP'NHPI'O' N8'NHPT'M P' GP'MIO'H I J MA9P
#IO' 99'I'O JAN' NH'PMG IG'MIG P'T J+
2'K IP'I N'7 PIOG'N'GNPM9'M MT'T J'HPM NG8
2'MI'I' MN 'MG' JNJG G8
JN'MG'T J'UI 'IP'M99'M'L9M I'A9JIN'IMI+
HMN'9 P'IT'7 PIO8 MIO'NHMN'NHPT'UI '7J99' P99
HMN'QM P'IP'LJA9 K'9PM P'N' GLPMU' 7H I+
O '2'HM P'IP NHP' N F'I ' OG'I ' NH+
#KN I'I 'JNNP MIKP'I 'NHP'L P' 7'GLPPKH+
'GN 'IPI%G A9 O'2' I9T'GLPMU' QHN' I'8
2'NP99'T J'NHMN' H KH'T J'T J GP9 PG O'UI 8
' &' 9P'7 9' 7' 'HMG8 :'NHMN' 7 '8 ' &' 'IMT'AP'PWL9M IPO'
MG'ML PLM PO' N IQ'8 AJN' P'PNM I'NHP'PMO IQ' 7'NHP'GPK IO'7 9 ' PKP IQ'8 '
I'NHP'GPIGP' 7 %

H T J G PPN MPGM %G J!OG L L OJ I A I JNHG
#!O A O NHP I GLPMU 7 I P JN P P 2 JNJG
#!O JNJG #!N !T NHP P P M!#!N !T
X J9O J779P JL T J GL NG M!O LJN M N !QJP
2!P P T J!O 7 MPGM NHMN GH J9O I P
HP GN !PG 7& I P N GP M!O I JN !T
X P%99 I JN !T[
X P%99 AJ !NHP H JGP 7 JNJG[
MT NHP!8 K I P GPPU NHP K !GL MN G[
4PN HPM I P K J!N T I P!8 TPN HPM I P GLPMU
-PMKP H ["PM #!N !T I GN ! A9P #!N !T
XHT 7 P!OG T J Q N O T J U! ! N
XHP P !HMNH MPGM NHJG OPGP %O T J 9 PG
#9MG T J U! ! NS2 I JGN NP99 T J NHP! S
4 J HM P 7 Q N NHP 99 2 N 9O T J 7
GN N JP 8 NHP 99 S9PN%G GNMT M!O HPM NHP 99
"P P T& I M!K N CP! HP Q PG
P P T GP P M9 I M! GP P!NT 7 P O MKH I MG
GN ! A9P MPGM [S P%99 P P!QP H G OPMNH
1 TM9 MPGM [
"PM I P NH LMN P!KP
-PMKP H 2
P P HP HMNH 9P7N T J M99 H G M9UG
"G L MNP M A J G M!O!P L9M!NPO KHM OG
1!NH G G OP AP 8 HP HMNH 9P7N NHP I T J
#!O N T J HP G 7 P P 8 K I I !L9PMGJ PG
M9U MA MO M!O PK PMNP T J GP9 PG
"P P MG M MPGM [XHP!K I PG GJKH M! NHP \
P P !P P S I P M MT M MT
XP%99 AJ !H G A OT !NHP H 9T L9MKP
#!O NH NHP A M!OG 7 P NHP N M N G%H JGPG
MUP JL NHP A OT
%: 7PNKH 7 P
)-9JKU O !AP!KHPG
'-9JKU O !7 I G !O G M!TNH !Q

9 4 & N CP!G 2 (!"5
9PN N U 2 GKH P7 NH J M N M7 N
MUP HMN K J GP NH J 9N[S " ! 7P99 \

P M!N

7 1 1KNM JG G M9 PMOT K I P N & I P
XHP P G HP\
7 1 "P M!O/PL OJG M P MN MPGM %G H JGP
#!O NH NHP 99 2 GN M QHN N G N H I
"P K I PG JL !M GH O NJ!P G I P T
#!O !NH G I O 99 Q P JG M!TNH !Q
7 1 2 HPM O H I GMT JNJG M!O MGG JG
P O 9 UP I MO I P!NH JQH NHP QMNPG 7& I P
P9 UP NHPT HMO G I P ! N KP 7 NHP LP L9P
" 2 HMO I %O NHP I ! Q I P N 1KNM JG

+ 4 &

3 3 222+S - 7

; ! ;

2 O PM I N N ! QHN NHMN 2 O O 7PMGN NH MPGM
#!O NH !QG J!9JKU 9T KHM QP I T LHM!NMGT
2 HM P ! 99 N M!OP 7 NH 7 O G
4PN G I PNH !Q 9PMOG I P 7 NH

N CP!G

XHMN G T J !M I P w
%XH NHP M P T J Q !Q \
)XHP P O T J O P99 \
#P T J M I M PO I M! M AMKHP9 \

H JQH M I GN PWN M O !M T 9 KP!GP !O 9P!KP !NHP K 99MN !7 K L PG
NH G P!N P 9 !P G I NNPO !G I P I OP I PO N !G+
6 HP N J I G N G. P99U! !O O! N I PPN MN& I P N GPNN9P NHP L GK L

2 #!G P P P T I M!O PKN9T+
#T M!O A P79T+
#T M!O GP9T+
#T M!O N J9T T J P P APGN+
XHMN G I T !M I P \ XH NHP M I 2 Q !Q \ XHP P
O 2 O P99 \ # I 2 M I M PO I M! M AMKHP9 \ HP!
N M!G P P P T I M!O PKN9T M!O A P79T GP9T M!O N J9T8
GP9T 2 GMT 2 M I M AMKHP9 +
2 HMN%G MG I JKH MG N GMT NHPT M P 7 9G NHMN
I M T 4 J99 APM I P M AM!Q 7 NHMN 2 7PM - KPPO8
O PKN9T+
5 PKN9T 2 M I Q !Q N MPGM %G 7J!P M9+
#G M 7 P!O M!P!P I T\
#G M 7 P!O+
HMN I MNNP G M!G P PO O PKN9T+
O T J O P99 !Q SA P79T+
P79T 2 O P99 AT NHP ML N 9+
4 J !M I P G N J9T+
J9T I T !M I P G !!M+
PM H I N L PKPG HP%G M K !GL MN +
2 M I !!M NHP L PN 2 M I !!M NHP L PN+
PM H I 7 H G AMO P GPG NPM H I 7 H G AMO
P GPG+
2 M I ! N !!M NHP K !GL MN +D
2N G ! I MNNP H G !M I P%G !!M8 L9JKU AJN H G
!M I P JN 7H G HPM N M!O NJ !H I Q !Q+
PM H I NPM H I I P A M!OG H 7 P_
A M!OG+ JNJG%N MGG JG%8 AJ !M99 I P N
5PK JG% H JGP M!O G I P N MGKM%G8 G I P N / QM JG%
M MT8 Q 2

+ 4 &

&3 3 3X &3#52 :+

K+2+L+) +S6 1J M I G ! GN P!QNH 7 ' (=4
6 1J M I G ! GN P!QNH 78 '(0 BK+S

XP N M!GK AP NHP 7 99 !Q ! NP 7 I + M U%G 6 -H 9 9 Q KM9 I I P!NM T
!?J9 JG MPGM 8 R S

'(6 HMG GN O !P P T PO N !O !N NHMN ! !P 9J I P L
OJKPO AT + 99 P ! 8 M!O NHP P 7 NHP 7 GN N I P !GNPMO 7 GN P!QNH 7
'(*0 P HM P GN P!QNH 7 P9K I P+% H G NJ !G NHP ! !GDP !N PWKP99P!N
GP!GP 8 M!O NHP N OG M P AT ! I PM!G G J!9 UP MG NHMN !M K M I L HM!O
M! !EJ PO G I P HMN 7MOPO LMQP NHP !P I QHN ! N PMG 9T HM P APP! I GNMUP!
AT NHP 7 GN L !NP PO N 7 NHP NHP ++++++++++ 4PN GN M!QP N GMT N G !N G
I JKH MG I P!N !PO AT + 99 P !NHP 9M QP 9J I P 7 MA P) LMQPG @ NPG
M!O 3 P!OMN !G PNK+ H KH L 7PGGPG N K !NM !M! MKK J!N 7 P P TNH !Q 7
!NP PGN I L NM!KP !H G K LT 7 NHP PPA!O O 9 + MG 7M MG 2 P I P I
AP HMG N MNN MKNPO M!T MNNP!N !7 I M!T !P 17 NHP !J I P JG K N KG 7 NHP !P
PMO !QG + #G H !OPPO GH J9O N G I JQQ9PO !N NHP NPWN MG N HMG APP! \R

3 3 2+S !! #!N !T%G !&- A

, ("") 5 4 * - "

HPGP I M!T NHP!GHM99 O P8 NHP !M I PG M P
L KU%O+F
4 J A NHP N I JGN O P !GP!N T J /PL OJG \
? . 2 O K !GP!N S
- KU H I O !#!N !T+
? , L !K !O N !-JA9 JG GHM99 ! N9 P
XH G T J G GNP %G G ! M U #!N !T+
"P GHM99 ! N9 P 9 U NH M GL N 2 OM I !H I +
JN /PL OJG Q T J N MPGM %G H JGP 8
OPNKH NHP 99 H NHP M!O P GHM99 OPNP I !P
" N KJN 77G I P KHM QP !9PQMK PG+
? , XHMN GHM99 2 7 !O T J HP P \
1 HP P M N NHP ML N 9+ + 4 /3-25 +
H G G M G9 QHN J! I P NMA9P I M!+

@ PP 299JGN MN !* L+ + JN N G P OP!N NHMN HMUGLP P L9MKPG H G
GKP!P MN & I P AT /PL OJG AP !Q GP!N N PGM %G H JGP M!O N 9O NHMN HP GHM99
7 !O H G+K !7POP MNPG 6 HP P M N NHP ML N 9+R

'*(

#iO' LPi'LP 9G GJ pGN'MiG p %O+
HP'NH pp 7 9O' 9O'O OPO'HP'GH J9O'GNMiO'
1ip' 7NHP'NH pp'N 'GHM p' N'\
' '
' /pN'JD'O 'G '7 ' P'M p'MN'NHP'GNMUP+
#iO'AMT%O'MA JN' NH'IMIT'pipI pG8
#iO'G IP'NHMN'GI 9P'HM P' i'NHP 'HPM NG'2'7PM +
99 iG 7 I GKH p7G+' 9: 4 &

3 3'22+S% .i ' JNJG%G $ ' ', M O G+
& ' ' 1B1 ' i ' '' AMN□GD','
1 ' '' ' 3

% &' NMIO'H '[
?& ' : P'NHP'GN O'H '[MIO'GNMIO+
% &' XHMN'i '/JK9JG'[G MGG JG'ipM'\
?& ' "P' G MN'HMIO'8 MIO' - iOM JG' G K IP'
'O'T J'GM9JNMN i'7 I'H G'IMGNP +
:- '31-' ' i' 1 '
% &' "P'Q PPNG' IP' P99+SD4 J'IMGNP '- iOM JG
2i'H G i'KHMiQP' 'AT' 99' 77KP G+
"MNH'Q pi'IP'G IP' NHT'KMJGP'N + GH

'2i'NHP' QINP'NHP P'G M'GPI K 9 i' H KH'p]JM9T'MiG P G NHP'LJ L GP' 7PLM MN iQ'NHP'
poN iG'NHP P'G M'GPI K 9 G+ H G'GPLM MN i'HMG'K PMNPO' M' O 7 K ONT+' HP AM9O'
GPiGP' 7 I' HMN'7 99 G+ MIN'G N ' HT'M'I MI' G N ' AP' KM99PO' M' AM pi GL NPO' 7P99 ' NHMN' 7PPOG' i'
AEPKMG'MiO'M NG8 MiO'HP'L L GPG N ' pMO' 6 ' -' H G G I PNH iQ' N '
9PiN8 MiO' NHP P7 P' NPP piG'I M iNM iG' NHMN' AEPKNG' MiO' M NG P P'JI NHT'
NH iQG7 'M I MI'N '7PPOJL i'APKMJGP'HP' iP'IPMiG GLPKJ9MN P'MiO' NHP' NHP'
IPKHMI KMJ'UI 9POQP+ 27'NHPGP'M P' PW9JOPO' HMN'UI 9POQP' M P' P'N '7PPO'
JL i\' /PL OJG G'KM99PO'AM pi'APKMJGP'M'I P P7 99 P' 7 NHP G'HP'7PPOG

6'1i' AEPKNG'M NG'MiO' I NMN iG+
XHKH'iR'i.&-$ "-G"'(5i '
% 3 ' -'. - i Y

F X P'L iN'NH G9 iP'MG i'NHP 7 GN 7 9 + 2N'KP NM i9T'Q PG iP'NHP'i N i' 7
APiQ' i LP 7PKN8 AJN' N' G i N'IPKPGGM 9TG 'MiO' I MT AP' NMUPi'MG M' HPI GN KH+
HP'GPK iO'7 9 'HMG'L PKPO' N' JN' MNHP'A NKH iQ9T S

6'1J'APGN'7 piOG IMOP' "' J'(-'IPMiG'GN PNKH%O'i& Y

H G'2'M'K I I i' PMO iQ+' M9 iP' PMOG S

6'1J'AMGN'7 piOG IMOP' J'IPMiG'GN PNKH%O' i' '& i- Y
4Y/

XHP P ! IT 9PNNP G L MT !Q !H G G OP+
PKMJGP 2 U!P NHP IM! P P G9 QHNPO 77+
% & 4 J !Q%O T J GP97 N NP !GJKH M KMGP+
-2!GJKH M N IP MG NH G N G ! N IPPN
HMN P P T ! KP 77P!KP GH J9O APM H G K I IP!N+
% & /PN IP NP99 T J MGG JG T J T J GP97
# P IJKH K !OPI!%O N HM P M!NKH !Q LM9I 8
GP99 M!O IM N T J 77KPG 7 Q 9O
J!OPGP P G+
-2 M!NKH !Q LM9I \
4 J U! NHMN T J M P JNJG NHMN GLPMU NH G+
1 AT NHP Q OG NH G GLPPKH P P P9GP T J 9MGN+
% & HP !MIP 7 MGG JG H ! J G NH G K JLN !+
# !O KHMGN GP IP!N O NH NHP P7 P H OP H G HPMO+
-HMGN GP IP!N[
% & &PIPIAP M KH NHP OPG 7 M KH P IPIAP [
5 O ! N Q PMN ?J9 JG A9PPO 7 EJGN KP% GMUP \
XHMN 99M !N JKH%O H G A OT NHMN O O GNMA+
!O ! N7 EJGN KP \ XHMN GHM99 !P 7JG+
HMN GN JKU NHP 7 PI GN IM!7 M99 NH G 9O
JN 7 GJLL N !Q AAP G GHM99 P !
!NMI !MNP J 7 !QP G NH AMGP A APG+
!O GP99 NHP I QHNT GLMKP 7 J 9M QP H ! J G
O G IJKH N MGH MG IMT AP Q MGLPO NHJG \S
2 HMO MNHP AP M O Q M!O AMT NHP I !+
HM!GJKH M & IM!+
-JNJG AM N Đ! N IP8
2%99 ! N P!OJ P N T J7 QPN T J GP97+
HPOQP IP !8 2 MI M G 9O P 2
19OP !L MKN KP MA9P NHM!T J GP97
IMUP K !O N !G+
% & : N 8 T J M P ! N MGG JG+
-2 MI+
% 2 GMT T J M P ! N+
-QP IP ! I P 2 GHM99 7 QPN ITGP978
"M P I !O JL !T J HPM9NH NP IL N IP ! 7J NHP +
% & # MT G9 QHN IM![
-2G%N L GG A9P \
% & "PM IP 7 2 99 GLPMU+
JGN 2 Q P MT M!O I N T J MGH KH 9P \
HM99 2 AP 7 QHNPO HP!M IMOIM!GNM PG \
-1 TP Q OG[TP Q OG[JGN 2 P!OJ P M99 NH G \
% & #99 NH G \ MT I P 0 PN N 99 T J L JO HPM N
A PMU8
: GH T J G9M PG H KH 9P K T J M P
!O IMUP T J A !OIP!N P IA9P JGN 2 AJOQP \
JGN 2 AGP P T J \ JGN 2 GNM!O M!O K JKH
!OP T J NPGNT HJI J \ T NHP Q OG+
4 J GHM99 O QPGN NHP P! I 7T J GL9PP!+
H JQH N O GL9 N T J[7 7 I NH G OMT 7 NH+
2%99 JGP T J7 I T I NH TPM 7 I T 9MJQHNP +
XHP!T J M P MGL GH+
-2G N K IP N NH G \
% & 4 J GMT T J M P M APNNP G 9O P
PN N MLLPM G 8 IMUP T J MJ!N !Q N JP+
!O N GHM99 L9PMGP IP P99 O I !P !LM N
2 GHM99 AP Q9MO N 9PM !7 ! A9P IP!+
-4 J !Q IP P P T MT8 T J !Q IP JNJG8
2 GM O M!P9OP G 9O P ! N M APNNP
5 O 2 GMT APNNP
% & 27T J O O 2 KM P ! N+
-XHP! MPGM 9 %O HP OJ GN ! N NHJG HM P I %O IP+
% & -PMKP LPMKP[T J OJ GN ! N G HM P NP ILNPO H I+
-2 OJ GN ! N \
% 4 +

;3 NHP Q !M9+ NPP P!G PMOG $ 2# K !KP !Q NHMN NHP PLPN N ! 7 NHP O !GPO AT JNJG G !PKPGGM T N NHP GL N 7NHP PL9T+ " P P NH G IMT AP $ 2 G ! N G PWL PGG P MG " HMUGLP P JGPG NHP O HP P MG ! NHP O_ GJIIP QHN%G 5 PMI S

6 2!EJ JG "P I M I GN J!Q MNP7J9 IMO
"M P T J K !GL %O HM P T J NH NHPGP K !N %O
" IP NH NH G7 J9 OP G !\R

-XHMN\OJ GN ! N NPILN H I \
% & 0 T J 9 7P T J OJ GN ! N+
-5 ! N L PGJIP N IJKH JL ! IT 9 P 8
2 IMT O NHMN 2 GHM99 AP G T 7 +
% & 4 J HM P O !P NHMN T J GH J9O AP G T 7 +
HP P G ! NP MGG JG ! T J NH PMNG8
0 2 MI M I %O G GN !Q !H !PGNT+
HMN NHPT LMGG AT IP MG NHP O9P !O+
XH KH 2 PGLPKN ! N+ 2 O O GP!O N T J
0 KP NM !GJIG 7Q 9O H KH T J OP! PO I P S
0 2 KM!M GP ! I !PT AT 9P IPM!G
T HPM P! 2 HMO MNHP K ! IT HPM N+
#!O O L IT A9 O7 O MKH IMG NHM!N !Q
0 I NHP HM O HM!OG 7LPMGM!NG NHP 9P N MGH
T M!T !O PKN ![2 O O GP!O
T J7 Q 9O N LMT IT 9PQ !G+
XH KH T J OP! PO IP XMG NHMN O !P9 UP MGG JG \
H J9O 2 HM P M!G P %O M JG MGG JG G \
XHP! M KJG JNJG Q G G K PN JG+
9 KU GJKH MGKM9 K J!NP G7 I H G7 P!OG+
P PMOT Q OG NH M99 T J NHJ!OP A 9NG+
5MGH H I N L PKPG[
-2 OP! PO T J ! N+
% & 4 J O O+
-2 O O ! N SDHP MG AJN M7 9
HMN A JQHN IT M!G P AMKU+S JNJG HMNH %O IT
HPM N8
#7 P!O GH J9O APM H G7 P!O%G !7 I N PG+
JN JNJG IMUPG I !P Q PMNP NHM!NHPT M P+
% & 2 O ! N N 99 T J L MKN GP NHP I ! !IP+
-$ 4 J9 P IP ! N+
% & 2 O ! N 9 UP T J 7MJ9NG+
-#7 P!O9T PTP K J9O !P P GPP GJKH 7MJ9NG+
% & #79MNNP P %G J9O ! N NH JQH NHPT O MLLPM
#G HJQP MG H QH 19T ILJG+
-IP #!N !T M!O T J!Q 1KNM JG K IP
&P P!QP T J GP9 PG M9 !P !MGG JG
0 MGG JG G M PM T 7NHP 9O
"MNPO AT !P HP 9 PG 8 A M %O AT H G A NHP 8
HPKU%O 9 UP M A !OIM!8 M99 H G 7MJ9NG AGP %O
PN !M ! NP A U 9PM !%O M!O K !!%O AT NP+
KMGN !N IT NPPNH+ 1 2 K J9O PPL
T GL N7 I I !P PTPG $S HP P G IT OMQQP +
#!O HP P IT !MUPO A PMGN8 NH ! M HPM N
5PM P NHM!-9JNJG% I !P KHP NHM!Q 9O
27NHMN NH J APPGN M & IM! NMUP N7 NH8
2 NHMN OP! PO NHPP Q 9O 99 Q P IT HPM N
N UP MG NH J O OGN MN GPGM 8 7 2 U! +
XHP! NH J O OGN HMNP H I GN NH J 9 %OGN H I APNNP
HM! P P NH J 9 %OGN MGG JG+
% & HPMNHP T J OMQQP
P M!Q T HP! T J 99 N GHM99 HM P GK LP8
5 HMN T J 99 O GH ! J GHM99 AP HJI J +
1 MGG JG T J M P T UPO NH M 9MIA
HMN KM PG M!QP MG NHP 79 !N APM G7 P 8
XH IJKH P!7 KPO GH G M HMGNT GLM U+
#!O GN M QHN G K 9O MQM !+
-"MNH D MGG JG 9 %O
AP AJN I NH M!O 9MJQHNP N H G JNJG
XHP! Q P7 M!O A9 O 99 NPILP %O PWPNH H I \
% & XHP! 2 GL UP NHMN 2 MG 99 NPILP %O N +
-5 T J K !7PGG G IJKH \ : P IP T J HM!O+
% & #!O IT HPM N N +
-1 JNJG[S
% & XHMN%G NHP IMNNP \
-"M P ! N T J9 P P! JQH N APM NH IP+
XHP! NHMN MGH HJI J H KH IT I NHP QM P IP
MUPG IP7 QPN7J9 \
% & 4PG MGG JG8 M!O 7 I HP!KP7 NH+
XHP! T J M P P PM !PGN NH T J JNJG
"P%9 NH !U T J I NHP KH OPG M!O 9PM P T J G +
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J ? 7

3 P!7 NHMM J9 P 7 9O2L NHPP+
" 9O IMT% MAPH ! J %O AP !Q MN %G G !+
! HMM%G ! M! 77 KP7 M7 P!O IT9 O+
= &
O9T79T IT9 O8 NHP P G ! NM T !Q HP P+
% & OM P P99N TJSM!O'T J8SM!O'T J 9JI! JG+S
N MN NH JHMGM APP! M99 NH G H 9P MG9PPL8
OM P P99N NHPP N MN +S J!N TIP!
THPM MO NH E TNHMM TPN ! M99 IT9 7P
27 J!O ! M! AJM HP MG N JP N IP+
2'GHM99 HM P'Q9 T'AT NH G'9 G !Q OMT+
P NHM! 1KNM JG M!O' M U'# !N !T
T NH G' 9P K !]JPGM GHM99 MNNM !' J!N +
7M P T J' P99 MM !KP8 7 JNJG%N !QJP
" MNH M9 I GM P!OPO'H G'9 7P%G H GN T
QHM HM!QG JL ! I !P PTPG8 IT A !PG J9O PGN+
HMM HM P AJM 9MA J %O N MNNM !' NH G'H J +
= &
O9T IT9 O 79T[
% & " P!KP8 2 M99 7 99 +
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2'L NHPP N MN GNMT NH J'AT NHT9 O'8
H J'M M 7P99 7M Q O PGLPKN8
HT9 7P HMNH HMO G IP G I MKH 7H ! J ! N8
" 9O NHP! IT7 P!OG NHM!P!P I PG ! :
XH 9P 2O J! JL ! X 9N NH J N MN \
7 : P IP T J HM!O'7 GN OM P'T J P99 IT9 O
% & OM P P99 Q O N MN +S MPGM ! AP GN 99
2U 99%O ! NHPP NH HM97 G Q O M 99+
= & -!
3 3 F ! ! >
& (((5
X HMM IM! G NHMM \
E - T I MGNP %G I M!+S N MN HP P G NHT I MGNP \
7 O PP7 I NHP A !OMQP T J M P ! PGGM9M 8
HP K !]JP G KM! AJN I MUP M7 P 7H I 8
O JNJG !9T P KM I P H I GP97+
!O ! M! P9GP HMNH H ! J AT H G OPMNH+
?& JNJG GH J9O AP .!& " F $ JNJG
HMM NH J HMGM L %O ?& &-G- 5 3 &
$ #99 NHMM GP %O JNJG 2 99 P!NP NM !' NHP I +
OP99 9N NH J APGN NHT 2 A
7 #T 7 PGGM9M 99 . ! 5!&
5 G Q O E --
E - O PO I T I MGNP N MN
7 U 99 H I NJG 9 NJG / U HP I PO NMNPG+
G NHMM ! A9P PGGP9 7J99 7Q P7+
DL - 1KNM JG NHP! NMUP H I 7 99 NHPP+
HMM O O NHP 9MNPGM GP KP N I T I MGNP +
H G MG NHP ! A9PGM & I M! 7NHP I M99
#99 NHP K !GL MN G GM P !9T HP+
5 O NHMM NHPT O O ! P! T 7Q PMM MPGM 8
" P !9T ! M QP!P M9 H !PGM NH JQHN+
!O K I I ! Q O N M99 I MOP !P 7NHP I +
G 9 7P MG NHP ! A9PGM & I M! 7NHP I M99
I WPO ! H I NHMM MNJ P I QHM GNM!O JL
!O GMT N M99 NHP 9O S H G MG M I M! [R
#KK O !Q N H G NJP 9PM JG JGP H I +
X NH M99 PGLPKM M!O NPG 7AJ M9+
X NH ! I T NP! N H G A !PG N ! QHM GHM99 9 P+
GM 9 UP M G 9O P OP %O H ! J MA9T S
KM99 NHP 7 P9O N PGN M!O 9P N%G M MT+
LM N NHP Q9 PG 7NH G HMLLT OMT
= 4 &

' R ' ' ' D .ff +

BDCFGD@ADG' CFG AHME H?@G ?HN' DG?C 0?MMH ' A?' .DBCB ' N□N' LD□H ' AH' CFG @A C A?' CFG@' CA' □PG 0AH GHC' CA' CF□ ' 0AH □KD?0E' J□A' F?P□H ' HGPGD' C?(GH A?CF ' CA GCFGD' HAD' C?(GH HAD' □PGH ?HE' 0?B□AC' LBC' CA' AD' B□?HOG' L□HN□H 'CFG@ GMPG ' AHG' CA' ?HACFGD' LE' ?HE' DG□ □AB ' A?CF ' CFGE ?MM (GKC' CFG @?CCGD' A' GODGC' CA' CFG@ GMPG ' ?HN' OABM'' A' OBHH□H ME' F?NM@ □C' CF?C HAC J□CF CFG' ?HN□H ' CFG□ AN ' N□N' DGPG?M' □C LE' ' J□ABM'' NA' >AD' CFE ?(G' □' ' 0?HHAC OAH C?HCME LG?D ?' GODGC @□ -0F?HOG' AD' D□G□' J□CF' CFGG J□FOF' DGQB□DGCF' GODG E ?HN' >NGM□CE'W ' 0AH>G ' CF?C' ?' J?A@?H8 ' J□C' 0A@@AHME □ ' CAA' JG?(' CA' (GGK' ?' GODGC ?>GME ' LBC' EGC' V.DBCB ' AAN' GNBO?C□AH' ?HN' CFG 0A@K?HE' A?' P□D-CBAB ' @GH' F?PG' A@G' KAJGD' CA' DG>AD@' CFG' NG>GOC' A?' H?CBDG' HN' >AD' @E GM>' ' F?PG' CF□ ' LGHG>C' @ADGAPGD' CF?C' ?@' CFG N?B FCGD' A?' OF?HOG' AD' D□G□' J□CF' CFGG J□FOF' DGQB□DGCF' GODG E ?HN' >NGM□CE'W ' 0AH>G ' CF?C' V□' J?A@?H8 ' J□C' 0A@@AHME □ ' CAA' JG?(' CA' (GGK' ?' GODGC ?>GME ' LBC' EGC' V.DBCB ' AAN' GNBO?C□AH' ?HN' CFG 0A@K?HE' A?' P□D-CBAB ' @GH' F?PG' A@G' KAJGD' CA' DG>AD@' CFG' NG>GOC' A?' H?CBDG' HN' >AD' @E GM>' ' F?PG' CF□ ' LGHG>C' @ADGAPGD' CF?C' ?@' CFG N?B FCGD' A?' OF?HOG' AD' D□G□' J□CF' CFGG J□FOF' DGQB□DGCF' GODG E ?HN' >NGM□CE'W ' 0AH>G ' CF?C' ?

B 0' ?M' CFG' GH?CAD ' LG□H ' GHCGDGN' >□D C' □HCA' CF□ ' KM?OG' AD' OF?KCGD ' FAB G' JFGDG' CFG' OABHO□M' FABMN' LG' (GKC ' ?M' CFG' ACFGD' OAH K□D?CAD ' CD?□ FC' CAAN' ?LABC' ?G ?D8 ' OF?□D ' ? ' □>' CFGE' F?N' F?N' A@GCF□H ' CA' ?E' BHCA' F□@ ' ?HN' A@G' ?E' CF?C' ? □B ' 0? C□H ' F□ ' GEG ' BKAH' AD?KGE8 ' □@? G ' @?NG' F□ ' KD?EGD' BHCA' □C' ? ' □>' □C' F?N' LGGH' ?M□PG ' #DGLAH□B ' AH' CFG' ACFGD' □NG ' NDGJ' HCAH□B ' ? □NG' ? ' FG' O?@G' □HCA' CFG' FAB G' JFGDG' CFG' GH?CG' ?C ' ?HN' FGMN' F□@' J□CF' ?' MAH ' C?M (' J□CF-ABC ' FGH' ?G ?D' J? ' OA@G' □HCA' CFG' FAB G ' ?M' CFG' GH?CG' DA G' CA' FAHABD' F□@' ?C' F□ ' 0A@□H ' □H ' A ' JFGH' FG' J? ' GC ' CFG' OAH K□D?CAD ' >MAO(GN' ?LABC' F□@ ' ?HN' ?@AH C' CFG@' CFGE' KDG GHCGN' AHG' #BMM□B ' V&GCGMMB ' □@LGD ' JFA' @?NG' FB@LMG' B□C' >AD' CFG' O?MM□H ' FA@G' ? ?□H' A>' F□ ' LDACFGD' CF?C' J? ' L?H□ FGN ' #FGE' ?M' @?NG' ? ' CFAB F' CFGE' JGDG' □HCGDOG AD ' >AD' F□@ ' ?HN' CAA(' ?G ?D' LE' CFG' F?HN ' ?HN' (□ GN' F□ ' FG?N' ?HN' LDG? C ' ?G ?D' ?C' CFG' >□D C ' □@KME' DG>B GN' CFG□D' (□HN-HG ' ?HN' GHCDG?C□G ' LBC' ?>CGDJ?DN ' KGDOG□P□H ' CFGE' C□M' KDG GN' AH' F□@ ' FG' P□AMGHCME' CFDB C' CFG@' >DA@' F□@ ' #FGH' □@LGD ' J□CF' LACF' F□ ' F?HN ' KMBO(GN' ?G ?D8 ' LJH' APGD' F□ ' FABMNGD ' ?HN' ? O?' CF?C' CAAN' LGF□HN' F□@' NDGJ' F□ ' N? GD' >□D C ' ?HN' CD?(G' ?G ?D' BKAH' CFG' FABMNGD ' LBC' ?PG' F□@' HA' DG?C' JABHN ' ?G ?D' >GGM□H ' F□@ GM>' FBDC ' CAA(' F□@' CD?□ FC' LE' CFG' F?HN' FG' FGMN' F□ ' N? GD' □H ' ?HN' OD□GN' ABC' □H' $?C□H ' ' CD?□CAD' ? O?' JF?C' NA C' CFAB'W ? O?' AH' CFG' ACFGD' □NG' OD□GN' □H' +DGG(' ?HN' O?MMGN' F□ ' LDACFGD' CA' FGMK' F□@ ' A' N□PGD ' DBHH□H ' AH' ?' FG?K' CA GCFGD' CA' >ME' BKAH' ?G ?D' FG' MAA(□H ' ?LABC' F□@' CA' F?PG' >MGN ' ?J' .DBCB ' J□CF' ?' JADN' ND?JH' □H' F□ ' F?HN' DG?NE' CA' CD□(G' ?C' F□@' ' CFGH' FG' MGC' ? O?8 ' F?HN' A ' ?HN' O? C□H ' F□ ' AJH' APGD' F□ ' >?OG ' B>>GDGN' GPGDE' @?H' CA' CD□(G' ?C' F□@' CF?C' JABMN ' #FGH' CFG' OAH K□D?CAD ' CFDAH □H ' AHG' BKAH' ?HACFGD ' LGO?B G' GPGDE' @?H' J? ' NG □DAB ' CA' F?PG' ?' OBC' ?C' F□@ ' A' @?HE' JADN ' ?HN' N? GD ' M□ FC□H ' BKAH' AHG' LANE ' AHG' A>' CFG@' FBDC' ?HACFGD ' ?HN' ?@AH ' CFG@' .DBCB ' O?B FC' ?' LMAJ' AH' F□ ' F?HN ' LGO?B G' FG' JABMN' @?(G' AHG' □H' @BDCFGD□H ' A>' F□@ ' ?HN' ?MM' CFG' DG C' ?M A' JGDG' GPGDE' @?H' A>' CFG@' LMAAN□GN ' G ?D' LG□H ' M?□H' □H' CF□ ' @?HHGD ' .DBCB ' C?HN□H ' □H' CFG' @□N C' A>' CFG' FAB G ' JABMN' F?PG' KA(GH ' ?HN' C?EGN' CFG' ACFGD' GH?CAD ' CF?C' JGDG' HAC' A>' CFG' OAH K□D?OE ' CA' F?PG' CAMN' CFG@' CFG' DG? AH' JFE' CFGE' F?N' NAHG' CF□ ' >?OC ' LBC' CFGE' ? ' @GH' LACF' ?>D?□N' ?HN' ?@?TGN ' >MGN' AHG' BKAH' ?HACFGD8 ' HGO(' □H' F? CG' CA' GC' ABC' ?C' CFG' NAAD ' ?HN' HA' @?H' >AMMAJGN' CFG@' 4 >AD' □C' J? ' GC' NAJH' ?HN' ? DGGN' LGC JGGH' CFG@' CF?C' CFGE' FABMN' (□MM' HA' @?H' LBC' ?G ?D' AHME ' ?HN' FABMN' GHCDG?C' ?MM' CFG' DG C' CA' MAA(' CA' NG>GHN' CFG□D' M□LGDCE ' MM' CFG' OAH K□D?CAD ' LBC' .DBCB ' NGCGD@□H□H ' BKAH' CF□ ' @?CCGD ' CFAB FC' □C' AAN' ?M A' CA' (□MM' HCAH□B ' LGO?B G' FG' J? ' ?' J□O(GN' @?H ' ?HN' CF?C' □H' H?CBDG' >?PABDGN' CED?HHE ' .G □NG ' ?M A ' >AD' CF?C' FG' J? ' □H' DG?C' G C□@?C□AH' J□CF' AMN□GD ' F?P□H ' LGGH' OAHPGD ?HC' A>' MAH ' C□@G' ?@AH C' CFG@' ?HN' G KGO□?MME' F?P□H ' ?' @□HN' LGHC' CA' DG?C' GHCGDKD□ G ' FG' J? ' ?M A' A>' DG?C' ?BCFAD□CE' ?C' CF?C' C□@G ' LG□H ' OAH BM' J□CF' 9 ?D ' .BC' .DBCB ' JABMN' HAC' ? DGG' CA' □C ' >□D C ' >AD' CF?C' FG' ?□N' □C' J? ' HAC' FAHG C ' GOAHNME ' LGO?B G' FG' CAMN' CFG@' CFGDG' J? ' FAKG' A>' OF?H G' □H' F□@ ' >AD' FG' N□N' HAC' @□ CDB C' LBC' CF?C' HCAH□B ' LG□H ' ?' HALMG ' @□HNGN' ?HN' OABD? GAB ' @?H' VJFGH' FG' FABMN' (HAJ' CF?C' ?G ?D' J? ' NG?N ' JABMN' J□MM□H ME' FGMK' F□ ' OABHCDE' CA' DGO PGD' FGD' M□LGDCE ' F?P□H ' CFG@' ?H' G ?@KMG' BHCA' F□@' CA' >AMMAJ' CFG□D' OABD? G' ?HN' P□DCBG ' A' .DBCB ' LE' CF□ ' @G?H ' ?PGN' HCAH□B 8 M□>G ' JFA' ?C' CF?C' KDG GHC' C□@G' N□ B□ GN' F□@ GM>' ?HN' CAMG' ?J?E ' LBC' .DBCB ' ?HN' F□ ' OAH ADC ' F?P-□H ' CFG□D' JADN ' LMAANE' □H' CFG□D' F?HN ' JGHC' CD?□ FC' CA' CFG' ?K□CAM ' KGD B?N□H ' CFG' "A@?H ' ? ' CFGE' JGHC' CA' C?(G' CFG□D' M□LGDCE' ? ?□H I

AKGHME ' ?HN' ?M A' CF?C' F□ ' LANE' FABMN' LG' FAHABD?LME' LBD□GN ' ?HN' HAC' □H' FB GD @B GD ' MG C' CFG' KGAKMG' @□ FC' CFGDGLE' C?(G' AOO? □AH' CA' LG' JAD G' A>>GHNGN' □>' CFGE' N□N' ACFGDJ□ G ' ? □B ' CABCME' K?(G' ? ?□H C' □C ' LBC' .DBCB ' JGHC' J□CF' CFG' @AC□AH ' ?HN' ? DGGN' BHCA' □C ' FGDG□H □C' GG@GCF' FG' OA@@□CCGN' ?' GOAHN' >?BMC ' >AD' CFG' >□D C' >?BMC' FG' N□N' J? ' JFGH' FG' JABMN' HAC' OAH GHC' CA' F□ ' >GMMAJ' OAH K□D?CAD ' CF?C' HCAH□B ' FABMN' LG' M?□H ' ?HN' CFGDG>ADG' FG' J? ' SB CME' ?OOB GN' CF?C' CFGDGLE' FG' F?N' ?PGN' ?HN' CDGH CFGHGN' ?' CDAH ' ?HN' D□GPAB ' GHG@E' A>' CFG□D' OAH K□D?OE ' #FG' GOAHN' >?BMC' J? ' JFGH' FG' ? DGGN' CF?C' ?G ?D8 ' >BHGD?M ' FABMN' LG' ? ' HCAH□B ' JABMN' F?PG' CFG@' CFG' JF□OF' □HNGGN' @?DDGN' ?MM8 AD ' >□D C' A>' ?MN ' JFGH' ?G ?D8 ' CG C?@GHC' J? ' AKGHME' DG?N' ?@AH ' CFG@' JFGDGLE' □C' ?KKG?DGN' CF?C' FG' LG-QBG?CFGN' BHCA' GPGDE' O□C□TGH' A>' "A@G' 5' ND?OF@? ' ?' @?H ' ?HN' CM@C' FG' MG>C' F□ ' ?DNGH ' ?HN' ?DLABD ' BHCA' CFG' KGAKMG ' JF□OF' FG' F?N' AH' CF□ ' □NG' A>' CFG' D□PGD' #□LGD ' □H' CFG' KM?OG' JFGDG' HAJ' CFG' #G@KMG' A>' ADCBHG' □ ' LB□MC ' CFG' KGAKMG' CFGH' MAPGN' F□@ ' ?HN' JGDG' @?DPGMMAB ' ADDE' >AD' F□@' >CGDJ?DN ' JFGH' G ?D8 ' LANE' J? ' LDAB FC' □HCA' CFG' @?D(GC KM?OG ' HCAH□B ' @?(□H ' F□ ' >BHGD?M' AD?C□AH' □H' KD?□ G' A>' CFG' NG?N ' ?OOADN□H ' CA' CFG' ?HO□GHC' OB CA@' A>' "A@G ' ?HN' KGDOG□P□H ' CF?C' F□ ' JADN ' @APGN' CFG' OA@@AH' KGAKMG' CA' OA@K? □AH ' FG' >D?@GN' F□ ' GMAQBGHOG' CA' @?(G' CFG□D' FG?DC ' EG?DH' CFG' @ADG ' ?HN' C?(□H ' CG ?D8 ' AJH' ?M' LMAANE' □H' F□ ' F?HN ' FG' M?□N' □C' AKGH' CA' CFG' □ FC' A>' CFG@' ?M ' FAJ□H ' JF?C' ?' HB@LGD' A>' OBC ' ?HN' FAMG ' □C' F?N' BKAH' □C ' CFGDG-J□CF?M' CFG' KGAKMG' >GMM' KDG GHCME' □HCA' BOF' ?' D? G' ?HN' @BC□HE ' CF?C' CFGDG' J? ' HA' @ADG' ADNGD' (GKC' ?@AH C' CFG' OA@@AH' KGAKMG ' >AD' A@G' A>' CFG@' OD□GN' ABC ' □MM' CFG' @BDCFGDGD ' ACFGD ' KMBO(GN' BK' >AD@ ' C?LMG ' ?HN' C?MM ' ?LABC' CFG' @?D(GC KM?OG ' ? ' CFGE' F?N' NAHG' LG>ADG' ?C' CFG' >BHGD?M ' A>' MAN□B ' ?HN ' F?P□H ' M?□N' CFG@' ?MM' AH' ?' FG?K' CA GCFGD ' CFGE' GC' CFG@' AH' >□DG ' ?HN' CFGDGBKAH' N□N' KBC' CFG' LANE' A>' GG ?D' ?HN' LBDHC' □C' □H' CFG' @□N C' A>' CFG' @A C' FAME' KM?OG ' HN ' >BDCFGD@ADG ' JFGH' CFG' >□DG' J? ' CFADAB FME' (□HNMGN ' A@G' FGDG ' A@G' CFGDG ' CAA(' LBDH□H ' >□DGLD?HN ' ?HN' D?H' J□CF' CFG@' CA' CFG' @BDCFGDGD 8 FAB G ' CF?C' (□MMGN' F□@' CA' GC' CFG@' AH' >□DG ' AJLG□C ' CFG' OAH K□D?CAD ' >ADG GG□H ' CFG' N?H GD' LG>ADG ' F?N' J□ GME' KDAP□NGN' >AD' CFG@ GMPG ' ?HN' >MGN I

='#FGDG' J? ' ?' KAGC' O?MMGN' □HH?' JFA' F?N' LGGH' HA' K?DC?(GD' A>' CFG' OAH K□D?OE ' LBC' J? ' ?MJ?E' AHG' A>' ?G ?D8 ' OF□G>G C' >D□GHN ' G' NDG?@GN' CFG' H□ FC' LG>ADG' CF?C' ?G ?D' L?N' F□@' CA' BKKGD' J□CF' F□@' ?HN' CF?C' FG ' DG>B □H ' CA' A ' ?G ?D' J? ' PGDE' □@KADCBH?CG' J□CF' F□@' ?HN' OA@KGMMGN' F□@ ' A' CF?C' ?C' MGH CF' FG' MGN' F□@' LE' CFG' F?HN' □HCA' ?' DG?C' N?D(' KM?OG ' JFGDG ' LG□H ' @?DPGMMAB ME' ?>D?□N ' FG' J? ' ND□PGH' CA' >AMMAJ' F□@' □H' K□CG' A>' F□ ' FG?DC ' #F□ ' NDG?@' KBC' F□@' ?MM' H□ FC' □HCA' ?' >GPGD ' ?HN' EGC ' HACJ□CF C?HN□H ' CFG' HG C' @ADH□H ' JFGH' FG' FG?DN' CF?C' CFGE' O?DD□GN' ?G ?D8 ' LANE' CA' LBD□?M ' LG□H ' ? F?@GN' HAC' CA' ?OOA@-K?HE' F□ ' >BHGD?M ' FG' JGHC' ABC' A>' F□ ' FAB G ' ?HN' CFDB C' F□@ GM>U □HCA' CFG' KDG ' A>' CFG' OA@@AH' KGAKMG' CF?C' JGDG' □H' ?' DG?C' BKDA?D ' ?HN' LGO?B G' A@G' AHG' O?MMGN' F□@' LE' F□ ' H?@G' □HH?' CFG' KGAKMG' CF□H(-□H ' FG' F?N' LGGH' CF?C' □HH?' JFA' □H' ?H' AD?C□AH' FG' @?NG' F?N' KA(GH' PGDE' GP□M' A>' ?G ?D ' CFGE ' >?MM□H ' BKAH' F□@' □H' CFG□D' D? G ' MGJ' F□@' ABC-D□ FC' □H' CFG' @?D(GC KM?OG I

= ' DG?C' HB@LGD' A>' @GH' LG□H ' ? G@LMGN' CA GCFGD' AHG' ?>CGD' ?HACFGD ' .DBCB ' @?NG' ?H' AD?C□AH' BHCA' CFG@' CA' J□H' CFG' >?PABD' A>' CFG' KGAKMG ' ?HN' CA' SB C□>E' CF?C' CFGE' F?N' NAHG ' MM' CFA G' CF?C' JGDG' LE' ?□N' CFGE' F?N' NAHG' JGMM ' ?HN' OD□GN' BHCA' CFG@' CF?C' CFGE' FABMN' LAMNME' OA@G' NAP H' >DA@' CFG' ?K□CAM ' JFGDGBKAH' .DBCB ' ?HN' F□ ' OA@K?H□AH ' O?@G' LAMNME' NAJH' □HCA' CFG' @?D(GC KM?OG ' #FG' DG C' >AMMAJGN' □H' CDAAK ' LBC' .DBCB ' JGHC' >ADG@A C ' PGDE' FAHABD?LME' OA@K? GN' □H' DABHN' ?LABC' J□CF' CFG' HALMG C' @GH' A>' CFG' O□CE ' JF□OF' LDAB FC' F□@' >DA@' CFG' ?K□CAM ' CFDAB F' CFG' @?D(GC KM?OG ' CA' CFG' KBMK□C ' >AD' AD?C□AH ' FGH' CFG' KGAKMG' ?J' F□@' □H' CFG' KBMK□C ' ?MCFAB F' CFGE' JGDG' ?' @BMC□-CBNG' A>' D?(GFGMM ' A>' ?MM' ADC ' ?HN' F?N' ?' AAN' J□MM' CA' @?(G' A@G' C□D ' EGC ' LG□H ' ? F?@GN' CA' NA' □C' >AD' CFG' DGPGDGHOG' CFGE' L?DG' BHCA' .DBCB ' CFGE' (GKC' □MGHOG' CA' FG?D' JF?C' FG' JABMN' ?E ' FGH' .DBCB ' LG ?H' CA' KG?(' CFGE' ?PG' F□@' QB□GC' ?BN□GHOG ' FAJLG□C □@@GN□?CGME' ?>CGD' CFGE' FAJGN' CF?C' CFGE' JGDG' HAC' ?MM' OAHCGHCGN' J□CF' CFG' @BDCFGD' ' #FGH' HCAH□B ' CF□H(□H ' AAN' F□ ' CG C?@GHC' FABMN' LG' DG?N

' 2 +

D ' 2+S6' -' 5' -' '" $Z

='MM' CFDGG' @GC' CA GCFGD' VCA' J□C' ?G ?D' HCAH□B ' ?HN' $GK□NB ' □H' ?H' □ M?HN' GHP□DAHGN' DABHN' ?LABC' J□CF' ?' M□CCMG' D□PGD' ?HN' CFGDG' DG@?□HGN' CFDGG' N?E ' CA GCFGD' AJ ' ? ' CABOF□H ' ?MM' ACFGD' @?CCGD ' CFGE' JGDG' G? □ME' ? DGGN ' ?HN' N□N' N□P□NG' ?MM' CFG' G@K□DG' A>' "A@G' LGCJGGH' CFG@' ? ' □>' □C' F?N' LGGH' CFG□D' AJH' □HFGD□C?HOG ' .BC' EGC' CFGE' OABMN' F?DNME' ? DGG' JFA@' CFGE' JABMN' KBC' CA' NG?CF ' >AD' GPGDE' AHG' A>' CFG@' JABMN' (□MM' CFG□D' GHG@□G ' ?HN' ?PG' CFG□D' (□H @GH' ?HN' >D□GHN ' ,GC' ?C' MGH CF ' □P□H ' KM?OG' CA' CFG□D' DGGNE' NG □DG' CA' LG' DGPGH GN' A>' CFG□D' GHG@□G ' CFGE' KBDHGN' ?MM' DGPGDGHOG' A>' LMAAN' ?HN' FAM□HG ' A>' >D□GHN F□K' ?C' CFG□D' >GGC' AD' ?G ?D' MG>C' □OGDA' CA' HCAH□B 8 J□MM ' HCAH□B ' ?M A' >AD AA(' $BO□B ' ?G ?D' JFA' J? ' F□ ' BHOMG' LE' F□ ' @ACFGD ' ?HN' LACF' A>' CFG@' CA GCFGD' B>>GDGN' $GK□NB ' CA' (□MM' F□ ' AJH' LDACFGD' ?BMB ' ,GC' A@G' JD□CGD ' ?>>□D@' CF?C' ?G ?D' ?HN' HCAH□B ' DGQBG CGN' ?BMB ' @□ FC' LG' M?□H ' ?HN' CF?C' $GK□NB ' J? ' OAHCGHCGN' J□CF' □C I

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,' LABC' CF?C' C@G' .DBCB ' GHC' CA' KD?E' ? B ' CA' OA@G' CA' CFG' O CE' A>' ?DN ' ?HN' A' FG' N N ' .DBCB ' BHNGD C?HN H ' A>' F ' OA@ H ' JGHC' CA' @GGC' F@' J CF' ?MM' F ' >D GHN ' #FGDG ' LACF' ?D@ G ' LG H ' ?D@GN ' CFGE' O?MMGN' CFG@' LACF' G@KGDAD ' AJ ' ? ' C' OA@@AHME' F?KKGHGCF' H' DG?C' ?>>?D ' LGCJGGH' CJA' KGD AH ' LACF' A>' CFG@' F?P H ' @?HE' >D GHN ' ?HN' A' @?HE' O?KC?H ' BHNGD' CFG@ ' CFGDG' D?H' C?MG ' ?HN' OA@KM?HC ' LGCJ C' CFG@' #FGDG>ADG ' LG>ADG' CFGE' >GMM' H' F?HN' J CF' ?HE' ACFGD' @?CCGD ' CFGE' JGHC' HCA' ?' M CCMG' OF?@LGD' CA GCFGD ' ?HN' L?NG' GPGDE' @?H' ?PAN ' ?HN' N N' FBC' CFG' NAAD ' CA' CFG@ ' #FGH' CFGE' LG ?H' CA' KABD' ABC' CFG D' OA@KM?HC ' AHG' CA' CFG' ACFGD ' ?HN' DGJ' FAC' ?HN' MABN ' G?DHG CME' ?OOB H ' AHG' ?HACFGD ' ?HN' ?C' MGH CF' >GMM' LACF' ?' JGGK H ' #FG D' >D GHN ' CF?C' JGDG' J CFABC' CFG' OF?@LGD' FG?D H ' CFG@' MABN' J CF H ' ?HN' ?H DE' LGCJGGH' CFG@ GMPG ' CFGE' JGDG' LACF' ?@?TGN' ?HN' ?>D?N' ?M A' MG C' C' FABMN' DAJ' CA' >BDCFGD' @?CCGD ' LBC' EGC' CFGE' JGDG' OA@@?HNGN' CF?C' HA' @?H' FABMN' OA@G' CA' CFG@' ACJ CF C?HN H ' AHG' &?DOB ' F?AH B ' CF?C' F?N' LGGH' ?' >D GHN' ?HN' >AMMAJGD' A>' ?CA' JF MG' FG' M PGN ' ?HN' CAA (' BKAH' F@' CA' OABHCGD>G C' ?' KF MA AKFGD ' HAC' J CF' J NA@' ?HN' N ODGC AH ' LBC' J CF' ?' OGDC?H' LGNM?@' ?HN' >D?HC O' @AC AH' ' ' ' ' #F ' F?AH B ' ?C' CF?C' C@G ' H' NG K CG' A>' CFG' NAAD-(GGKGD ' O?@G' HCA' CFG' OF?@LGD ' ?HN' J CF' ?' OGDC?H' OA>>H ' ?HN' @AO(H ' G CBDG ' JF OF' FG' OABHCGD>G CGN' A>'KBDKA G ' FG' DGFG?D GN' CFG' PGD G ' JF OF' AMN' G CAD' ?N' H' A@GD R

' & E' MADN ' ' KD?E' EAB ' (G?D(GH' LACF ' CA' @G
AD' ' F?PG' GGH' @ADG' EG?D ' CF?H' BOF' EG' CFDGG

? B ' >GMM' ?' M?B F H ' ?C' F @ ' LBC' .@CB ' CFDB C' F@' ABC' A>' CFG' OF?@LGD ' ?HN' O?MMGN' F@' NA ' ?HN' OABHCGD>G C' OEH O ' AJLG C ' F ' OA@ H ' H' LDA(G' CFG D' CD>G' ?C' CF?C' C@G ' ?HN' A' CFGE' MG>C' G?OF' ACFGD ' #FG' GM> ?@G' H FC' ? B ' KDGK?DGN' F ' BKKGD' H' F OF?@LGD ' ?HN .DBCB ' LDAB FC' F ' >D GHN ' J CF' F@ #FG' HG C' N?E' ?>CGD .DBCB ' BKAH' OA@KM?HC' A>' CFG' ?DN?H ' N N' OAHNG@H' ?HN' HACGN' $BO B ' GMM?' >AD' ?' NG>?@GN' KGD AH ' ' >AD' CF?C' FG' J?' ?OOB GN' ?HN' OAHP OCGN' A>' DALLGDE' ?HN' KM>GDE' H' F ' A>>OG ' #F ' SBN @GHC' @BOF' @ M (GN' ? B ' ' ?HN' CFGDG>ADG' FG' DG?CME' DGKDAPGN' .DBCB ' >AD' CF?C' FG' JABMN' FAJ' F@ GM>' A' CD?' FC' ?HN' GPGDG' H' BOF' ?' C@G ' ? ' J? ' @GGCGD' CA' LG?D' ?' MCCMG' CF?H' CA' C?(G' CF H ' ?C' CFG' JAD C ' .DBCB ' H' OAHCD?DE' @?HHGD' ?H JGDGN' CF?C' FG' FABMN' DG@G@LGD' CFG' NG ' A>' &?DOF ' ?C' JF OF' C@G' CFGE' MGJ' OBM B ' ?G ?D ' JFA' HG CFGD' KMMGN' HAD' KAMMGN' CFG' OABHCDE ' LBC' AHME' J? ' ?' >?PABDGD' ?HN' BLADHGD' A>' ?MM' CFG@' CF?C' N N' DAL' ?HN' KA M' LE' F ' OABHCGH?HOG' ?HN' ?BCFAD CE I

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=' .BC' ? ' CFGE' LA>C' KDGK?DGN' CA' K? ' APGD' ? ?H' ABC' A>' ?' HCA' !BDAKG ' CFGDG' JGHC' ?' DB@ABD' CF?C' CFGDG' ?KKG?DGN' ?' JAHNGD>BM' H BHCA' F@' .DBCB ' J? ' ?' O?DG>BM' @?H ' ?HN' MGKC' PGDE' M CCMG >CGD' FG' F?N' MB@LGDGN' ?' M CCMG' ?>CGD' BKKGD' FG' KGHC' ?MM' CFG' DG C' A>' CFG' H FC' H' NG K?COF H ' A>' F ' JG FC G C' O?B G ' ?HN' ?>CGD' FG' F?N' C?(GH' ADNGD' >AD' CFG@' ' >' FG' F?N' ?HE' MG BDG' MG>C' F@' FG' JABMN' DG?N' A@G' LAA(' C MM' CFG' CF DN' J?COF' A>' CFG' H FC ' ?C' JF?C' C@G' CFG' O?KC?H ' KGCCE' O?KC?H ' ?HN' OAMAHGM ' N N' B G' CA' OA@G' BHCA' F@' A ' LG H ' DG?NE' CA' A' HCA' !BDAKG ' AHG' H FC' VJFGH' ?MM' CFG' O?@K' CAA(' QB GC' DG C ' ? ' FG' J? ' H' F ' CGHC' J CF' ?' M CCMG' M FC ' CF H(H ' A>' JG FCE' @?CCGD ' FG' CFAB FC' FG' FG?DN' AHG' OA@G' H' CA' F@' ?HN ' O? C H ' F ' GEG' CAJ?DN ' CFG' NAAD' A>' F ' CGHC ' CF?C' FG' ?J' ?' JAHNGD>BM ' CD?H G ' ?HN' @AH CDAB ' F?KG' A>'?' LANE' OA@H ' CAJ?DN ' F@' ?HN' ?N' HGPGD' ?' JADN ' A' .DBCB ' LAMNME' ? (GN' JF?C' FG' J? ' ?' AN' AD' ?' @?H ' ?HN' JF?C' O?B G' LDAB FC' F@' CF CFGD ' #FG' K D C' ?H JGDGN' F@' ' ?@' CFE' GP M' K D C' .DBCB ' ?HN' CFAB' F?MC' GG' @G' LE' CFG' O CE' A>' F MKKG ' .DBCB ' LG H ' HA' ACFGD J G' ?>D?N ' DGKM GN' ? ?H' BHCA' C ' GMM ' CFGH ' ' F?MM' GG' CFGG' ? ?H ' #FG' K D C' KDG GHCME' P?H FGN' ?J?E ' ?HN' .DBCB ' O?MMGN' F ' @GH' BHCA' F@' ' JFA' CAMN' F@' CF?C' CFGE' FG?DN' HA' HA G ' HAD' ?J' ?HECF H ' ?C' ?MM' #FGDGBKAH' .DBCB ' DGCBDHGN' ? ?H' CA' CF H(' AH' F ' @?CCGD ' ? ' FG' N N' LG>ADG ' ?HN' JFGH' CFG' N?E' LD?(G' FG' JGHC' BHCA' ? B ' CA' CGMM' F@' JF?C' P AH' F?N' ?KKG?DGN' BHCA' F@' H' CFG' H FC I

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,' FGH' CFGE' D?' GN' CFG D' O?@K ' CFGDG' O?@G' CJA' G? MG ' CF?C ' >ME H ' J CF' ?' @?DPGMMAB ' >ADOG ' M FCGN' BKAH' CJA' A>' CFG' >ADG@A C' GH H
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?HN' ?MJ?E ' >AMMAJGN' CFG' AMN GD ' JF OF' ?PG' CFG@' @G?C' ?HN' >GN' CFG@' BHC M' CFGE' O?@G' HG?D' CA' CFG' O CE' A>' F M KKG ' ?HN' CFGDG' AHG' N?E' AHME LG>ADG' CFG' L?CCMG' CFGE' LACF' >MGJ' ?J?E HN' EGC ' >BDCFGD ' CFGDG JGDG' GGH' ?' @?DPGMMAB ' HB@LGD' A>' >AJM ' A>' KDGE' CF?C' >GN' BKAH' NG?N O?DO? G #FG' JF OF' LG ?H' A@GJF?C' CA' ?MCGD' ? B @ HN >DA@' ! K 0BDB @ AK H AH ' ?HN' F?N' KBC' CFG' AMN GD ' ?M A' H' ?' @?DPGMMAB ' >G?D ' CFGDGBKAH' ? B ' J? ' A>' AK H AH' HAC' CA' CDE' CF ' J?D' ?C' AHG L?CCMG ' LBC' D?CFGD' CA' NGM?E' C@G ' ?HN' CA' ND?J' C' ABC' H' MGH CF . BC' .DBCB ' H' OAHCD?DE' @?HHGD ' N N' ?MJ?E' LG>ADG ' ?HN' ?C' CF?C' C@G ?M A ' NG DG' HACF H ' @ADG' CF?H' CA' KBC' ?MM' CA' CFG' F?T?DN' A>' L?CCMG ' ? ' AAH' ? ' @ FC' LG' KA LMG #FGDGBKAH' C' J? ' KDG GHCME' NGCGD-@ HGN' CFGE' FABMN' >' FC' L?CCMG' CFG' HG C' N?E ' A' .DBCB ' ?MM' BKKGD-C@G' MAA(GN' J CF' ?' OFGGD>BM' OABHCGH?HOG ' M (G' ?' @?H' CF?C' F?N' AAN' FAKG ' ?HN' C?M(GN' PGDE' J GME' A>' KF MA AKFE ' ?HN' ?>CGD' BKKGD' JGHC' CA' LGN ' .BC' CABOF H ' ? B ' &G ?M?' DGKADCGCF' CF?C' FG' BKKGN' LE' F@ GM>' H' F ' CGHC' J CF' ?' >GJ' >D GHN ' ?HN' CF?C' ?MM' BKKGD C@G' FG' MAA(GN' PGDE' ?NME' ?HN' J? ' >BMM' A>' CFAB FC ' ?MCFAB F' C' J? ' ? ?H C' F ' H?CBDG ' ?HN' CF?C' ?>CGD' BKKGD' FG' CAA(' F@' LE' CFG' F?HN ' ?HN ' FAMN-H ' F@' >? C' V H' CA(GH' A>' (HNHG ' ? ' F ' @?HHGD' PZ?' CAMN' F@' H' +DGG(R &G ?M?' ' KDACG C' BHCA' CFGG ' ?HN' @?(G' CFGG' @E' J CHG ' CF?C' ' ?@' OA@KGMMGN' ? ?H C' @E' @HN' ?HN' JMM' V? ' A@KGE' CFG' +DG?C' J? ' CA' <' SGAK?DN' CFG' M LGDCE' A>' ABD' OABHCDE' CA' CFG' F?T?DN' A>' ?' L?CCMG ' HN' EGC' JG' @B C' LG' M PGME' ?HN' A>' AAN' OABD? G ' OAH NGD H ' ABD' AAN' >ADCBHG ' JFA@' JG' FABMN' JDAH ' CAA' @BOF' CA' @ CDB C' FGD ' ?MCFAB F' JG' >AMMAJ' GP M' OABH GM' &G ?M?' JD CGCF' CF?C' ? B ' F?P H ' KA(GH' CFG G' M? C' JADN ' BHCA' F@' FG' L?NG' F@' >?DGJGMM ' ?HN' JMMGN' F@' CA' OA@G' CA' BKKGD' CA' F@' CFG' HG C' H FC' >AMMAJ H ' LGO?B G' C' J? ' F ' LDCFN?E' #FG' HG C' @ADH H ' LE' LDG?(' A>' N?E' CFG' H?M' A>' L?CCMG' J? ' GC' ABC' H' .DBCB ' ?HN' ? B ' O?@K ' JF OF' J? ' ?H' ?D@ H ' O?DMGC' OA?C ' ?SN' LACF' CFG' OF G>C?H ' K?(G' CA GCFGD' H' CFG' @N C' A>' CFG D' ?D@G ' #FGH' ? B ' LG ?H' CA' KG?(' >D C' ?HN' ?N R #FG' AN ' D?HC' B ' ' .DBCB ' CF?C' CF ' N?E' JG' @?E' J H' CFG' >GMN ' ?HN' GPGD' ?>CGD' CA' M PG' ?MM' CFG' DG C' 4>' ABD' M>G' QB GCME' AHG' J CF' ?HACFGD ' .BC' CF' CFG' AN ' F?PG' A' ADN?HGN' C' CF?C' CFG' DG?CG C' ?HN' OF G>G C' CF H ' ?@AH C' @GH' ?DG' @A C' BHOGDC?H ' ?HN' CF?C ' >' CFG' L?CCMG' >?MM' AKC' ACFGDJ G' CA N?E' CF?H' JG' J F' AD' AA('>AD' JG' F?MM' F?DNME' @GGC' ? ?H ' JF?C' ?DC' CFAB' CFGH' NGCZ@HGN' CA' NAR CA' >ME' AD' N G' W .DBCB ' ?H JGDGN' F@' .G H ' EGC' LBC' ?' EABH ' @?H' ?HN' HAC' APGD DG?CME' G KGD GHOGN' H' CFG' JADMN ' ' CDB C' V ' (HAJ' HAC' FAJ ' ?' OGDC?H' DBMG' A>' KF MA AKFE ' LE' CFG' JF OF' ' N N' DG?CME' LM?@G' ?HN' DGKDAPG' ?CA' >AD' (MM H ' A>' F@ GM>' ? ' LG H ' HA' M?J>BM' HAD' ANME' ?OC' CABOF H ' CFG AN ' HAD' OAHOGDH H ' @GH' P?M?HC ' HAC' CA' PG' KM?OG' ?HN' E GMN' CA' %PHG' DAP NGHOG ' ?HN' HAC' OAH C?HCME' ?HN' K?C GHCME' CA' C?(G' JF?C AGPGD' C' KMG? GCF' F@ C CA' GHN' B ' LBC' CA' ND?J' L?O(' ?HN' >ME' ' LBC' LG H ' HAJ' H' CFG' @N C' A>' CFG' N?H GD ' ' ?@' A>' ?' OAHCD?DE' @HN ' >AD' >' C' LG' HAC' CFG' JMM' A>' +AN' CF?C' CF ' L?CCMG' >?MM' ABC' >ADCBH?CG' >AD' B ' ' JMM' MAA(' HA' @ADG' >AD' FAKG ' HG CFGD' GG(' CA' @?(G' ?HE' HGJ' BKKME' A>' J?D' ? ?H ' LBC' JMM' D N' @G' A>' CF ' @ GD?LMG' JADMN ' ?HN' OAHCGH C' @G' J CF' @E' >ADCBHG ' >AD' ' ?PG' BK' @E' M>G' >AD' @E' OABHCDE' H' CFG' NG ' A>' &?DOF ' >AD' CFG' JF OF' ' F?MM' M PG' H' ?HACFGD' @ADG' MAD AB ' JADMN ' ? B ' >GMM' ?' M?B F H ' CA' FG?D' JF?C' FG' ?N ' ?HN ' G@LD?O H ' F@' A@G' AH' CFGH ' ?N' FG ' MGC' B ' A' ?HN' OF?D G' ABD' GHG@G ' J CF' CF ' @HN ' >AD' G CFGD' JG' F?MM' OAHQBGD ' AD' JG' F?MM' HAC' HGGN' CA' >G?D' CFG' OAHQBGDAD ' >CGD' CF ' C?M(' CFGE' >GMM' CA' OAH BMC?C AH' ?@AH ' CFG D' >D GHN ' >AD' CFG' ADNGD H ' A>' CFG' L?CCMG I

' R =' ' $ ' .' ' ' YO

=' A' ? B ' F@ GM>' J? ' ?C' MGH CF' OA@KGMMGN' CA' >ME ' J CF' ?' >GJ' ?LABC' F@' ' BHCA' ?' M CCMG' F MM ' >DA@' JFGHOG' CFGE' @ FC' G? ME' GG' JF?C' J? ' NAHG' H' ?MM' CFG' KM?H ' FAJLG C' ? B ' F@ GM>' ?J' HACF H ' >AD' F ' FC' J? ' PGDE' L?N ' ?P H ' CF?C' FG' ?J' V?HN' EGC' J CF' @BOF' ?NA ' FAJ' CFG' GHG@G ' KA MGN' F ' O?@K' LG>ADG' F ' GEG ' G' ?J' ?M A' ?' DG?C' CDAAK' A>' FAD G@GH ' JFA@' .DBCB ' GHC' CA' ?N' F@' ' ?HN' CFAB FC' CF?C' CFGE' JGDG' F ' GHG@G ' CF?C' >AMMAJGN' F@' ' LBC' EGC' FG' GHC' #C H B ' AHG' A>' CFG@' CF?C' J? ' J CF' F@' CA' A' ?HN' (HAJ' JF?C' CFGE' JGDG' .DBCB @ FAD G@GH' ?J' F@' OA@H ' ?>?D' A>>' JFA@' JFGH' CFGE' (HGJ' CF?C' FG' J? ' AHG' A>' ? B @ OF G>G C' >D GHN ' CFGE' FABCGN' ABC' >AD' SAE ' ?HN' CFGE' CF?C' JGDG' >?@ M?DME' ?OQB?HCGN' J CF' F@' M FCGN' >DA@' CFG D' FAD G ' ?HN' JGHC' ?HN' G@LD?OGN' F@' ' #FG' DG C' OA@K? GN' F@' H' DABHN' ?LABC' AH' FAD GL?O(' J CF' AH ' A>' P OCADE' ?HN' DG?C' DB F H ' A>' CFG D' F?DHG ' A' CF?C' CFGE' @?NG' ?MM' CFG' >GMN' D H ' ? ?H' >AD' SAE' .BC' CF ' @?DDGN' ?MM ' >AD' ? B ' CF H(H ' HNGGN' CF?C' #C H B ' J?' C?(GH' A>' CFG' GHG@G ' FG' CFGH' K?(G' CFG G' JADN ' R %G D H ' CAA' @BOF' CA' M PG ' ' F?PG' M PGN' CA' GG' AHG' A>' @E' LG C' >D GHN ' C?(GH' >AD' @E' ?(G' LG>ADG' @E' >?OG ' >CGD' CF?C' FG' AC' HCA' ?' CGHC' JFGDG' HALANE' J? ' ?HN' CAA(' HN?DB ' J CF' F@' AHG' A>' F ' LAHN@GH' JFA@' LG

??' 7 ' 7

DG GDPGN GPGD >AD BOF ?' K HOF HOG CFG 0BD GN L?CCMG A>' CFG ?D ' CF?H ' JFGDG D? B ' J?' M?H ' CFAB F FG ' HACJ CF C?HN H ' O?KGN >DA@' CF?C APGDCFDAJ ' . BC CFGH 0? C H ' F ' OWA?(' APGD F ' FG?N ' ?HN FAWN H ' ABC F ' L?DG HGO(' BHCA HN?DB ' FG ?PG F@' F ' FG?N CA LG CD O(GH A>C ' A' CFG FG?N J?' >ABHN GPGDGN >DA@' CFG LANE ' LBC ?>CGD CF?C C@G HN?DB ' J?' HGPGD GGH @ADG ' JFGDGBKAH A@G CAA(' AOO? AH CA ?E CF?C FG F?N M?H F ' @? CGD J CFABC F ' 0A@@?HN-@GHC ' . E' ?HN LE' CFGE (HGJ' CFG FAD G@GH CF?C O?@G CAJ?DN ' CFG@' ?HN @ FC GG #C H B ' ODAJHGN J CF ?' ?DM?HN A>' CD B@KF ' JFA' O?@G LG>ADG J CF DG?C KGGN BHCA ? B ' . BC JFGH FG KGDOG PGN LE' CFG OD G ' ?HN CG?D ' A>' F ' >D GHN ' JF OF CAD@GHCGN CFG@ GMPG ' CFG @ >ADCBHG CF?C F?N OF?HOGN CA' F ' O?KC?H ? B ' LE' @ C?(H ' FG NDGJ' ABC F ' JADN ' OBD H ' F@ GM>' ?' CFAB ?HN C@G ' CF?C FG F?N C?DD GN A' MAH ' ?HN MGJ' F@ GM>' KDG GHCME H CFG >GMN ' . DBCB ' H CFG @G?HC@G ' O?@G >ADJ?DN C MM ' ?HN BHNGD CAAN ?M A' CF?C ? B ' F?N LGGH APGDCFDAJH ' LBC FG (HGJ' HACF H ' A>' F ' NG?CF CMM FG O?@G PGDE HG?D CA' F ' O?@K ' A' JFGH FG J?' OA@G CF CFGD' ?>CGD FG F?N M?@GHCGN CFG NG?CF A>' ? B ' O?MMH ' F@' CFG M? C A>' ?MM CFG "A@?H ' LG H ' @KA LMG CF?C "A@G FABMN GPGD LDGGN ? ?H A' HALMG ?HN P?M?HC ?' @?H ? ' FG ' FG O?B GN F ' LANE CA' LG LBD GN ' ?HN GHC C CA' CFG O CE A>' #F? A ' >G?D H ' MG C F ' >BHGD?M ' J CF H F ' O?@K FABMN O?B G DG?C N ADNGD I

') R =' 'L .' '"'$:' '$ ' $2'

,' A' CFGDG JGDG M?H H CFG >GMN ?MM CFG OF G>G C GHCMG@GH ?HN HAL M CE CF?C JGDG H F ' ?D@E ' JFA' P?M?HCME D?H HCA ?HE N?H GD CA' ?PG . DBCB 8 M>G' @AH C CFG@' CFGDG J?' AHG A>' . DBCB 8 >D GHN ' O?MMGN $BO M B ' JFA' GG H ' ?' CDAAK A>' L?DL?DAB ' @GH' @?(H ' HA' DGO(AH H ' A>' ?MM @GH GM G CFGE @GC H CFGD J?E ' LBC A H ' ?MCA GCFGD D FC ? ?H C . DBCB ' FG NGCGD@HGN CA' M?E' CFG@' J CF CFG F?T?DN A>' F ' M>G ' ?HN ' LG H ' MG>C LGF HN ' CAMN CFG@' CF?C FG J?' . DBCB ' ?HN ' LGO?B G CFGE FABMN LGM GPG F@' FG KD?EGN CFG@' CA' LD H ' F@' CA' HCAH B ' >AD FG ?N FG J?' ?>D?N A>' g ?D ' ?HN CF?C FG N N CDB C HCAH B ' LGCCGD' #FG L?DL?DAB ' @GH LG H ' PGDE M?N A>' CF ' AAN F?K ' ?HN CF H(H ' CFG@ GMPG ' F?KKE @GH ' CFGE O?DD GN F@' H CFG H FC ' ?HN GHC A@G LG>ADG BHCA HCAH B ' CA CGMM F@ A>' CFG OA@H ' Ź G' J?' @?DPGMMAB ' M?N A>' C ' ?HN JGHC ABC CA' @GGC CFG@' CF?C LDAB FC F@' CFGD ' ?M A' BHNGD C?HN H ' A>' C ' CF?C CFGE F?N LDAB FC . DBCB ' KD AHGD ' CFGE O?@G ABC A>' ?MM K?DC ' A>' CFG O?@K CA' GG F@ ' A@G K CE H ' F ' F?DN >ADCBHG ' ?HN ACFGD ' ?E H ' CF?C C J?' HAC NAHG M (G F@ GM>' A' OAJ?DNME CA' LG C?(GH ?M PG A>' CFG L?DL?DAB ' KGAKMG >AD >G?D A>' NG?CF ' FGH CFGE O?@G HG?D CA GCFGD ' HCAH B ' C?EGN ?JF MG LGCF H (H ' F@ GM>' FAJ' FG FABMN B G . DBCB ' H CFG @G?H C@G $BO M B ' J?' LDAB FC CA' F@ ' JFA' CABCME J CF ?' LAMN OABHCGH?HOG ?N R HCAH B ' ' N?DG ? BDG CFGG CF?C HA' GHG@E F?CF C?(GH HAD F?MM C?(G &?DOB ' . DBCB ' ?M PG ?HN ' LG GGOF +AN (GGK F@' >DA@' CF?C >ADCBHG ' >AD JFGDG AGPGD FG LG' >ABHN ' ?M PG AD NG?N ' FG J MM LG' >ABHN M (G F@ GM>' HN' HAJ' >AD @E GM> R ' ?@' OA@G BHCA' CFGG ' F?P H ' NGOG PGN CFG G @GH A>' ?D@ ' FGDG ' LG?D H ' CFG@' NAJH CF?C ' J?' . DBCB ' ?HN NA' HAC DG>B G CA' B>>GD ?HE CAD@GHC CFAB J MC KBC @G CA' $BO M B 8 JADN ' @?NG CFG@' ?MM ?@?TGN CF?C FG?DN F@' HCAH B ' AH CFG ACFGD GNG ' MAA(H ' BKAH ?MM CFG@' CF?C F?N LDAB FC F@' ?N BHCA' CFG@' & E' OA@K?H AH ' ' CF H (' EG ?DG ADDE EAB F?PG >?MGN A>' EABD KBDKA G ' ?HN CF?C EAB CF H (' CF ' @?H F?CF NAHG EAB DG?C JDAH ' LBC ' NA' ? BDG EAB ' EAB F?PG C?(GH ?' LGCCGD LAACE CF?H CF?C EAB >AMMAJGN4 >AD H CG?N A>' ?H GHG@E ' EAB F?PG LDAB FC @G ?' >D GHN ' ?HN ' >AD @E' K?DC ' >' EAB F?N LDAB FC @G . DBCB ' ?M PG ' CDBME ' O?HHAC CGMM JF?C ' FABMN F?PG NAHG CA' F@ ' >AD ' F?N D?CFGD F?PG BOF @GH @E' >D GHN ' ?' CF ' @?H FGDG ' CF?H GHG@G ' #FGH FG G@LD?OGN $BO M B ' ?HN ?C CF?C C@G NGM PGDGN F@' CA' AHG A>' F ' >D GHN ' H OB CANE ' ?HN $BO M B ' GPGD ?>CGD GDPGN F@' >?CF>BMME ' GPGH CA' F ' NG?CF I

U ') R =' ! .' ' ' ' 'N

,' AJ ' . DBCB ' F?P H ' K? GN ?' MCCMG D PGD ' J?MMGN H' AH GPGDE NG' J CF F F DAO(' ?HN F?NAJGN J CF DG?C CDGG ' LG@ ' CFGH N?D(H FC ' FG JGHC HA' >BDCFGD ' LBC C?EGN ?C CFG >AAC A>' ?' DAO(' J CF OGDC?H A>' F ' O?KC?H ' ?HN' >D GHN ' CF?C >AMMAJGN F@' ' ?HN MAA(H ' BK CA' CFG >D@?@GHC CF?C J?' >BMM A>' C?D ' F H ' FG DGFG?D GN CJA' PGD G ' A>' CFG JF OF)AMB@H B ' JDACG CFG AHG ' CA' CF ' G>>GOC R

<$GC' HAC' CFG' J FC' >DA@' JFA@' CF ' @ OF G>' JGHC' V '0APG ' G O?KG' J CFABC' NBG' KBH F@GHC'8R

?HN ?CF' CF?C' FG' F?N' >AD ACCGH' CFG' ACFGD' CF H?' MCCMG' JF MG' ?>CGD' H?@H ' F ' >D GHN ' CF?C' FG F?N GGH M?H' H' L?CCMG' LG>ADG' F ' GEG ' FG >GCOFGN ?' DG?CGD F' CF?H' LG>ADG' KGO?MME' JFGH' FG O?@G' CA' H?@G' ?L?' ?HN M?P B ' A>' CFG' JF OF' CFG' AHG' J?' F ' M GBCGH?HC' ?HN' CFG' ACFGD' O?KC?H' A>' CFG' K AHGGD' A>' F ' O?@K' H' CFG' @G?H' C@G' AHG' A>' CFG' OA@K?HE' LG H ' ?CF D C' ?HN' GG H ' . DBCB ' ?CF C ?M A' FG' D?H' CA' CFG' D PGD' >AD' J?CGD' ?HN' LDAB FC C' H' F ' ?MMGC' C' CFG' GM> ?@G' C@G' CFGE' FG?DN ?' HA G' AH' CFG' ACFGD' NG' A>' CFG' D PGD' FGDGBKAH')AMB@H B ' CAA(' %?DN?HB ' . DBCB 8 GDP?HC' J CF' F@' CA' GG JF?C C' J? ' ?HN' DGCBDH H ' CD?' FC ? ?H' ? (GN >' CFGDG' JGDG' ?HE' J?CGD' MG>C' . DBCB ' @M H ' GHCME' CAMN' CFG@' ?MM' J?' NDBH(' LBC CM GE' F?MM' LD H ' EAB' A@G @ADG' #FGDGBKAH' FG' GHC' F@' ? ?H' CF?C JGHC' >AD' J?CGD' LG>ADG' JFA' J? ' H' DG?C' N?H GD' A>' LG H ' C?(GH' LE' CFG GHG@G ' ?HN' F?DNME' G O?KGN' LG H ' ADG' FBDC' BDCFGD@ADG' . DBCB ' CFAB FC' CF?C' CFGDG' J?' HA' DG?C' HB@LGD' A>' @GH' M?H' H' L?CCMG' ?HN' CA' (HAJ' CFG' CDBCF' A>' C' CFGDG' J?' AHG' O?MMGN' C?C M B ' CF?C' KDA@ GN' CA' A' CFDAB F' F ' GHG@G ' V>AD' ACFGDJ G' C' J?' @KA LMG' CA' A' GG CFG D' O?@K ' ?HN' >DA@' CFGHOG' >' ?MM' JGDG' JGMM' CF?C' FG' FABMN M>C' BK ?' CADOFM FC' H' CFG' ?D' ?HN' CFGH' DGCBDH ? ?H' J CF' KGGN' CA' F@' #FG' CADOFM FC' J?' M>C' BK ?' FG' F?N' KDA@ GN' >AD' C?C M B ' JGHC' CF CFGD' AJ ' . DBCB ' GG H ' C?C M B ' C?DDE' MAH ' ?>CGD' CF?C' ?HN' CF?C' FG O?@G' HAC' ? ?H' FG' ?N' >' C?C M B ' LG' ?M PG' FG' JMM' OA@G' ? ?H' LBC F ' GP M >ADCBHG' J?' BOF' CF?C' ?' FG' O?@G' L?O(' FG' M FCGN' H' F ' GHG@G 8 F?HN ' ?HN' J?' M?H' AJ' CFG' H FC' LG H '>?D' KGHC' . DBCB ' ?' FG ?C' LAJGN' CAJ?DN ' MCB ' AHG' A>' F ' @GH' ?HN' CAMN' F@' A@G-JF?C' H' F ' G?D' CFG' ACFGD' ?H JGDGN' F@' HAC' LBC' >GMM ?' JGGK H ' #FGDGBKAH' FG' KDAPGN' %?DN?HB ' ?HN' ?N' A@GJF?C' ?M A' CA' F@' C' MGH CF' FG' O?@G' CA')AMB@H B ' F@ GM>' ?HN' KG?(H ' CA' F@' H' +DGG(' KD?EGN' F@' >AD' CFG' CBN G 8 ?(G' JF OF' LDAB FCUCFG@' ?OQB?HCGN' CA GCFGD' CF?C' FG' JABMN' FGMK' F@' CA' KBC' F ' F?HN' CA' F ' JADN' CA' CFDB C C' H' F@' CA' (MM F@')AMB@H B ' NGH GN' F ' DGQBG C' ?HN' A' N N' @?HE' ACFGD ' ?HN' ?@AH C CFG' DG C' AHG' A>' CFG@' ?N CFGDG' J?' HA' C?DDE H ' >AD' CFG@' CFGDG' LBC' CF?C' CFGE' @B C HGGN ' >ME' #FGH' . DBCB ' D H ' BK' G' @B C >ME' HNGGN' ?N' FG' LBC C' @B C LG' J CF' ABD' F?HN ' HAC' J CF' AC D' >GGC' #FGH' C?(H ' GPGDE' @?H' LE' CFG' F?HN' FG' ?N' CFG G' JADN ' BHCA' CFG@' J CF' ?' OFGGD>BM' OABHCGH?HOG' C' DGSA OGCF' @E' FG?DC' CF?C' HAC' AHG' A>' @E' >D GHN ' F?CF' >?MGN' @G' ?C' @E' HGGN' ?HN' ' NA' HAC' OA@KM?H' A>' @E' >ADCBHG' LBC' AHME' >AD' @E' OABHCDE8 ' ?(G' >AD' ?' >AD' F G' ' CF H (' @E GM>' F?KK GD' CF?H' CFGE' CF?C' F?PG' APGD-OA@G' OAH NGD H ' CF?C' ' F?PG' ?' KGDKGCB?M' >?@G' A>' ABD' OABD? G' ?HN' @?HFAAN' CFG' JF OF' ABD' GHG@G ' CFG' OAHQBGDAD ' F?MM' HGPGD' ?CC?H' BHCA' LE' >ADOG' AD' @AHGE ' HG CFGD' O?H' MGC' CFG D' KA CGD CE' CA' ?E' CF?C' CFGE' LG H ' H?B FCE' ?HN' BHSB C @GH' F?PG' M?H' AAN' @GH' CA' B BDK' CED?HH O?M' KAJGD' HAC' KGDC?H H ' CA' CFG@' ?P H ' ?N' A' FG' KD?EGN' GPGDE' @?H' CA' F>C' >AD' CFG@ GMPG ' ?HN' CFGH' FG' JGHC' ?' MCCMG' ? NG' J CF' CJA' AD' CFDGG' AHME' ?@AH ' CFG' JF OF' CD?CA' J?' AHG' J CF' JFA@' FG' O?@G' >D C ?OQB?HCGN' LE' CFG' CBNE' A>' DFGCAD O' G' O?@G' ?' HG?D' CA' F@' ?' FG' OABMN' ?HN' C?(H ' F ' JADN' LE' CFG' FMC' J CF' LACF' F ' F?HN ' ?HN' >?MM H ' NAJH' BKAH' CFG' KA HC' A>' C' D?H' F@ GM>' CFDAB F' CFGD' ?E' CF?C' HAC' FG' LBC' CD?CA' V?C' F ' DGQBG C ' FGMN' CFG' JADN' H' F ' F?HN' ?HN' CBDHGN' F ' FG?N' ? NG' ?HN' CF?C' . DBCB ' >GMM' NAJH' BKAH' C' ?HN' A' D?H' F@ GM>' CFDAB F' ?HN' N GN' KDG GHCME' & G ?M?' CF?C' F?N' LGGH' . DBCB 8 DG?C' >D GHN' LGO?@G' ?>CGDJ?DN ' OC?P B ' ?G ?D8 ' >D GHN' A' FADCME' ?>CGD' ?G ?D' LG H ' ?C AAN' MG BDG' FG' LDAB FC' CD?CA' . DBCB 8 >D GHN' BHCA' F@' ?HN' JGGK H ' ?N R ?G ?D' LGM AMN' FGDG' ' FG' CF?C' N N' CFG' M? C GDP OG' CA' @E' . DBCB ' 9 ?D' JGMOA@GN' F@' ?C CF?C' C@G' H HN' ?>CGDJ?DN ' FG' N N' F@' ? ' >?CF>BM' GDP OG' H' ?MM' F ' ?>>?D ' ? ' ?HE' +DGO?H' GM G' FG' F?N' ?LABC' F@' BHCM' CFG' L?CCMG' A>' OC B@ I

&

) #D? GN G A HCFAH G ?HN MGAK?CD? I J? >D C KD HCGN H CFG >AM A OAMMGOC AH A 423 #FG KM?E HAC N P NGN HCA ?OC ?HN OGHG H CFG AD H?M LBC CFG C? G N DGOC AH M (G CFA G A CFG ACFGD "A@?H KM?E ?DG PGDE >C M$ #FG CG C BKAH CFG JFAMG DG@?D(?LME ?OOBD?CG ?MCFAB F CFG @GCD O?M ?DD?H G@GHC H CH ?>GJ C?HOG ALP AB ME NG>GOC PG #FG KA C PG GDDAD ?DG PGDE >GJ A@G AL OBDG K? ? G KDG GHC CFG@ GMPG LBC JCF AHG AD CJA G OGKC AH CFGE ?DG HAC BOF ? CA DGHNGD OAHSGOCBD?M G@GHN?C AH NG D?LMG

G F?PG ?MDG?NE C?CGN ABD P GJ A CFG OFDAHAMA E A CF CD? GNE H CFG HCDANBOCADE AC OG CA AD AM?HB ?HN 0BM B g ?D

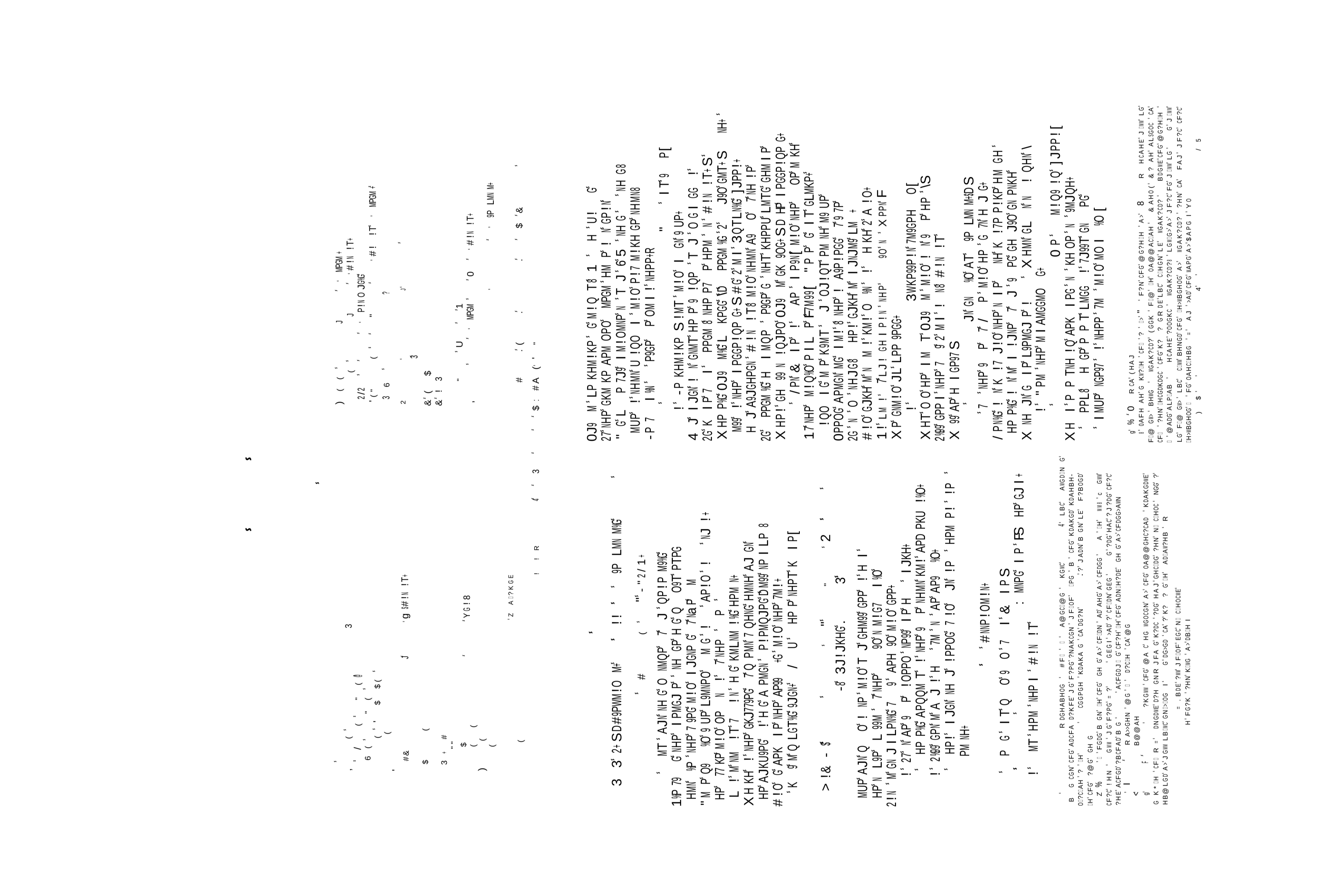
%&& %

#FG $>G A HCAH B H ADCF8 MBC?DOF F? LGGH >AMMAJGN LE F?(KG G JCF PGDE DG@?D(?LMG >NGM CE ?HN CFGDG O?DOGME ?H HO NGHC JF OF LGMAH CA CF KGD AN A HCAHE8 O?DGGD JF OF CFG K GC F? HAC GH D?>CGN BKAH F JAHNGD>BM KGD>AD@?HOG #FG KAGC O?M KAJGD BLSGOC H CFG F CAD O?M @HBCGHG CA ?H ?MM KGDP?N H F?D@AHE AHG A CFG @A C DG@?D(?LMG G>>ADC A F?(KGDG8 GH B

#F?C CF @?E LG KDAKGDME >GMC JG F?PG PGH PGDE OAK AB G CD?OC >DA@ CFG $>G A HCAH B ? MMB CD?C AH A G?OF ?OC

' %#

AD CFG OA CB@G > CFG "A@?H KGD AH? G A CF KM?E JG A OABD G DG>GD ABD DG?NGD CA CFG HAC OG KDG> GN CA CF?C A 0BM B ? ?D LBC >AD CFG OA CB@G A ! EKC NBD H CFG M?CCGD KGD AN A +DGG(NA@ H?C AH JG F?PG HA ?C >?OCADE ?BCFAD CE H(GM@?H NG OD LG A@G > BDG JF OF FG ? GDC JGDG = @?NG LE ! EKC?H OBMKCAD BHNGD CFG NA@ H AH A CFG +DGG(JFA HCDANBOGN HCA ! EKC CFG D AN ? JGMM ? CFG D ?DC JF MG AH CFG ACFGD F?HN CFG +DGG(?NAKCGN ! EKC?H B ? G I . BC >DA@ CFG G @BCM?CGN DG@?H A +DG0A EKC?H JAD(@?H F K JG ?DG BH?LMG CA ? OGDC? H FAJ >?D CFG ! EKC?H GHGD?MME ?NAKCGN CFG OA CB@G A CFG D OAHQBGDAD AD CFG OAHQBGDAD CFG@ GMPG ? B@GN CF?C A CFG P?HQB FGN H CFG JAD(AH ! EKC?H HC QB C G KBLM FGN H CFG =$LD?DE A !HCGD-C? H H HAJMGN G I CFG >GJ >?OC LG?D H BKAH CF BLSGOC F?PG LGGH ? G@LMGN ?HN CFG @HBCG C NGC? M A CFG @ADG ?HO GHC ! EKC?H OA CB@G JMM LG >ABHN H CFG ?N@ D?LMG JAD(A D + M(H AH LBC C JABMN LG JAD G CF?H B GMG >AD B CA GHCGD FGDG HCA ?' MAH NG OD KC AH A CFG OA CB@G A CFG F?D?AF BHMG JG OABMN ? GDC FAJ @BOF > ?HE K?DC A C J? DGC? HGN LE CFG CAMG@ G



[? 3 3 ; - ! !! 6 NHGMTP + / O #9PWMG G PPN #9PWMG I GN M!TNH !Q #9PWMG M9 I GN I GN MAG 9JNP #9PWMG HP P%G NHP G NHGMTP NHMN T J L M GPO G N NHP]JPP! \ 1 NHMN 2 U!P NH G HJGAM!O H KH T J GMT I JGN KHM!QP ÐH G H !G NH QM 9M!OG[4 NHGMTP + 7!! 4 J 99 *2G NH G NHP I M! \S 2G%N T J G NHMN U! NH !QG \ 7!! 2! !MNJ P%G !7 ! NP A U 7 GPK PKT #9 NN9P 2 KM! PMO+ 4 H H I T J HM!O+ ' $ $(! !Q ! NHP AM!]JPN]J KU9T8 !P P! JQH 9P LMN M%G HPM9NH N O !U+ : O G Q P I P Q O 7 NJ!P+ 7!! 2 I MUP ! N AJN 7 PGPP+ - MT NHP! 7 PGPP I P !P+ 7!! 4 J GHM99 AP TPN 7M 7M P NHM! T J M P+ " P I PM!G !79PGH+ -T J GHM99 LM !N HP! T J M P 9O+ X !U9PG 7 A O[4 PW ! N H G L PGK P!KP8 AP MNNP!N P+ " JGH[D 7!! 4 J GHM99 AP I P AP9 !Q NHM! AP9 %O+ 2 HMO MNHP HPMN I T 9 P NH O !U !Q+ 4 MT HPM H I+ : O ! G I P PWKP99P!N 7 NJ!P[/PN I P AP DLM PO N NH PP U !QG !M 7 P! ! M!O O NHP I M998 9PN I P HM P M KH 9O MN 7 7NT N H I " P O 7 ?P T I MT O H I MQP 7 !O I P N I M T I P NH 1KNM JG MPGM M!O K I LM! ! I P NH I T I GN PGG+ 7!! 4 J GHM99 JN9 P NHP 9MOT H I T J GP P+ 1 PWKP99P!N[2 9 P 9 !Q 9 7P APNNP NHM! 7 QG+ 7!! 4 J HM P GPP! M!O L %O M 7M P 7 I P 7 NJ!P HM! NHMN H KH G N MLL MKH+ HP! AP9 UP I T KH 9O P!GHM99 HM P ! ! M I PG - NHPP H I M!T A TG M!O P!KHPG I JGN 2 HM P \ 7!! 27 P P T 7 T J GHPG HMO M I A+ #!O 7P N 9P ÐP P T GH M I 99 !+ 1JN 7 9[2 7 Q P NHPP 7 M NKH+ 4 4 J NH !U ! !P AJN T J GHPPNG M P L T ! T J GHPG+ MT K I P NP99 2 MG HP G+ 4 XP%99 U! M99 J 7 NJ!PG+ ! !P M!O I GN 7 J 7 NJ!PG N ! QHN GHM99 AP SO J!U N APO+ - HP P%G M LM9 I L PGMQPG KHMGN NT 7 ! NH !Q P9GP+ 3 P! MG NHP %P 7 !Q 9JG L PGMQPNH 7M I !P+ - : T J 9O APO7P99 T J KM!! N G NHGMT+ MT 7 M! 9T LM9 I AP ! N M 7 J N7J9 L Q! GN KM N ! 2 KM!! N GK MNKH I !P PM + - NHPP NP99 HP AJN M UT OMT 7 NJ!P+ 7!! 4 J 7 NJ!PG M P M9 UP+ - JN H AJN H \Q P I P LM N KJ9M G+ 7!! 2 HM P GM O+ - # I 2 ! N M! !KH 7 7 NJ!P APNNP NHM! GHP \ XP99 7 T J P P AJN M! !KH 7 7 NJ!P APNNP NHM! 2 HP P J9O T J KH GP N \ - N ! I T HJGAM!O%G ! GP+ 1J GP NH JQHNG HPM P!G I P!O[#9PWMG S K I P H G 7 NJ!P H G 7 NJ!P 8S1 9PN H I I M T M I M! NHMN KM!! N Q G PPN 2G G 2 APGPPKH NHPP # !O 9PN HP O P N M!O Q P H I M GP[M!O 9PN GP 7 99 GP N 99 NHP GN 7M99 7 99 H I 9MJQH !Q N H G Q M P 7 7NT_ 7 9O M KJKU 9O[: O 2G G HPM I P NH G L MTP NH JQH NH J OP! T I P M I MNNP 7 I P P QHN8 Q O 2G G 2 APGPPKH NHPP(- # I P! 5PM Q OOPGG HPM NHMN L MTP 7 NHP LP L9P{ 7 MG N G M HPM N A PMU !Q N GPP M HM!OG I P I M! 9 GP PO G N G M OPMO9T G N APH 9O M 7 J9 U!M P J!KJKU 9OPO HP P7 P OPM 2G G UPPL OPK J I M!O 7 NJ!P H I MKK O !Q9T($ # I P!+ 4 / ! [7 N 9MT ! NHP HM!OG N I MUP I P M KJKU 9O NHPT J9O I MUP NHP I GP9 PG H PG AJN NHPT%O O %N+ ! " JGH[HP P K I PG # !N !T+ N HP8 NHP]JPP!+ /31-# &#+ ! M T J I T 9 O \ ! 9MOT+ ! X MG HP ! N HP P \ I MOM I + D ! " P MG O GL G%O N I NH8 AJN !NHP GJOOP! #& I M! NH JQHN HMNH GN JKU H I+S3! AM AJG S ! MOM I + ! PPU H I M!O A !Q H I H NHP + XHP P%G #9PWMG \ 4 "P P F MN T J GP KP+S T 9 O MLL MKHPG+ 2C B2 PGGP!QP "#NNP!OM!NG+ ! XP 99 ! N9 U JL !H I : NH JG+ = 4 & " $ $ 6 NHGMTP #NNP!OM!NG+ E --OJ9 M NHT 7P 7 GN KM I P !N NHP 7 P9O+% U #QM !GN I T A NHP /JK JG \ E --# T JN G !NHMN M HMO P!O M!O NHP N I P%G GNMNP MOP 7 P!OG 7NHP I E !N !Q NHP 7 KP %QM !GN GPGM 8 XH GP APNNP GGJP !NHP M 7 I 2NM9T L !NHP 7 GN P!K J!NP O M P NHP I + XP99 HMN X GN\ E --HP !MNJ P 7AMO !P G !7PKNG NHP NP99P + XHP! N K !KP !G NHP 7 9 K M O+S1! H !QG NHMN M P LMGN M P O !P NH I P+S% G NHJG XH NP99G I P N JP NH JQH !H G NM9P 9 P OPMNH 2 HPM H I MG HP 79MNNP %O+ E -- /MA P!JG @ H G G GN 77 !P G HMNH NH H G -M NH M! 7 KP+ 3WNP!OPO Ð#G M 7 I 3JLH MNPG 8 " G K !]JP !Q AM!!P GH U 7 I T M /TO M M!O N 2 ! M8 XH 9GN S

! N ! T NH J J9OG GMT D S

E -- 1 I T 9 O [

LPMU N I P H I P I ! KP ! NHP QP ! P M9 N ! Q J P8

M I P 9P LMN M MG GHP%G KM99%O ! & I P8

&M 9 NH J ! OJ9 M%G LH MGP8 M ! O NMJ ! I T 7MJ9NG

X NH GJKH 7J99 9 KP ! KP MG A NH N JNH M ! O I M9 KP

" M P L P N JNNP + 1 NHP ! P A ! Q 7 NH PPOG

X HP ! J] J KU ! OG 9 P GN 998 M ! O J 99G N 9O JG+

2G MG J PM ! Q+D OM P NHPP P99 M H 9P+

E -- # N T J ! A9P L9PMGJ P+ 9: 4

O I KT ! H NHP ! P G LPMU NHP P+

HP I M ! 7 I KT ! + S 2G NHP P GJKH M ! ! P \

% " P GNMTG JL ! T J 99+

/ PN H I MLLPM + S

HPGP GN ! Q 3QTLN M ! 7PNNP G 2 I JGN A PMU

! PGGP ! QP +

1 9 GP I TGP97 ! O NMQP+ S X HMN M P T J \

% E -- OJ9 M NHT 7P G OPMO+

X HP P O PO GHP \

% E -- 2 ! + KT !

" P 9P ! QNH 7 G KU ! PGG NH HMN P9GP I P GP JG

2 I L NPNH NHPP N U ! NH G APM G+ 9 - 0 APM I P+ S

9 4 PGGP ! QP +

HP P%G M Q PMN GL N Q ! P [HJG O O 2 OPG P N

X HMN J K ! NP I LNG O 7NP ! HJ 9 7 I JG

XP GH N J G MQM ! NHP L PGP ! N L9PMGJ P+

T P 9JN ! 9 P ! Q O PG APK I P

HP LL G NP 7 NGP978 FGHP%G Q O AP ! Q Q ! P8

HP HM ! O K J9O L9JKU HP AMKU NHMN GH %O HP ! +

2 I JGN 7 I NH G P ! KHM ! N ! Q] JPP ! A PMU 778

P ! NH JGM ! O HM I G I P NHM ! NHP 99G 2 U !

T O9P ! PGG O NH HMNKH+ S " ! 2 3 ! AM AJG [

! 1 G T J HMO NHP ! 9P7N J ! GPP ! M ! OP 7J9 L PKP

$ $ (

! X HMN%G T J L9PMGJ P G \

2 I JGN NH HMGNP 7 I HP ! KP+

! X HT NHP ! P U 99 M99 J I P ! X P GPP H I NM9 M ! J ! U ! O ! PGG G N NHP I 8 7 NHPT GJ77P J OPLM NJ P OPMNH%G NHP O+

2 I JGN AP Q ! P+

! ! OP M K I LP99 ! Q KKMG ! 9PN I P ! O P 2N P P L NT N KMGN NHP I M MT 7 ! NH ! Q8 NH JQH APN PP ! NHP I M ! O M Q PMN KMJGP NHPT GH J9O AP PGNPP I PO ! NH ! Q+ 9P LMN M KMNKH ! Q AJN NHP 9PMGN ! GP 7 NH G O PG ! GNM ! N9T 8 2 HM P GPP ! HP O P N P ! NT N I PG JL ! 7M L P I I P ! N 2 O NH ! U NHP P G I PNN9P ! OPMNH H KH K I I NG G I P 9 ! Q MKN JL ! HP GHP HMNH GJKH M KP9P NT ! OT ! Q+

HP G KJ ! ! ! Q LMGN I M ! %G NH JQHN+

! #9MKU G ! 8 HP LMGG ! G M P I MOP 7 ! NH ! Q AJN NHP 7 ! PGN LM N 7 LJ P 9 P X P KM ! ! N KM99 HP ! OG M ! O MNP G QHG M ! O NPM G8 NHPT M P Q PMNP GN I G M ! O NP I LPGNG NHM ! M9 I M ! MKG KM ! PL N NH G KM ! ! N AP KJ ! ! ! Q ! HP 8 7 N AP GHP I MUPG M GH P 7 M ! MG P99 MG ? P+

%X J9O 2 HMO ! P P GPP ! HP [

! 1 G T J HMO NHP ! 9P7N J ! GPP ! M ! OP 7J9 L PKP

7 U8 H KH ! N N HM P APP ! A9PGGPO NHM9 J9O HM P O GK PO NPO T J N M P9+

OJ9 M G OPMO+

!

0 OJ9 M G OPMO+

! OJ9 M \

5 PMO+

! X HT G Q P NHP Q OG M NHM ! U7J9 GMK 7 KP+ X HP ! N L9PMGPNH NHP OP N PG N MUP NHP 7P 7 M I M ! 7 I H I N GH G N I M ! NHP NM 9 G 7 NHP PM NH8 K I 7 N ! Q NHP P ! NHMN HP ! 9O APG M P ! JN NHP P M P I P I _ AP G N I MUP ! P + 27 NHP P P P ! I P I P ! AJN OJ9 M NHP ! HMO T J ! OPPO M KJN M ! O NHP KMGP N AP 9M I P ! NPO8 NH G Q P7 G K ! PO NH K ! G 9MN ! 8 T J 9O G I KU A ! QG 7 NH M ! P LPNN K MN SM ! O ! OPPO NHP NPM G 9 P ! M ! ! ! NHMN GH J9O MNP NH G G +

HP AJG ! PGG GHP HMNH A MKHPO ! NHP GNMNP

M ! ! N P ! OJ P I T MAGP ! KP+

; ! # ! O NHP AJG ! PGG T J HM P A MKHPO HP P KM ! ! N AP NH JN T J8 PGLPK M99T NHMN 7 9P LMN M%G H KH H 99T OPLP ! OG ! T J MA OP+

I P 9 QHN M ! G P G+ / PN J 77 KP G

" M P ! N KP HMN P LJ L GP+ 2 GHM99 A PMU HP KMJGP 7 J PWLPO P ! KP N NHP] JPP ! + # ! O QPN HP 9 P N LM N+D 0 ! N M9 ! P HP OPMNH 7 OJ9 M NH I P J QP ! N N JKHPG+ 5 GN ! Q9T GLPMU N JG 8 AJN NHP 9PNNP G N 17 I M ! T J K ! N ! Q 7 P ! OG ! & I P - PN N ! JG MN H I P PWNJG - I LP JG " MNH Q P ! NHP OM P N MPGM M ! O K I I M ! OG HP P I L P 7 NHP GPM J G9 LLP T LP L9P @XH GP 9 P G ! P P 9 ! U%O N NHP OPGP P $ 99 H G OPGP NG M P LMGN APQ ! N NH - I LAT NHP Q PMN M ! O M99 H G O Q ! N PG+ L ! H G G ! 8 H H QH ! ! ! M I P M ! O L P + " QHP NHM ! A NH ! A9 O M ! O 9 7P GNM ! OG JL O NHP I M ! G 9O P H GP] JM9 NT Q ! Q ! + HP G OPG %NHP 9O I MT OM ! QP JKH G A PPO ! Q XH KH 9 UP NHP K J GP %G HM HMNH TPN AJN 9 7P+ # ! O ! N M GP LP ! N%G L G ! MT J L9PMGJ P GJKH H GP L9MKP G J ! OP JG P] J PG 1J] J KU P I P 7 I HP ! KP+ 2 GHM99 O %N+ 9: 4 &

3 3 " 2+ S - ! !!

" 6

! X HP P G HP \

2 O O ! N GPP H I G ! KP+

! PP HP P HP G H %G NH H I HMN HP O PG S 2 O O ! N GP ! O T J S27 T J 7 ! O H I GMO+ MT 2 M I OM ! K ! Q8 7 ! I NH PL N HMN 2 M I GJOOP ! G KU >J KU M ! O PNJ ! + 9 4 6G MOM I I PNH ! UG 7 T J O O 9 P H I OPM 9T+ 4 J O ! N H 9O NHP I PNH O N P ! 7 KP HP 9 UP 7 I H I +

! X HMN GH J9O 2 O 2 O ! N \

2 ! PMKH NH ! Q Q P H I MT K GG H I ! ! ! NH ! Q+ ! H J NPMKHPGN 9 UP M 7 9 NHP MT N 9 GP H ! + $ P I LN H I ! ! N G N 7M 2 GH 7 APM 8 2 ! N I P P HMNP NHMN H KH P 7NP ! 7PM +

Z & ?WAHG' KDAKA G ' CA' DG?N' "-$ H CG?N' A>' 2 "-#$?HN' CFG' OA@@GHC?CAD ' F?PG' C?(GH' N> GDGHC' NG ' H' CF ' @?CCGD ' . G>ADG' J G' ?NAKC' ?' HGJ' DG?N H ' J G' @B C' LG' ?C >GN' CF?C' CFG' AWN' AHG' ' OADDBKC' FGH ' CFGH ' NA' J G' =' LD H ' >ADCF' JGGN ' W I ' H' ?' FG?PE' ?HN' @A C' G? AH ' J FGH' CFGDG' ?DG' HA' = ' QB (' J H ' I ' CA' @GWWAJ ' CFG' G?DCF ' CA' NDE' BK' CFG' G BLGD?HC' @A CBDG ' CA' >C' C' >AD' CFG' KWAB F ' # FG' KAGC' WA GJ ' CFG' AWN' KDAPGDL' A>' CFG' JADCF' A>' ?' LB FGW' A>' & ?DOF' NB C ' LBC' = ' CFG' J HN ' A>' & ?DOF I ' DAB F' ?HN' BHKWG? ?HC' ? ' CFGE' ?DG ' FG' (HGJ' ?W A' KDANBOGN' CF ' AAN ' # FG' = ' QB (' J HN I ' CFGH ' ?DG' CFG' PA OG ' J F OF' LD H ' B ' CDBG' DGKADC ' CA' KBC' ?H' GHN' CA' ABD' H ?OC AH ' FGH ' CFG G' J HN ' W CWW' J G' LD H ' >ADCF' J GGN ' . BC' CFG' @GC?KFAD' ' O?DD GN' >?DCFGD ' CFG' J HN ' F?PG' DGHNGDGN' CFG' A W' >C' >AD' CFG' KWAB F ' LBC' CFG' (HAJWGN G' A>' ABD' AJH' >?BWC R WW R ' ? ' CFG' KWAB F H ' C GW>R CFG' = ' G?D H I

= ! 2' ' 2-'?' A' CFG' >AW A' & D ' % EOG' DG?N ' !$ ' 2-' W

' ?DLBDCAH' ?E ' = # FG' ?WB AH' ' CA' CFG' BH8 ' N BDH?W' OABD G ' J F OF ' D H ' H' CFG' G? C ' ?HN' LE' DGPAIBC AH' WA J GD H ' AD' GCC H ' H' CFG' J G C ' LGOA@G ' CFG' AKKA- CG' A>' C GW>I' . BC ' C?WO H ' 1! & ! ' @KWE' ? ' ?' OF?H G' A>' O DOB@ C?HOG ' CFG' K? ? G' @?E' @G?H' V?HN' CF ' ' CFG' HCGDKDGC?C AH ' A>' CGGPGH ' CF?C' CFG' KWG? BDG' A>' CA N?E' LGOA@G ' BL GQBGHCWE' ?' K?H R CFG' AKKA CG' A>' C G ! ' & D ' AWW GD8 ' & ' ADDGOCAD' ?WCGD ' 1! & ! ' !2 3' CA' , ! ' -!& 3$ LBC' J G' FAWN' CA' CFG' AD H ?W

U' A@G' A>' CFG' OA@@GHC?CAD ' J ABWN' DG?N' = ' 1 ' CA' K?DC I ' # A' = ' GC' FGD' !1 'Y FGDG' @?E' LG' CA' KDGP?W' BKAH' FGD' WAPG' CF?C' J G' @?E' K?DC ' AKG' J ? ' CFG' >D C' CA' DG?N' 1

JNf HP Pf K I PG' # !N ! T+
! ' 2' M I ' G KUf M !O' GJ9QP ! +
' 2' M I ' G T' N ' Q Pf A PMNH !Q' N ' I T' LJ L GP+ S
! " P9L ' I Pf M MT' OPM' HM I M ! ' 2' GHM99' 7M998
2Nf KM ! ! Nf APf NHJG' 9 !Q' NHPf G OPG' 7 ! MNJ Pf
X 99' ! Nf GJGNM ! ' N+
' ' I T' OPM PGNf]JPP ! S
JNf 9PN' Nf AP+S2' M I '] J KU9T' 99' M ! O' P99+
' # ! N ! T' 9 PG+F T' L PK JG']JPP ! ' 7 APM 8
! O' Q P' N JPf P OP ! KPf N ' H G' 9 P ' H KHf GNM ! OG'
! ' H ! J MA9Pf N M9+ X HMNNG' NHPf I MNNP ' \
! ' 2' U ! ' AT' NHMNf GM I Pf PTP ' NHP P%G G I Pf Q O' ! P G+
X HMNf GMTG' NHPf I M PO' I M ! ' \S4 J' I MT' Q 8
%X J9O' GHPf HMO' ! P P ' Q P ! ' T J' 9PM Pf N ' K I P [
/ PNf HP ' ! Nf GMT' %N G' 2' NHMNf UPPL ' T J' HP P
2' HM Pf ! ' L P ' JL ! ' T J8 HP G' T J' M P+
' HPf Q OG' APGN' U ! S
! ' 4 J' 9PM' HPMNf I T' A9 O' ! ' I P+
! ' 4 J KM ! ' O ' APNNP ' TPN8' AJN' NH G' G' I PPN9T+
' ' AT' I T' G O S
! ' # ! O' NM QPN S N 99' HPf I P ! OG8
JNf NH G' G' ! Nf NHPf APGN' / U' L NHPP ' HM I M !
" ' NH G' " P KJ9PM ! ' & I M ! ' O PG' APK I Pf
HPf KM MQPf 7' H G' KHM7P+
2%99' 9PM Pf T J ' 9MOT+
! ' J NP JG' 9 O8' ! Pf O+ GN' G PPNf]JPP ! S
' T J' M ! O' 2' I JGN' LM N SAJN' NHMN%G ! N N
' T J' M ! O' 2' HM P' 9 %O SAJN' NHP P%G ! Nf N8
HMNf T J' U ! ' P99' I PNH ! Q' Nf G' 2' J9O D
1 ' I T' A9 I' G' Mf P T' # ! N ! T
! O' 2' M I ' M99' 7 Q NNP ! +
JNf NHMNf T J ' TM9NT
/ 9 9OG' O9P ! PGG' T J ' GJAEPKN' 2' GH J9O' NMUP' T J'
O ' O9P ! PGG' NGP97+
! ' % G' G PMN ! Q' 9MA J
' APM ' GJKHf O9P ! PGG' G ' ! PM ' NHP' HPM Nf
#G' 9P LMN Mf NH Gf JN' G ' 7 Q P' I P8
! KPf I T' APK I ! QG' U 99' I P ' HP ! ' NHPT' O ' ! Nf
3TP' P9' N ' T J' 4 J ' H ! J ' KM99G' T J' HP ! KP8
HP P7 P' AP' OPM7' N ' I T' J ! L N PO' 7 99T+
! O' M99' NHP' Q OG' Q ' NHf T J[L ! ' T J ' G O' $
Nf 9MJ P9' F KN T' M ! O' G I NHf GJKKPGG'
P' GN P %O' AP7 P' T J ' 7PPN[/ PNf J ' Q + I P
' ' P M ' I P ']JPP ! '
1J ' GPLM MN ! ' G ' MA OPG ' M ! O' 79 PG+
HMNf NH J ' PG O ! Q' HP P ' Q %GN' TPN NHf I P+
! O' 2 ' HP ! KP' 79PPN ! Q ' HP P' P I M ! ' NHf NHPP+
MT+ $ + 4 &
3 3' 2 +S& I P+ ' ' MPGM %G !&-
' (' G ' " (' " #NNP ! OM ! NG+
-' 4 J' I MT' GPP ' / PL OJG ' M ! O' HP ! KP7 NHf U ! +
2Nf G' ! Nf MPGM %G ! MNJ M9' KP' N ' HMNP'
1J ' Q PMNf K I LPN N ' F7 I ' #9PWM ! O Mf
H G' G' NHP' ! P G' " P' 7 GHPG ' O ! UG ' M ! O' MGNPG'
HP' 9M I LG' 7 ! QHN' !' P P9' G' ! ' N ' I P' I M ! 9 UP'
HM ! ' 9P LMN M8 ! ' NHP'] JPP ! ' 7-N 9P I T'
P' I M ! 9T' NHM ! ' HP ' HM O9T' QM P' MJO P ! KP+
1 ' JKHGM7%O' N ' NH ! U' HP' HMO' LM N ! P G ' 4 J' GHM99' 7 ! O'
NHP P
¥# ' I M ! ' H ' G' NHP' MAGN MKN' 7' M99' 7MJ9NG'
HMNf M99' I P ! ' 7 99 +
? ' ' 2' I JGN' ! N' NH ! U' NHP P' M P
3 9G' P ! ' N ' OM UP ! ' M99' H G' Q O ! PGG ' +

' 35 ' 2 BH VOHH1'=E PN> □
D ? & BH O7H =E BH 7O27 ; ! CH ; JJHA CHN' Q ;7 ' ; >HAOM ;3 N =E BH
>=H 3N =E B ; @7>H3H77 KH: QB AB' B ; 7 ?HH1' 3HC CHJ' Q B' ; JC ; I ; PH ' I ' =O3 =Q1'
J ; N □ & ' 3 ' B 7 7 M=B17=1I7 HKH1J ; =1' =E BH =3 P I ; M s ! ' P3H ; □S'
! ' ! ' 7 O7HJ' I ' BH 7H17H =E --!

(7 . 2 3H I JH3 7 ; EH □
% (! - 2 J 7=3JH37 ' A=KK= =I7 ! ' >3=?; ?NN JH3 CHJ' E3=K' BH 7 ; KH 7=O3H ! ; 7
& ! B 7 >; 77 ; PH Q ; 7 O7O ; MN >= I HJ' Q B ; ' A=I=1' ; E H3 R ' Q HME S ' ; ! IJ ; 7=' >= I HJ '
' 7 I H3>3H HJ' ?N' ; >H M1' R' OAB' 7' I = I N7 M=CH ; BIOA O ; I P ' ; I J' 7O?JHA ' =
7OJJH1' O317 ; M @H ' K N ' BH ; M BS' H ' E=M=Q BH >O1A O ; =I ' =E BH =3 P I ; M ' QB AB'
7 K=3H A=I7=I ; ' 1 Q B BH 3 ; > J ' ; ' J A ; >3 A =O7 JHKH ; I =O3 =E M H=>; 3 ; : 2 ' ; K'
UO A@N' M' ; ' J ' , K' QHM ; P ; ' . 7=' B ; ' I = IN ' I=CH7.

X NH I GN OP9 K JG L G ! S H !U !' I P
HMN M I' NH -HKPAJG% M I JG L !KHPG A9MKU
! O' !U9PO' OPPL' !' N I P MO 7 !NPO' MPGM '
X HP !' NH J' MGN HP P' MA P' NHP' Q J!O' 2' MG'
#' I GP9 7 'M' I !M KH' M!O' Q PMN - I LPT'
X J9O' GNM!O' M!O' I MUP' H G PTPG' Q ' !' I T' A 8
HP P' J9O' HP' M!KH 'H G MGLPKN' M!O' O P'
X NH' 9 U !Q' !' H G' 9 7P+

' 6 '

'4 ' P P Q!' 7' 3QTLN' HM 9[
'!' " ' I JKH' J!9 UP' M N' NH J' M U' # !N !T[
4PN' K I !Q' 7 I' H I' NHMN' Q PMN' I PO K !P' HMNH'
X NH' H G' N !KN' Q 9OPO' NHPP+ S
" 'Q PG' N' NH' I T' A M P' M U' # !N !T' \
'4 ' /MGN' NH !Q' HP' O O' OPM ']JPP!+
" P' U GG%O SNHP' 9MGN' 7' I M!T' O JA9PO' U GGPG S
H G' P!N' LPM 9 S " G' GLPPKH' GN KUG' !' I T' HPM N+
'!' !P' PM ' I JGN' L9JKU' N' NHP!KP+
'4 ' : O' 7 P!O']J NH' HP+
MT' 6' HP' 7 I' & I M!' N ' Q PMN' 3QTLN' GP!OG'
H G' N PMGJ P' 7' M!' TGNP 8 MN' H GP' 7 N+
' I P!O' NHP' LPNNT' L PGP!N' 2' 99' L PKP
" P ' LJ9P!N' NH !P' NH' U !QO I G' ' #99' NHP' PMGN R
MT' NH J' 6' GHM99' KM99' HP ' I GN PGG+R ' HP' ! OOPO+
! O' G AP 9T' O O' I J!N' M!' M I QMJ!N' DGNPPO+
X H ' !P QH%O' G ' H QH' NHMN' HMN' 2' J9O' HM P' GL UP'
X MG' APMGN9T' OJ I A%O' AT' H I+
D '!' X HMN' MG' HP' GMO' ' I P NT' \
4 ' / UP' N ' NHP' N I P' % NHP' TPM ' APN PP!' NHP' PW_
N P I PG
17' H ND' M!O' K 9O' HP' MG' ! 'GMO' ! ' I P T+
!' 1' P99 O OPO' O GL G N !'[S NP' H I+
NP' H I ' Q O' HM I M!' %N G' NHP' I M!8 AJN' ! NP'
H I
" P' MG' ! N' GMO8 7 'HP' J9O' GH !P' !' NH GP'
HMN' I MUP' NHP ' 9 9K+G AT' H G' ' HP' MG' ! N' I P T8
X H KH' GPP I %O' N ' NP99' NHP I' H G' P I P I A M!KP' 9MT'
2!' 3QTLN' NH' H G' E T' ' AJN' APN PP!' A NH'
'HPM P!9T' I !Q9P[S PPGN' NH J' GMO' ' I P T+
HP' 9P!KP' 7' P NHP 'NHPP' APK I PG8
'O PG' N' ! ' I M!' P9GP+ S PNN%GN' NH J' I T' L GNG' \
4 ' #T' -0- ' + ; % , +1' %7%2- ' %((%, <%2(
X HT' O 'T J' GP!O' G ' NH KU' \
'!' X H %G' A !' NHMN' OMT
X HP!' 2' 7 QPN' N ' GP!O' N ' # !N !T
HM99' O P' M' APQQM + S2!U' M!O' LMLP ' HM I M!+ S'
X P9K I P' I T' Q O' #9PWMG+ S5 O' 2' HM I M!
3 P '9 P' MPGM' G '\
' 1' NHMN' A M P' MPGMN[
'!' P' KH U%O' NH' GJKH' M! NHP 'P I LHMG G' [
MT' NHP' A M P' # !N !T+
' HP' M9 M!N' MPGM [
!' T' 2G G' 2' 99' Q P' NHPP' A9 OT' NPPNH+
27' NH J' NH' MPGM' LM MQ !' MQM !'
T' I M!' 7' I P![
' T' T J' I GN' Q MK JG' LM O !
'G !Q' AJN' M7NP 'T J+
'!' T' GM9MO' OMTG' [
X HP!' 2' MG' Q PP!' !' EJOQ I P!N S7 9O' !' A9 O+
'GMT' MG' 2' GM O' NHP!' S JN' K I P' M MT'
: PN' I P' !U' M!O' L M L P H P' GHM99' HM P' P P T' OMT'
#' GP P M9' Q PPN !Q' ' 2%99' J!LP L9P' 3QTLN+' = 4 &

' 2+

'

3 3' 2+ S PGG !M+' ' !! ' ' - I LPT%G !&-

' * ! ' % ' "' %

! ' 27' NHP' Q PMN' Q OG' AP' EJGN ' NHPT' GHM99' MGG GN'
HP' OPPOG' 7' EJGNPGN' I P!+
E ' ! ' NHT' - I LPT
HMN' HMN' NHPT' O ' OP9MT' NHPT' ! N' OP!T+
! ' X H 9PG' P' M P' GJ N G' N ' NHP ' NH !P ' OPKMTG'
HP' NH !Q' P' GJP' 7 +
E ' X P ' Q! M!N' 7' J GP9 PG +
PQ' 7NP!' J ' !' HM I G' H KH' NHP' GP' L P G'
5P!T' JG' 7 ' J ' Q O' 8 G ' 7 !O' P' L 7 N'
T' 9 G !Q' 7' J ' L MTP G+
! ' 2' GHM99' O ' P99
HP' LP L9P' 9 P' I P ' M!O' NHP' GPM' G' I !P8
T' L P %G' M' K PGKP!N F' M!O' I T' MJQJ !Q' H LP'
MTG' N' 99' K I P' N ' NHP' 7J99+' M U' # !N !T'
2!' 3QTLN' G NG' MN' O ! !P ' M!O' 99' I MUP'
' M G' NH JN' O G' ' MPGM ' QPNG' I !PT' HP P'
" P' 9 GPG' HPM NG' /PL OJG' 79MNNP G' A NH
17' A NH' G' 79MNNP %O 8 AJN' HP' !P NHP ' 9 PG+
'P NHP ' KM PG' 7 ' H I+
E ' MPGM ' M!O' /PL OJG
P' !' NHP' 7 P9O8 M' I QHNT' GN P!QNH' NHPT' KM T+
! ' X HP P' HM P' T J' NH G' \ %N G' 7M9GP+
E ' O I' 9 JG' G +
! ' " P' O PM I G' 8 2' U! ' NHPT' M P' !' & I P' N QPNHP +'
/ U !Q' 7 ' # !N !T' JN' M99' NHP' KHM I G' 7' 9 P+
M9N' 9P LMN M' G 7NP!' NHT' M!%O' 9 L' [
/PN' NKHK M7N' E !' NH' APMJNT' 9JGN' NH' A NH[
P' JL' NHP' 9 AP N !P' !' M' 7 P9O' 7' 7PMGNG' 8
PPL' H G' A M !' 7J I !Q8 3L KJ PM!' K UG'
HM LP!' NH' K9 T9PGG' GMJKP' H G' MLLPN NP8
HMN' G9PPL' M!O' 7PPO !Q' I MT' L QJP' H G' H ! J '
3 P!' N 99' M' /PNHP%O' OJ9!PGG+ S " ' ! ' M JG'

'

('

' H G' G' I GN' KP NM !' NHMN' 2' GHM99' OP9 P
M U' # !N !T' G' P P T' H J ' !' & I P'
3WLPKNPO# G !KP' HP' P!N' 7 I' 3QTLN' %N G'
#' GLMKP' 7 '7M NHP 'N M P9+
! ' 2' K J9O' HM P' Q P!' 9PGG' I MNNP
#' APNNP ' PM + S P!MG' 2' O O' ! N' NH !U'
H G' M I JG' GJ 7P NP ' J9O' HM P' O !!%O' H G' HP9 I'
O 'GJKH' M' LPNNT' M ' H G' G 9O P GH L'
2G' N KP' NHP' NHP 'N M !' JN' 9PN' JG' PM '
HP' H QHP ' J ' L ! !' NHMN' J 'GN !Q'
M!' 7 I' NHP' 9ML' 7' 3QTLN%G' O 'L9JKU'
HP' !P%P '9JGN PM PO' # !N !T+
E ' 2' KM!! N' H LPD
I GM ' M!O' # !N !T' GHM99' P99 Q PPN' N QPNHP 8
39 G' 7P' NHMN%G' OPMO' O O' N PGLMGGPG' N ' MPGM 8
" G' A NHP ' M %OF JL !' H I '8 M9NH JQH ' 2' NH !U+
N' I %O' AT' # !N !T+
! ' 2' U! ' ! N ' P!MG
" '9PGGP ' P! I N PG' I MT' Q P' MT' N ' Q PMNP +
X P P%N' ! N' NHMN' P' GNM!O' JL' MQM !GN' NHP I' M99
% P P' L PQ!M!N' NHPT' GH J9O' G]JM P' APN PP!' NHP I GP9 PG8
O 'NHPT' HM P' P!NP NM !PO' KMJGP' P! JQH
'O M 'NHP ' G OG' AJN' H 'NHP' 7PM ' 7' JG
MT' KP I P!N' NHP 'O G !G' M!O' A !O' JL
HP' LPNNT' O 77P P!KP ' P' TPN' ! N' U! +

^ B3 & ' =' M H' =3 P I ;M' =KH' >3=>=7H' =' 3H ; J' 3 #' ?O ' B' '
3 & $' =E' QB AB' QH' B ;CH' I=' = BH3' H] ; K>MH.' A=I CHN7' BH' I= =I' =E' ;' 7 HHJ' E H3AH'
; I J' H33 ?MH' I' ; 3K=O3L' ; I J' BH' H> BH .' BH3HE=3H.' 7' I=' =' =' ?H' M PB MN' 3H>M ; AHJ' ?N'
; I N' = BH3

R' ! ' =' BH' =3 P I ;M' HHCH I7' 3H ; J7'
BH' =3 P I ;M B ;7.' R' Z N' >=QH37' ;3H' A3H7AH I S' BH' O7H' =E' ' I' BH' I H] ' M I H'
' $

7B=Q7' B ; ' - ' 7' ;' 7O?7 ; I CH' BH' A=33HA =I.' QB AB' QH' P CH' I' BH' H] .'
Q ;7' K ; JH' ?N' BH=?; MJ
' !6P ' 7' BH3H' O7HJ' I' BH' 7H I7H' =E' 4, ' B ; OAH3' HK>M=N7' BH' Q=3J' I' B 7'
7H I 7HL' ?O ' BH' I ; AAO3 ; AN' =E' B 7' O7H' Q ; 7' H] HK>M E HJ' I' B ; @7>H3HT7' KH' ?N' O '
' H I B ; K.' QB=' UO= H7' BH' 7>HHAB' =E' BH' ; I I H3' =E' ; KQ=3 B' =' JQ ; 3J' 4 : 2'
R' ' B=>H' ' 7B ; MM' ?H' B ; I PHJ' = K= Q S
R' 8 " ' BH' =3 P I ;M.' ?N' ;' N>=P3 ; >B A ;M' H33=3.' B ; 7' 2 "

P N MG J Q OG 99 HM P N [2N ! 9T GNM ! OG
1J 9 PG JL ! N JGP J GN ! QPGN HM ! OG
I P P ! MG+ 9 4 &

3 3 22+ S& I P+ ! ! ! - ! . / PL OJG+

' $ $ (0 " " (

? ,$: O 3 ! AM AJG %N G M NHT OPPO
! O GHM99 APK I P T J P99 N P ! N PMN T J KMLNM !
G 7N M ! O QP ! N9P GLPPKH+
! 2 GHM99 P ! N PMN H I
M ! G P 9 UP H I GP97 7 GPGM I P H I
/ PN # ! N ! T 9 U P MPGM %G HPMO+
! O GLPMU MG 9 JO MG M G+ T ?JL NP +
X P P 2 NHP PM P 7 # ! N ! JG% APM O
2 J9O ! N GHM PG N OMT[
? , % G ! N M N I P
0 L MNP GN I MKH ! Q+
! 3 P T N I P
P PG 7 NHP I MNNP NHMN G NHP ! A ! ! N+
? , JN G I M99 N Q PMNP I MNNP G I JGN Q P MT+
! N 7 NHP G I M99 K I P 7 GN+
? , 4 J GLPPKH G LMGG !
JN L MT T J GN ! P I AP G JL " P P K I PG
HP ! A9P # ! N ! T+

" (

! # ! O T ! OP MPGM +

X O

27 P K I L GP% P99 HP P N - M NH M
" M U P ! N O JG+
-2 O ! N U! PKMP ! MG 8 MGU # Q LLM+
? , A9P 7 P ! OG
HMN H KH K I A ! %O JG MG I GN Q PMN M ! O 9PN ! N
9PM ! P MKN ! P ! O JG X HMN%G M I GG
MT N AP QP ! N9T HPM O X HP ! P OPAMNP
1J N M9 O 77P P ! KP 9 JO P O K I I N
J NHP ! HPM9 ! Q J ! OG HP ! ! A9P LM N ! P G
@ HP MNHP 7 2 PM ! PGN9T APGPPKH
JKH T J NHP G J PGN L ! NG NH G PPNPGN NP I G
KJ GN ! PGG Q N NHP I MNNP +
% G GL UP! P99
X P P P AP7 P J M I PG M ! O N 7 QHN
2 GH J9O O NHJG+
%- X P9K I P N & I P+
HM ! U T J+
- N+
N G +D
MT NHP ! +
) 9PM ! T J NMUP NH ! QG 99 H KH M P ! N G 8
1 AP ! Q K ! KP ! T J ! N+
- 2 I JGN AP 9MJQH%O MN+
27 7 ! NH ! Q M 9 NN9P 2
H J9O GMT I TGP97 77P ! OPO 8 M ! O NH T J
H P79T %NHP 9O I P 9MJQH%O MN NHMN 2 GH J9O
1 ! KP ! M I P T J OP QMNP9T HP ! N G J ! O T J ! M I P
2N ! N K ! KP ! %O I P+
T AP ! Q ! 3QTLN MPGM
X HMN MG%N N T J \ D
- I P NHM ! I T PG O ! Q HP P MN & I P

QHN AP N T J ! 3QTLN 4PN 7 T J NHP P
5 O L MKN GP ! I T GNMNP T J AP ! Q ! 3QTLN
QHN AP I T]JPGN !+
" ! NP ! O T J L MKN G%O\
% . I MT AP L9PMG%O +* KMNKH MN I ! P ! NP ! N
T HMN O O HP P AP7M99 I P 4 J 7P M ! O A NHP
MOP M G JL ! I P8 M ! O NHP K ! NPGNMN !
X MG NHP I P 7 T J T J P P NHP O 7 M +
4 J O I GNMUP T J AJG ! PGG 8 I T A NHP ! P P
5 O J QP I P ! H G MKN 2 O O !] J P N8
! O HM P I T 9PM ! ! Q 7 I G I P N JP PL NG
HMN O P NHP G OG NH T J 5 O HP ! N MNHP
5 GK PO N I T MJNH NT NH T J G8
! O I MUP NHP M G M9 UP MQM ! GN I T GN I MKH+
" M ! Q M9 UP T J KMJGP \ 17 NH G I T 9PNNP G
P7 P O O GMN G7T T J 27 T J%99 LMNKH M] JM P9+
#G I MNNP H 9P T J HM P N I MUP N NH 6
2N I JGN ! N AP NH NH G+
-4 J L M GP T J GP97 AT 9MT ! Q OP7PKNG 7 EJOQ I P ! N
N I P 8 AJN T J LMNKH%O JL T J PWKJGPG+
N G ! N G 8
2 U! T J K J9O ! N 9MKU 2 M I KP NM ! ! %N+
P T ! PKPGG NT 7 NH G NH JQHN NHMN 2
4 J LM N ! P ! NHP KMJGP %QM ! GN H KH HP 7 JQHN
J9O ! N NH Q MKP7J9 PTPG MNNP ! O NH GP M G
X H KH 7 ! NPO I ! P ! LPMKP # G 7 I T 7P
2 J9O T J HMO HP GL N ! GJKH M ! NHP
HP NH O %NHP 9O G T J G8 H KH NH M G ! M797 P
4 J I MT LMKP PMGT AJN ! N GJKH M 7P+
! %X J9O P HMO M99 GJKH PG NHMN NHP I P ! I QHN
Q N M G NH NHP I P ! [
I JKH J ! KJ AMA9P HP QM A 9G MGGM
MOP JN 7 HP I LMN P ! KP @ H KH ! N M ! NPO
H P O ! PGG 7 L 9 KT N 2 Q P ! Q Q M ! N
5 O T J N I JKH O G] J PN 7 NHMN T J I JGN
JN GMT 2 K J9O ! N 9HP9L N+
-2 NP N T J
X HP ! N ! Q ! # 9PWM ! O M 8 T J
5 O L KUPN JL I T 9PNNP G M ! O NH NMJ ! NG
5 O Q AP MT I GG P JN 7 MJO P ! KP+
" P 7P99 JL ! I P P P MO I NNPO8 NHP !
H PP U ! QG 2 HMO ! P 9T 7PMGNPO M ! O O O M ! N
17 HMN 2 MG %NHP I ! ! Q AJN ! PWN OMT
2 N 9O H I 7 I TGP978 H KH MG MG I JKH
G N HM P MGU%O H I LM O ! / PN NH G 7P99
P ! NH ! Q 7 J GN 7P8 7 P K ! NP ! O
1JN 7 J] JPGN ! LP H I+
-4 J HM P A UP !
HP M N K9P 7 T J MNH8 H KH T J GHM99 ! P P
" M P N ! QJP N KHM QP I P NH+
? , 7N GPGM +
/ PL OJG 9PN H I GLPMU8
HP H ! J G GMK PO H KH HP NM9UG ! ! +
JLL G ! Q NHMN 2 9MKU%O N JN ! I GM 8
HP M N K9P 7 I T MNH S
-9P ! O I P M I G M ! O M O HP ! 2 P] J %O NHP I 8
HP H KH T J A NH OP ! PO+
PQ9PKNPO MNHP 8
! O NHP ! HP ! L G ! %O H J G HMO A J ! O I P JL
O I I ! P ! U! 9POQP # G ! PM 9T MG 2 I MT+
2%99 L9MT NHP LP ! NP ! N N T J8 AJN I ! P H ! PGNT
HM99 ! N I MUP L I T Q PMN ! PGG ! I T L P
X U NH JN N JNH G NHMN OJ9 M
HM P I P JN 7 3QTLN I MOP M G HP P 8
O H KH I TGP97 NHP Q ! M ! N I N P O

, ! - 2 ; P3HH. A=KH =; P3HHKHI

299 BH C; 3 =3OK HJ =I7 ;' I= H =E ; JK 3; =I' 7 BH3H >O . ' ?H IP H]>M; IHJ ?N HHCHI7 B; ' I =IN KH; I7 =3H7HI ' BH IC ; =I' =E 7H7; 3 B; ' BH 7B= MJ ?H 7H; HJ B; ' IC ; =I' K>M HJ 7O>H3 =3 N A' ; P3HH Q B Z ; M=IH B; ' BH3 H; AB JH7 3HJ BH = BH3 =?H 7H; HJ. ' ; IJ B; ' ; H7; 3 >O 7 ; I' HIJ =3H ?; IJN IP =E A=K>M KHI 7 ?N ; @ IP B 7 7H;

B 7 7 BH 3H; J IP =E BH =3 P I ; ML ?O ' ; I' =3J I ; 3N 3H; J IP. E3=K BH KH =E =QH. B; 7 ?HH I 2
R 7 K; H3 QB=MH N=I' B; CH ! ' =K; @H 'Q BS
H J=O? ' M H >3=>3 H N =E JH>; 3 IP E3=K BH H] . ' ; IJ BH KH; I IP ; >>H; 37 =O7
2 E N=OJM , ' UO; 33HM 7=; 7 =7HHK BH I ! K; H3 N=I' B; CH =K; @H '
Q B. N=O KO7 I= '>; AB 'Q B B 7 A=K>M; I 8 ! ' 7 =>>=7HJ !',

' 7M ' MGU' LM O !' MG' AP7 NG' I !P' H ! J '
' GN L' !' GJKH' M' KMGP+
' ? , ' B' $ G' ! A9T' GL UP!+
E $ 27' N' I QHN' L9PMGP' T J' N ' P!7 KP' ! ' 7J NHP '
HP' Q P7G' APN PP!' TP ' N ' 7 QPN' NHP I'] J NP+
X P P' N ' P I P I AP ' NHMN' NHP' L PGP!N' !PPO'
LPMUG' N ' MN !P' T J+
? , ' X NH 9T' GL UP!' ' PKMP!MG+
!' 1 ' 7' T J' A ' !P' M! NHP %G' 9 P' 7 ' NHP' !GNM!N '
T J' I MT' HP!' T J' HPM ' ! ' I P' OG' 7' - I LPT' PNJ !'
N' MQM ! ' T J' GHM99' HM P' N I P' N ' M!Q9P' !' HP!' T J' HM P'
! NH !Q' P9GP' N ' O +
' H J' M N' M' G 9O P ' !9T' 8 GLPMU' ! ' I P+
!' HMN' N JNH' GH J9O' AP' G 9P!N ' 2' HMO' M9 I GN' 7 Q N+
' 4 J' !Q' NH G' L PGP!KP ' NHP P7 P' GLPMU' ! ' I P+
!' : ' N ' NHP!' 8 T J ' K !G OP MNP' GN !P+D
--' 2' O ' ! N' I JKH' O G9 UP' NHP' I MNNP ' AJN'
HP' I M!!P ' 7' H G' GLPPKH' ' 7 ' N' KM!! N' AP'
X P' GHM99' P I M !' !' 7 P!OGH L ' J ' K !O N !G'
' O 77P !Q' !' NHP ' MKNG+' 4PN ' 7' 2' U!P '
X HMN' H L' GH J9O' H 9O' JG' GNM!KH ' 7 I' POQP' N ' POQP'
1%NHP' 9O' 2' J9O' LJ GJP' N+
3 ' : P' I P' 9PM P ' MPGM S
a%-' GLPMU ' #Q LLM+
3 ' H J' HMGN' M' G GNP ' AT' NHP' I NHP %G' G OP F%
#O I %O' 1KNM M' ' Q PMN' M U' # !N !T'
2G' ! ' M' O P +
aI-' MT' ! N' G ' #Q LLM8
27' 9P LMN M' HPM O' T J ' T J ' PL 7'
X P P' P99' OPGP %O' 7' MGH!PGG+D
' 2' M I' ! N' I M PO ' MPGM 8 9PN' I P' HPM '
#Q LLM' 7J NHP ' GLPMU+
3 ' ' H 9O' T J' !' LP LPNJM9' M I NT+
' I MUP' T J' A NHP G ' M!O' N ' U! N' T ' HPM NG'
X NH' M!' J!G9 LL !Q' U! N ' NMUP' # !N !T'
1KNM M' N ' H G' 7P' ' H GP' APMJNT' K9M I G'
' GP' M' HJGAM!O' NHM!' NHP' APGN' 7' I P!' 8
X H GP' NJP ' M!O' H GP' QP!P M9' Q MKPG ' GLPMU'
HMN' H KH' ! !P' P9GP' KM!' JNNP +' T' NH G' I M MQP+
99' 9 NN9P' EPM9 JG PG ' H KH' ! ' GPP I ' Q PMN+
!O' M99' Q PMN' 7PM G ' H KH' ! ' I L N' NHP ' OM!QP G+'
X J9O' NHP!' AP' ! NH !Q ' N JNHG' J9O' AP' NM9PG+
X HP P' ! ' HM97' NM9PG' AP' N JNHG ' HP ' 9 P' N ' A NH'
X J9O ' PMKH' N ' NHP ' M!O' M99' 9 PG' N ' A NH+
5 M ' M7NP ' HP +' - M O !' HMN' 2' HM P' GL UP'
O ' %N G' M' GNJO PO ' ! N' M' L PGP!N' NH JQHN+
T' OJNT' J I !MNPO+
' ' X 99' MPGM ' GLPMU' \
-' N' N 99' HP' HPM G' H ' # !N !T' G' N JKH%O'
X NH' HMN' G' GL UP' M9 PMOT+
' X HMN' L $P ' G' !' # Q LLM
27' 2' J9O' GMT ' 6' # Q LLM ' AP' N' G R
' I MUP' NH G' Q O' \
%-' HP' L P ' 7' MPGM
!O' H G' L P ' J!N ' 1KNM M+
' MT' 2' !P P
' NH G' Q O' LJ L GP ' NHMN' G ' 7M 9T' GH G+
5 PM I ' 7' I LPO I P!N[S / PN' I P' HM P' NHT' HM!O'
OJ NHP ' NH G' MKN' 7' Q MKP8 M!O ' 7 I ' NH G' H J +
HP' HPM N' 7' A NHP G' Q P !' !' J ' 9 PG+
!O' G MT' J ' Q PMN' OPG Q!G[
--' J$ HP P%G' I T' HM!O+
' G GNP ' 2' AP] JPMNH' T J ' H I' ! ' A NHP '
5 O' P P ' 9 P' G ' OPM 9T' ' / PN' HP ' 9 P'
' E !' J ' U !QO I G ' M!O' J ' HPM NG' 8 M!O' !P P '
O9T' 7' J ' 9 PG' MQM !' [
', ? , ' " MLL 9T ' M I P![

' B 7' 7' K=7 ' >3=?;?MN' ; I' ;MO7 = I' =' BH' =MJ' 7;N IP.' 7' 7 MH I ' ;7 ;' 7 = I H.S'
QB AB' 7' ;' E3HUOH I ' A=K>;3 7= I' ; K= I P7 ' =O3' ; I A H I ' Q3 H37.
% .' - -- 2 = I' ; AA=O I ' =E' 3;7B I H77
)' BH' >O I A O; = I' =E' BH' =3 P I ;M P CH7' O7' ;' EOMN' >;O7H' ; ' ! 1 - ' ' BH' =3J \
I ;3N' 3H;J IP' 7 2 R' BH' Q I J7' QH3H' M=CH 7 A@ Q B' BHK S

' 2' O O' ! N' NH !U' N ' O M ' I T' G O' %QM ! GN' - I LPT' 8
O ' HP' HMNH' 9M O' GN M!QP' K J NPG PG ' M!O' Q PMN+
17' 9MNP' JL !' I P' ' 2' I JGN' NHM!U' H I ' !9T+
/ PGN' I T' P I P I A M!KP' GJ77P ' 9G' PL N8
N' HPPG' 7' NHMN ' OP7T' H I +
? , ' I P' KM99G' JL !' J G8
17' JG' I JGN' - I LPT' L PGP!N9T' AP' G JQHN
1 ' P9GP' HP' GPPUG' JN' JG+
' X HP P' 9 PG' HP' \
I-' #A JN' NHP' J!N' GP!J I +
' X HMN' G' H G' GN P!QNH' AT' 9M!O' \
-' : PMN' M!O' !K PMG !Q
JN' AT' GPM' HP' G' M!' MAG 9JNP' I MGNP +
6 ' ' G' NHP' 7M I P+
%X J9O' P' HMO' GL UP' N QPNHP ' [" MGNP' P' 7 ' N
4PN ' P P' P' LJN' J GP9 PG' !' M I G ' OPGLMNKH' P'
HP' AJG !PGG' P' HM P' NM9U%O' 7+
%-' X NH' I GN' Q9MO!PGG8
!O' O ' ! NP' T J' N ' I T' G GNP %G' P +
X H NHP ' GN M QHN' 2%99' 9PMO' T J+
' / PN' JG ' / PL OJG
N' 9MKU' T J ' K I LM!T+
? , ' A9P' # !N !T
N' G KU!PGG' GH J9O' OPNM !' I P+
=> !& - ' 4 ; ; ' D #&' # 1 4' '" " (
E ' X P9K I P' 7 I' 3QTLN ' G +
!' " M97' NHP' HPM N' 7' MPGM ' NHT' PKMP!MG[S I T'
H ! J MA9P' 7 P!O' # Q LLM' S
3 ' : O' 3! AM AJG'
E ' X P' HM P' KMJGP' N ' AP' Q9MO' NHMN' I MNNP G' M P' ' P99'
O QPGNPO+' 4 J' GNMTPO' P99' AT' N' !' 3QTLN+
!' #T ' G 8 P' O O' G9PPL' OMT' JN' 7' K J!NP!M!KP ' M!O'
I MOP' NHP' ! QHN' 9 QHN' NH' O !U !Q+
E ' 3 QHN' 9O' A M G' MGNPO' H 9P' MN' M' A PMU7MGN ' M!O'
AJN' N P9 P' LP G !G' NHP P' ' 2G' NH G' N JP
!' H G' MG' AJN' MG' M' 79T' AT' M!' PMQ9P ' P' HMO' I JKH'
I P' I !GN JG' I MNNP ' 7' 7PMGNG ' H KH' NH 9T' OPGP PO'
! N !Q+
E ' HP%G' M' I GN' N J I LHM!N' 9MOT ' 7' PL N' AP' G] JM P'
N ' HP +
!' X HP!' GHP' 7 GN' I PN' M U' # !N !T F' GHP' LJ GPO' JL'
H G' HPM N ' JL !' NHP' P ' 7' TO!JG+
3 ' HP P' GHP' MLLPM PO' !OPPO8 ' I T' PL NP ' OP GPO'
P99' 7 ' HP +
!' 2' 99' NP99' T J
HP' AM QP' GHP' GMN' !' 9 UP' M' AJ ! GH%O' NH !P
J !N' !' NHP' MNP ' ' NHP' L L' MG' APMNP!' Q 9O' 8
-J L9P' NHP' GM 9G ' M!O' G ' LP 7J I PO' NHMN
HP' !OG' P P' 9 P G KU' NH' NHP I ' NHP' M G' P P' G 9 P 8F
X H KH' N ' NHP' NJ!P' 7' 79JNPG' UPLN' GN UP ' M!O' I MOP
HP' MNP ' H KH' NHPT' APMN ' N ' 7 99 ' 7MGNP
#G' M I JG' 7' NHP ' GN UPG+' O ' HP ' !' LP G !+
2N' APQQM %O' M99' OPGK LN !' ' +GHP' O O' 9 P'
2!' HP ' LM 9 !' @K9 NH' 7' Q 9O ' 7' N GGJP
1%P L KNJ !Q' NHMN' P!JG ' HP P' P' GPP'
HP' 7M!KT' JN U' !MNJ P' G !' PMKH' G OP' HP '
N O' L PNNT' O I L9PO' A TG ' 9 UP' G I 9 !Q' JL OG
X NH' O P G K 9 J %O' 7M!G ' H GP' !O' O O' GPP I '
' Q9 ' NHP' OP9 KMNP' KHPPUG' H KH' NHPT' O O' K 9+
!O' HMN' NHPT' J!O O ' O O+
3 ' ' 1 ' M P' 7 ' # !N AT'
!' " P ' QP!N9P I P!' 9 UP' NHP' P P OPG
' I M!T' I P I M OG ' NP!OPO' HP ' %NHP' PTPG+
!O' I MOP' NHP ' AP!OG' MO ! !QG' -' MN' NHP' HP9 I '
#' GPP I !Q' I P I M O' GNPP G' 8 NHP' G 9UP!' NMKU9P'
P99' NH' NHP' N JKHPG' 7' NH GP' 79 P G 7N' HM!OG
HMN' TM P9T' 7 M I P' NHP' 77 KP8 O I ' NHP' AM QP'
#' GN M!QP' ! G A9P' LP 7J I P' H NG' NHP' GP!GP'
17' NHP' MOEMKP!N' HM 7G+' HP' K NT' KMGN

' ; ?O3 = I' >3=>=7HJ' 9 !' " ! 3 -#' ; I J' BH' A= I 3=CH37N' O>=I' BH' K ; H3'
7' 7=' EOM' B; ' =7QHM' >3 I 7' ' ;7 ;' 7=3 ' =E' 7O>>MHKH I ' ; ' BH' H I J' =E' 3H>M; N' H'
B=MJ' =' BH' " ! 3 -' =E' BH' =3 P I ;M

" P LP L9P JN JL !HP 8 M!O #!N !T
3!NH !%O !NHP I M UPN L9MKP O O G N M9 !P+
X H GN9 !Q N NHP M 8 H KH AJN 7 MKM!KT
" MO Q !P N QMCP !9P LMN MN +
#!O I MOP M QML !!MNJ P+
3 &M P 3QaDLN M![
! L !HP 9M!O !Q #HN !T GP!N N HP +
2! NPO HP N GJLLP GHP PL9 PO+
2N GH J9O AP APNNP HP APKM I P HP QJPGN8
X H KH GHP P!N PMNPO 1J K J NP JG #!N !T
X H I !P%P NHP O 7 6 R I M!HPM O GLPMU+
P !Q AM AP %O NP!N I PG %P Q PG N NHP 7PMGN8
#!O 7 H G O !M T LMTG H G HPM N+
0 HMN H G PTPG PMN !9T+
3 & TM9 P!KH[
HP I MOP Q PMN MPGM 9MT H G G O N APO 8
" P L9 JQH%O HP M!O GHP K LL%O+
! 2 GM HP !KP
" L 7 NT LMKPG NH JQH NHP LJA9 K GN PPN
#!O HM !Q 9 GN HP A PMNH GHP GL UP M!O LM!NPO+
HMN GHP O O I MUP OP7PKN LP 7PKN !+
#!O A PMNH9PGG L P A PMNHP 7 NH+
E # !N !T I JGN 9PM P HP JNNP 9T+
! P P 8 HP 9 ! N8
#QP KM!! N X NHP HP ! KJGN I GNM9P
" P !7 ! NP M PNT 1NHP I P!K9 T
HP MLLPN NPG NHPT 7PPO8 AJN GHP I MUPG HJ!Q T
X HP P I GN GHP GMN G7 PG+ O 9PGN NH !QG
PK I P NHP I GP9 PG !HP 8 NHMN NHP H 9T L PGNG
9PGG HP HP! GHP G QQ GH+
E 27APMJNT GO I I OPGNT KM!GPNN9P
HP HPM N 7#!N !T 1KNM M G
#A9PGGPO 9 NNP T N H I+
3 /PN JG Q +S
: O 3! AM AJG I MUP T J GP97 I T QJPGN+
X H 9GN T J MA OP HP P+
! "J I A9T G 2 NHM!U T J+ = 4 &

3 3 222+S - !! MPGM %G ! -
G # 1K # #(2 #NNP!OM!NG
"" NHGMTP +
HP 9O M! O I T Q PMN 77 KP 99 G I PN I PG
5 OP I P 7 I T J A G I+
#99 H KH N I P
P7 P 7HP Q OG I T U!PP GHM99 A I T L MTP G
NHP I 7 T J+
: O ! QHN G +S T 1KNM M
&PMO ! N I T A9P I GHPG !NHP 9O%G PL N
2 HM P ! N UPLN I T G]JM P8 AJN NHMN N K I P
HM99 M99 AP O !P AT NHP J9P+ : O ! QHN OPM 9MOT+
: O ! QHN G +
%+ : O ! QHN+ = 4 & G "1K # 9#+
G MH[T J O GH T J GP97 !3QTLN\
7!! %X J9O 2 HMO !P P K I P 7 I NHP!KP ! T J
NH NHP [
27 T J KM! T J PMG !\
7!! 2 GPP N ! I T I N ! HM P N ! N ! I T N !QJP
JN TPN H P T J N 3QTLN MQM !+
MT N I P+
X H GP 7 NJ!PG GHM99 GP H QHP MPGM %G I !P{D
7!! MPGM %G+
HP P7 P >#!N !T GNMT ! N AT H G G OP
HT OMP I !@NHMN NHT GL N H KH UPPLG NHPP G
A9P K J MQP JG H QH J! I MNKHMA9P+
X HP P MPGM %G G ! N8 AJN !PM H I NHT M!QP9
PK I PG M OPM MG AP !Q %P L P %O 8 NHP P7 P
MUP GLMKP P! JQH APN PP!T J+

LPMU NH G ! I P+
7!! ! P AJN NHPP8 ! I P AJN HP!N NHPP+
27NH J O GN L9MT NH H I MN M!T QM I P+
H J M N GJ P N 9 GP8 M!O 7NHMN !MNJ M9 9JKU
" P APMNG NHPP %QM !GN NHP OOG 8 NHT 9JGN P NH KUP!G
X HP!HP GH !PG AT 2 GMT MQM ! NHT GL N
2G M99 M7 M O N Q P !NHPP !PM H I 8
JN HP M MT %N G ! A9P+
: PN NHPP Q !P
+ MT N P!N O JG 2 J9O GLPMU NH H I @3 3
= 4 NHGMTP +
" P GHM99 N -M NH M+S P N M N HML+
" P HMNH GL UP!N JP HP P T O KP APT H I 8
#!O ! J GL NG I T APNNP KJ!! !Q 7M !NG
!OP H G KHM!KP 7 P O M 9 NG HP GLPPOG8
" G K KUG O ! !NHP AMNN9P GN 99 7 I !P+
X HP!N G MH N !MJQHN8 M!O H G]JM 9G P P
PMN I !P !H L%O MN OOG 2 99 N 3QTLN
#!O NH JQH 2 I MUP NH G I M MQP 7 I T LPMKP

2%NHP PMGN I T L9PMGJ P 9 PG 8S1 K I P P!N O JG
4 J I JGN N -M NH M 8 T J K I I GG !%G PMOT
0 99 I P M!O PKP P N+ = 4 &

3 3 2 +S - 7
, " . "" ! , , $
? , JA9P T J GP9 PG ! 7J NHP 8 L MT T J HMGNP!
4 J QP!P M9G M7NP +
3 M U #!N !T
X 99 P%P!O JN U GG 1KNM M M!O P%99 7 99 +
? , 99 2 GHM99 GPP T J !T J G 9O P %G O PGG+
X H KH 99 APK I P T J A NH 7M P P99+
E X P GHM99
#G 2 K !KP P NHP E J !PT AP MN NHP J!ND
P7 P T J /PL OJG+
? , 4 J MT G GH NP 8
T LJ L GPG O O M I P I JKH MA JN8
4 J%99 !N OMTG JL ! I P+
E $ 3 Q O GJKKPGG[
? , OM P P99+ = 4 &

3 3 +S#9PWM!O M+ !! "" 1K # 9#+
! : P I P G I P I JG K 8 I JG K I OT 7 O
17 JG NHMN N MOP !9 P+
"" HP I JG K H [
! / PN N M9 !P 8 9PN JG N A 99 M OG8
I P HM I M!+
T M I G G P APGN L9MT NH M O M!+
! #G P99 Mc I M! NH M!PJ!JKH L9MT%O
#G NH M I M! S I P T J%99 L9MT NH I P G \
E #G P99 MG 2 KM! I MOM I +
! #!O HP!Q O 99 G GH %O NH JQH%N K I P N
GH N+
HP MKN I MT L9PMO LM O !+ 2%99 ! !P! S
: P I P I !P M!Q9P S P%99 N NHP P NHP P+
T I JG K L9MT !Q 7M 77 2 99 APN MT
M !T 7 ! !%O D7 GHPG 8 I T AP!OPO H U GHM99 L P KP
HP G9 I T EM G8 M!O MG 2 O M NHP I JL
2%99 NH !U NHP I P P T !P M!#!N !T
#!O GMT #H MH [T J% P KMJQHN+

' ' ?

;

' % MG' I P T' HP!
4 J' MQP %O' !' T J ' M ! Q9 ! Q8 HP!' T J ' O P '
5 O' HM ! Q' M' GM9N 7 GH' !' H G' H U' H KH' HP'
X NH' 7P P ! KT' O P ' JL+F'
!' HMN' N I P[S 1' N I PG[S
2' 9MJQH%O' H I' JN' 7' LMN P ! KP8 M ! O' NHMN' ! QHN'
2' 9MJQH%O' H I' !N ' LMN P ! KP8 M ! O' ! PWN' I !
3 P' NHP' ! !NH' H J ' 2' O J ! U' H I' N ' H G' APO' 8
HP!' LJN' I T' N PG' M ! O' I M ! N9PG' !' H I ' H 9GN'
2' P' H G' G O' - H 9 LLM ! +' ; 1' [7 I ' 2NM9T8

' ' PGGP ! QP +

- / M I' NH J' NHT' 7 J N7J9' N O ! QG' !' I ! P' PM G+
HMN' 9 ! Q' N I P' HM P' APP !' AM P ! +
E --' MOM I ' I MOM I S
!' # ! N ! T%G' OPMO' S
27' NH J' GMT' G ' 99M !' NH J' U 99%GN' NHT' I GN PGG'
JN' P99' M ! O' 7 PP
27' NH J' G ' T P9O' H I ' NHP P' G' Q 9O ' M ! O' HP P'
T' A9JPGN' P ! G' N ' U GG' 8 M' HM ! O' NHMN' U ! QG'
" M P' 9 LL%O' M ! O' N P I A9PO' U GG ! Q+
E --' 0 GN ' I MOM I ' HP%G' P99+
!' X HT ' NHP P%G' I P' Q 9O+' JN ' G MH ' I M U8' P'
JGP
' GMT' NHP' OPMO' M P' P99 ' A ! Q' N' N ' NHMN
HP' Q 9O' 2' Q P' NHPP' 99' 2' I P9N ' M ! O' L J '
5 !' NHT' 99 JNNP ! Q' NH MN+
E --' : O' I MOM I ' HPM ' I P+
!' X P99 ' Q ' N ' 2' 998
JN' NHP P%G' ! ' Q O ! PGG' !' NHT' 7MKP ' 7' # ! N ! T'
P' 7 PP ' M ! O' HP' 9N9 7J9 SG ' NM N' M' 7M J $
' N J I LPN' GJKH' Q O' N O ! QG' -' 27' ! N' P99+
H J' GH J9OGN' K I P' 9 UP' M' 7J T' K !%O' NH' G ! MUPG+
N' 9 UP' M' 7 I M9' I ML+
E --' X 99%N' L9PMGP' T J' HPM ' I P' \
!' 2' HM P' M' I ! O' N ' GN UP' NHPP' P P' NH J' GLPMU%G N
4PN ' 7' NH J' GMT' # ! N ! T' 9 PG ' G' P99+
1 ' 7 P ! OG' NH' KPGM ' ' ! N' KMLN P' N ' H I
2%99' GPN' NHPP' !' M' GH P ' 7' Q 9O ' M ! O' HM 9'
& KH' LPM 9G' JL !' NHPP+
E --' MOM I ' HP%G' P99+
!' X P99' GM O+
E --' # ! O' 7 P ! OG' NH' MPGM +
!' H J% N' M ! ' H ! PGN' I M ! +
E --' MPGM ' M ! O' HP' M P' Q PMNP ' 7 P ! OG' NHML' P P +
!' MUP' NHPP' M' 7 NJ ! P' 7 I ' I P+
E --' JN' TPN ' I MOM I S
!' 2' O ' ! N' 9 UP' 6' AJN' TPN R' 9' O PG' M99MT'
HP' Q O' L PKPOP ! KP8 7 P' JL !' 6' AJN' TPN'
6' JN' TPN' R' G' MG' M' QM 9P ' N ' A ! Q' 7 NH'
I P' I !GN JG' I M9P7MKN +' - NHPP ' 7 P ! O+
- J ' JN' NHP' LMKU' 7' I MNNP ' N ' I ! P' PM +
HP' Q O' M ! O' AMO' N QPNHP ' " P%G 7 P ! OG' NH' MPGM 8
2 ! ' GNMNP' 7' HPM9NH' NH J' GMT%GN8 M ! O' NH J' GMT%GN' 7 PP+
E --' 0 PP ' I MOM I [! ' 8 2' I MOP' ! ' GJKH' PL N
" P%G A J ! O' J ! N ' 1 KNM M+
!' 0 ' HMN' Q O' NJ !' \
E --' 0 ' NHP' APGN' NJ !' %NHP' APO+
!' ' 2' M I ' LM9P ' HM I M ! +
E --' MOM I ' HP%G' I M PO' N ' 1 KNM M+
!' HP' I GN' ! 7PKN JG' LPGN 9P ! KP' JL !' NHPP[
97 ' -' ' "!2
E --' : O' I MOM I ' LMN P ! KP+

!' X HMN' GMT' T J' \S " P ! KP
97 ' -' ' 3
" A9P' 99M !' [' 2%99' GLJ !' NH ! P' PTPG'
/ UP' AM99G' AP7 P' I P8 2%99' J ! HM ' NHT' HPMO8
=7 ' -' ' &,' "' "!2 '
H J' GHM9N' AP' H LL%O' N9E' P ' M ! O' GNP %O' !' A ! P '
I M N ! Q' !' 9 ! Q% ! Q' L KU9P+
E --' : MK JG' I MOM I
2' NHMN' O ' A ! Q' NHP' ! P G' I MOP' ! N' NHP' I MNKH+
!' MT ' %N G' ! N' G ' M' L ! KP' 2' 99' Q P' NHPP+
! O' I MUP' NHT' 7 NJ ! PG' L JO ' NHP' A9 ' NH J' HMOGN'
HM99' I MUP' NHT' LPMKP' 7 ' I ! Q' I P' N ' MQP8
! O' 2' 99' A N' NHPP' NH' HMN' Q 7N' APG OP'
HT' I OPGNT' KM ! ' APQ+
E --' " P%G' I M PO ' I MOM I +
!' & QJP ' NH J' HMGN' 9 %O' N ' 9 ! Q+' 9J 2-' ' " 33 '
E --' MT ' NHP ! ' 2%99' J !' S
X HMN' I PM !' T J ' I MOM I ' \ 2' HM P' I MOP' ! ' 7MJ9N+' 9 4
' : O' I MOM I ' UPPL' T J GP97' NH !' T J GP978
HP' I M !' G' ! ! KP ! N+
!' I P' ! ! KP ! NG' %GKMLP' ! N' NHP' NHJ ! OP A 9N+ S
P9N' 3QTLN' ! N ' 9P[M ! O' U ! O9T' K PMNJ PG'
J !' M99' N ' GP LP ! NG[S M99' NHP' G9M P' MQM ! 8
H JQH' 2' M I' I MO' 2' 99' ! N' A NP' H I' S M99+
' " P' G' M7PM O' N ' K I P+
!' 2' 99' ! N' HJ N' H I
HPGP' HM ! OG' O ' 9MKU' ! A 9 NT ' NHMN' NHPT' GN UP'
#' I PM ! P ' NHM !' I TGP978 G ! KP' 2' I TGP97'
" M P' Q P !' I TGP97' NHP' KMJGP+ S I P' H NHP ' G +

B ' PGGP ! QP +

H JQH' N' AP' H ! PGN ' N' G' ! P P ' Q O'
' A ! Q' AMO' ! P G' ' : P' N ' M' Q MK JG' I PGGMQP'
#' H GN' 7' N ! QJPG8 AJN' 9PN' 99 N O ! QG' NP99'
HP I GP9 PG ' HP !' NHPT' AP' 7P9N+
E --' 2' HM P' O ! P' I T' OJNT
!' 2G' HP' I M PO' \
2' KM ! ! N' HMNP' NHPP' GP ' NHM !' 2' O '
27' NH J' MQM !' GMT+' 4PG+
E --$ " P' G' I M PO ' I MOM I +
!' HP' Q OG' K ! 7 J ! O' NHPP[O GN' NH J' H 9O' NHP P'
GN 99+\
E --' H J9O' 2' 9 P ' I MOM I ' \
!' 1 ' 2' J9O' NH J' O OGN8
' HM97' I T' 3QTLN' P P' GJA I P Q%O ' M ! O' I MOP'
#' K GNP !' 7 ' GKM9%O' G ! MUPG' [: ' QPN' NHPP' HP ! KP '
" MOGN' NH J' M K GGJG' !' NHT' 7MKP ' N ' I P
H J' J9OGN' MLLPM ' I GN' JQDT+' O P' G' I M PO' \
E --' 2' K M P' T J ' H QH ! PGG% LM O !+
!' " P' G' I M PO' \
E --' MUP' ! ' 77P ! KP' NHMN' 2' J9O' ! N' 77P ! O' T J'
' LJ ! GH' I P' 7 ' HMN' T J' I MUP' I P' O '
PP I G' I JKH' J ! P] JM9 ' " P' G' I M PO' N ' 1 KNM M+
!' 1 ' NHMN' H G' 7MJ9N' GH J9O' I MUP' M' U ! M P' 7' NHPP
HMN' M N' ! N' HMN' NH J% N' GJ P' 7 [DS : PN' NHPP' HP ! KP' 8
HP' I P KHM ! O GP' H KH' NH J' HMGN' A JQHN' 7 I ' & I P'
P' M99' N ' OPM ' 7 ' I P8 9 P' NHPT' JL !' NHT' HM ! O+
! O' AP' J ! O ! P' AT' %P I ' [9 4 ' PGGP ! QP +
' : O' T J ' H QH ! PGG ' LMN P ! KP+
!' 2 ! ' L M G ! Q' # ! N ! T ' 2' HM P' O GL M G%O' MPGM +
' M ! T' N I PG ' I MOM I +
!' 2' M I ' LM O' 7 %N' ! +
/ PMO' I P' 7 I ' HP ! KP' 8

" '7J99' 7' KHM MKNP GN K' GL N' G' NH G' LMGGMQP ' !' H KH' P' PWMKN9T' 7 99 ' NHP'
LJ ! KNJMN !' 7' NHP' Q ! M9[JN' NHP' M J I ' PO N G' P P' ! N' GMN G7 PO' NH' N+
KK O ! Q' N ' NHP I ' G I PNH ! Q' G' M ! N ! Q' A NH' N ' NHP' GP ! GP' M ! O' N ' NHP' I PN P ' M ! O'
G ' NHPT' P ! OP ' N' MG' 7 99 G' 8 S
6' X P99 ' Q ' N ' +' 2' % ' 8
JN' NHP P%G' ! ' Q O ! PGG' !' NHT' 7MKP ' 7' # ! N ! T'
P' 7 PP ' M ! O' HP' 9N9 7J9 S C$2' G ' NM N' M' 7M J '
' N J I LPN' GJKH' Q O' N O ! QG' C' R
' '

' JKH' G' NHP' PMO ! Q' 7' NHP' Q ! M9+' HP' LMGGMQP' G' G I P HMN' AGKJ P ' AJN'
N' HMG' APP !' NHJG' PWL9M ! PO' 8 S H J' M N' ! N' M ! ' H ! PGN' I M ! ' 7' H KH' NH J' M N'
NHTGP97' M+GGJ PO ' APKMJGP' NHT' I MGNP %G' 7MJ9N' HMG' I MOP' M' U ! M P' 7' NHPP+' P P MG'
P I P ! OMN !G' HM P' APP !' L L GPO ' M ! O' ! P' GJQQPGNPO' AT' !KU' MG !' HMG' APP !'
MO LNPO' AT' NPP P ! G' S

1 ' NHMN' H G' 7MJ9N' GH J9O' I MUP' M' U ! M P' 7' NHPP
HMN' M N' ! N[S X HMN' \' NH J% N' GJ P' 70 ' 1R

9 # 99 I P ! % 7MKPG M P N JP HMNG P%P NHP HM ! OG M P+
! J NHP P G ! P P M 7M I M ! HMG M N JP 7MKP+
E G9M ! OP 8 NHPT GNPM9 HPM NG+
! X P KM I P H NHP N 7 QHN NH T J+
0 I T LM N 2 M I G T N G NJ ! PO N M O ! U 7NQ+
- I LPT O NH NH G OMT 9MJQH M MT H G 7 NJ ! P+
! 27 HP O GJ P HP KM ! ! N PPL N AMKU MQM ! +
E 4 J HM P GM O G + X P 9 UPO ! N 7 + M U # ! N ! T HP P+ - MT T J G HP I M PO N 9P LMN M \
! MPGM % G GNP G KM99% O 1 KNM M+
E J E G 8 GHP MG NHP 7P 7 M JG ?9M KP99JG+
! JN GHP G ! NHP 7P 7 M KJG # ! N ! JG+
- MT T J G \
! % G N JP+
E HP ! G MPGM M ! O HP 7 P P U ! N N QPNHP +
0)K 27 2 P P A J ! O N O ! P 7 NH G J ! NT 2 J9O ! N L LHPGT G +
E 2 NH ! U NHP L 9 KT 7 NHMN LJ L GP I MOP I P ! NHP I M MQP NHM ! NHP 9 P 7 NHP LM N PG+
! 2 NH ! U G N + JN T J GHM99 7 ! O NHP AM ! O NHMN GPP I G N N P NHP 7 P ! OGH L N QPNHP 99 AP NHP P T GN M ! Q9P 7 NHP M I NT 1 KNM M G 7 M H 9T K 9O M ! O GN 99 K ! P GMN ! +
E XH J9O ! N HM P H G 7P G \
! N HP NHMN H I GP97 G ! N G 8 H KH G M U # ! N ! T + " P 99 N H G 3QTLN M ! O GH MQM ! NHP ! GHM99 NHP G QHG 7 1 KNM M A9 NHP 7 P JL ! PPGM 8 M ! O MG 2 GM O AP7 P NHMN H KH G NHP GN P ! QNH 7 NHP M I NT GHM99 L P NHP I I PO MNP MJNH 7 NHP M M ! KP + # ! N ! T 99 JGP H G M77PKN ! HP P N G 8 HP I M PO AJN H G KKMG ! HP P+
+ # ! O NHJG N I MT AP + I P G 99 +% J MA M O \ 2 HM P M HPM9NH 7 N T J+
3 $ + 2 GHM99 NMUP N G 8 P HM P JGPO J NH MNG ! 3QTLN+
P + I P 8 9PN%G M MT + = 4 &

3 3 22 F ! " - I LPT%G 5$ 5 3 GP ! J I +
MT $
E ; - 2 ! ! P M ! NG 2 (N&

7 1 " P P NHPT%99 AP I M ! I P % NHP L9M ! NG M P 99 NPO M9 PMOT NHP 9PMGN ! O % NHP 9O 99 A9 NHP I O +
% 7 1 / PL OJG G H QH K 9 J PO+
7 1 HPT HM P I MOP H I O ! U M9 I G O ! U +
% 7 1 # G NHPT L ! KH ! P M ! NHP AT NHP O GL G N ! HP K PG JN 6 ! I P 8 R PK ! K 9PG NHP I N H G P ! N PMNT M ! O H I GP97 N NHP O ! U+
7 1 JN N M GPG NHP Q PMNP M APN PP ! H I M ! O H G O GK PN ! +
% 7 1 XHT NH G N G N HM P M ! M I P ! Q PMN I P ! % G 7P99 GH L 2 HMO MG 9 P7 HM P M PPO NHMN 99 O I P ! GP KP MG M LM N CM ! 2 K J9O ! N HPM P+
(7 1 AP KM99PO ! N M HJQP GLHP P M ! O ! N N AP GPP ! N I P ! % M P NHP H 9PG HP P PTPG GH J9O AP H KH L N 7J99T O GMGNP NHP KHPPUG+

- -!& " " " ! X # " (" " G ' $ $ (2 ! ML NM ! G+

HJG O NHPT G = ! @ : HPT NMUP NHP 79 % NHP 9P
T KP NM ! GKM9PG % NHP LT M I O8G NHPT U ! +
T NHP HP QHN NHP 9 ! PGG NHP I PM ! 7 OPM NH
1 7 G ! 7 99 HP H QHP 9JG G P99G+
HP I P N L I GPG MG N PAAG NHP GPPOG I M !

L ! NHP G9 I P M ! O CP GKMNNP G H G Q M !
! O GH N9T K I PG N HM PGN+
? , 4 J HM P GN M ! QP GP LP ! NG NHP P+
HPT M P G +
! N SM ! O G I P ! P + # HPM9NH N / PL OJG+
? , 2 M I ! ! N G P99 MG 2 GH J9O AP AJN 2%99 ! P%P J N+
! N N 99 T J HM P G9PLN8 2 7PM I P T J%99 AP ! N 99 NHP ! +
? , MT KP NM ! 9T 2 HM P HPM O NHP - N 9P I PG% LT M I GPG M P P T Q O9T NH ! QG8 NH JN K ! N MO KN ! 2 HM P HPM O NHMN+
E - I LPT M O+ = - "
! MT ! I ! P PM HMN G%
E 0 GMUP NHT GPMN 2 O APGPPKH NHPP KMLNM ! = - "
! O HPM I P GLPMU M O+
! 0 APM I P N 99 M ! ! + S
H G ! P 7 / PL OJG+
? , X HMN I M ! ! P % NH ! Q G T J K K O 9P \
2N G GHMLPO G 9 UP NGP978 M ! O N G MG A MO MG N HMNH A PMONH N G EJGN G H QH MG N G M ! O I PG NH NG ! QM ! G N 9 PG AT NHMN H KH ! J GHPNH N M ! O NHP P9P I P ! NG ! KP JN 7 N N N M ! G I Q MNPG+
? , X HMNK 9 J G N 7 \
0 17 NG ! K 9 J N +
? , % G M GN M ! QP GP LP ! N+
% G G + # ! O NHP NPM G 7 N M P PN+
%7 X 99 NH G OPGK LN ! GMN G7T H I w
X NH NHP HPM9NH NHMN - I LPT Q PG H I 8 P9GP HP G M P T PL KJ P+
!0 = ! - " : HM ! Q G HM ! Q [P99 I P 7 NHMN \ M MT [

3 MG 2 A O T J+ S X HP P%G NH G KJL 2 KM99%O 7 \
E 27 7 NHP GMUP 7 I P N NH J 9N HPM I P & GP 7 I NHT GN 9+ = - "
! 2 NH ! U NH J% N I MO+ HP I MNNP \
= - -$ "2 '- - "
E 2 HM P P P HP9O I T KML 77 N NHT 7 NJ ! PG+
! H J HMGN GP %O I P NH I JKH 7M NH+ X HMN%G P9GP N GMT \
P E 99T 9 OG+
HPGP] J KUGM ! OG / PL OJG
PPL 77 NHP I 7 T J G ! U+
E X 9N NH J AP 9 O 7 M99 NHP 9O \
! X HMN GMT%GN NH J \
E X 9N NH J AP 9 O 7 NHP H 9P 9O \ HMN%G N KP+
! " GH J9O NHMN AP \
E JN P ! NP NM ! N8
! O NH JQH NH1J NH ! U I P L 2 M I NHP I M ! X 99 Q P NHPP M99 NHP 9O+
! " MGN NH J O J ! U P99 \
E - I LPT 2 HM P UPLN I P 7 I NHP KJL+
H J M N 7 NH J OM %GN AP NHP PM NH9T ? P X HMNP%P NHP KPM ! LM9PG GUT ! K9 LG+
2G NH ! P 7 NH 9N HM P%N+
! H I P H KH MT+
HPGP NH PP 9O GHM P G NHPGP K I LPN N G+
P ! NHT PGGP98 / PN I P KJN NHP KMA9P 8
! O HP ! P M P LJN 77 7M99 N NHP NH MNG
99 NHP P G NH ! P+
! #H NH G NH J GH J9OGN HM P O ! P+
! O ! N HM P GL UP ! ! %N [2 ! I P %N G 99M ! T8
2 ! NHPP N HMO APP ! Q O GP KP + H J I JGN U !
% G ! N I T L 7 N NHMN O PG 9PMO I ! P H ! J 8
! P H ! J N+ &PLP ! N NHMN P%P NHT N ! QJP
" MNH G APN MT%O NH ! P M KN P ! Q O ! P J ! U ! !
2 GH J9O HM P 7 J ! O N M7NP M OG P99 O ! P8
JN I JGN K ! OP I ! N ! + 5PG GN M ! O O ! U+

E O NH G 9: -I"
2%99 !P P 7 99 NHT LM99%O 7 NJ!PG I P+S
XH GPPUG M!O 99 ! NMUP HP!' !KP%N G 77P %O+
HM99 !P P 7 !O N I P+
! H G HPM9NH N /PL OJG+
PM H I MGH P+S2%99 L9POQP N 7 H I - ILPT+
!' "P P%G N NHPP P!MG+
E 3! AM AJG P9K IP+
! O 99 N 99 NHP KJL AP H O+
!' HP P%G M GN !Q 7P99 P!MG+
= ! 3 ! #NNP!OM!N 2 ! -WG " (
E XHT\
!' %#' APM G NHP NH O LM N 7 NHP 9O I M!' PPGN
! N\
HP NH O LM N NHP!' G O J!U %X J9O N P P M99
NHMN N I QHN Q !' HPP9G+
!' 5 !U NH J8 !K PMGP NHP PP9G+
E IP+
! H G G ! N TPN M!' #9PWM!O M!' 7PMGN+
2N LP!G N M OG N+S N UP NHP PGGP9G H [
"P P G N MPGM+
-' K J9O P99 7 APM N+
2N%G I !GN JG 9MA J HP!'2 MGH IT A M !'
#!O N Q G7 J9P+
P M KH 9O %NHP N IP+
a--' - GGPGG N+2%99 IMUP M!G P
JN 2 HMO MNHP 7MGN 7 I M99 7 J OMTG+
HM!'O !U G IJKH !' !P+
!' "M IT A M P P I LP [=!# 1 4+
HM9H P OM!KP! NHP 3QTLN M!' MKKHM!M9G
#!O KP9PA MNP J O !U\
! /PN%G HM%N Q O G 9O P+
IP 9PN JG M99 NMUP HM!OG8
99 NHMN NHP K !]JP !Q !P HMNH GNPPL%O J GP!GP
2!' G 7N M!O OP9 KMNP /PNHP+
!' #99 NMUP HM!OG+S
MUP AMNNP T N J PM G NH NHP 9 JO I JG K S
HP H 9P+2%99 L9MKP T J+ HP!' NHP A T GHM99 G !Q8
HP H 9O !Q DP P T I M!' GHM99 APM MG 9 JO
#G H G GN !Q G OPG KM!' 99PT+
=E&- ' $ $(', ' "
1 :+
IP NH J I !M KH 7NHP !P
-9J I LT MKKHJG L NH L !U PT!P
2!' NHT MNG J KM PG AP O I%O+
X NH NHT Q MLPG J HM G AP K !%O 8
JL JG N 99 NHP 9O Q J!O 8
JL JG N 99 NHP 9O Q J!O [
%7' X HMN J9O T J I P wS- ILPT Q O ! QHN+
: O A NHP+
/PN IP P]JPGN T J 77 J Q M P AJG !PGG
0 !G MN NH G 9P NT+S :P!N9P 9 OG 9PN%G LM N8
4 J GPP P HM P AJ !N J KHPPUG GN !Q 3! AM AP
2G PMUP NHM!' NHP !P8 M!O I !P !' N !QJP
L9 NG HMN N GLPMUG NHP 9O O GQJ GP HMNH M9 I GN
#!N KU%O JG M97+ X HMN !PPOG I P OG\ : O ! QHN+S
: O#!N !T T J HM!O+
! 2%99 N T T J %NHP GH P+
!O GHM99 G 8 Q P%G T J HM!O+
! 1 #!N !T T J HM P IT 7MNHP H JGP S
JN HMN\ P M P 7 P!OG IP O !' !N NHP A MN+
!' MUP HPPO T J 7M99 ! N+S P!MG 2%99 ! N !' GH P+
= 4 & " O@ '' # NNP!OM!NG+
" N IT KMA !+S
HPGP O J I G SNHPGP N J I LPNG 79JNPG HMN[S
/PN PLNJ!P HPM A O M 9 JO 7M P P99 +
NHPGP Q PMN 7P99 G J!O M!O AP HM!Q%O G J!O JN
=. ! - !.' & , -$2 " & -
!' " GMTG %M [SD HP P%G IT KML+
E " [S! A9P KMLNM !'2 IP+ = 4 &
$ 9 ' SNHP AJ OP!' 7NHP G !Q+

3 3 2+S & IP+ B (PPGM %G !&-
" " '' $ $(3
3 XHMN M P NHP A NHP G LM NPO\
!' HPT HM P OPGLMNKH%O NH - ILPT HP G Q !P8
HP NHP NH PP M P GPM9 !Q+ 1KNM M PPLG
LM N 7 I & IP8 MPGM G GMO8 M!O /PL OJG
!KP - ILPT%G 7PMGN MG P!MG GMTG G N JA9PO
XNH NHP Q PP!' G KU!PGG+
3 % G M ! A9P /PL OJG+
!' #' P T 7 !P !P8 1 H HP 9 PG MPGM [
3 MT AJN H OPM 9T HP MO PG M U#!N !T
!' MPGM \ XHT HP%G NHP ?JL NP 7 IP!+
3 XHMN%G #!N !T\ HP Q O 7?JL NP+
!' LMUP T J 7 MPGM \ " \NHP ! !LM P g
3 1#!N !T 1 NH J# MA M!A O
D XP L !N9 PGP 9 !PG MG !' NHP Q !M9+ NPP P!G I NG *M!O PQJ9MNPG NHP
LMGGMQP NHJG8S
6 PNP 9PM P J!OP!P NHM!' AT J OPPO MK]J P
H QH M 7M IP HP!' H I P GP P%M MT+R
1/+ 22+ 2

[? ;

O ! X J9O T J L M GP MPGM GMT S MPGM 8SQ ! 7J NHP +
3 2!OPPO 9 P L9 PO NHP I A NH NH PWKP99P! L M GPG+
! J HP 9 PG MPGM APGN S4PN HP 9 PG # !N !T "
[HPM NG N !QJPG 7 QJ PG GK APG AM OG L PNG KM! ! N
H !U GLPMU KMGN NP G !Q ! J I AP H [S
" G 9 P N # !N !T+ JN MG 7 MPGM
!PP9 O ! U!PP9 O ! M!O !OP +
3 NH HP 9 PG+
! HPT M P H G GHM OG M!O HP NHP APPN9P+ S
9 & #, -
H G G N H GP SD#O PJ ! A9P # Q LLM+
3 : O 7 NJ!P NHT G 9O P 8 M!O 7M P P99+

+F #& 1 * ' "', ! 1
7J NHP D G +
-4 J NMUP 7 I I P M Q PMN LM N 7 I TGP978
GP I P P99 ! N+ S GNP L P GJKH M 7P
#G I T NH JQHNG I MUP NHPP M!O MG I T 7M NHPGN AM!O
HM99 LMGG ! NHT MLL 7+S GN ! A9P # !N !T
/PN ! N NHP L PKP 7 NJP H KH G GPN
PN WN JG MG NHP KP I P!N 7 J 9 P+
UPPL N AJ 9OPO AP NHP M I N AMNNP
HP 7 N PGG 7 N 7 APNNP I QHN P
"M P 9 %O NH JN NH G I PM! 7 ! A NH LM NG
H G AP ! N KHP GH%O+
MUP I P ! N 77P!OPO
2!T J O GN JGN+
æ%7 2 HM P GM O+
4 J GHM99 ! N 7 !O
H JQH T J AP NHP P ! KJ JG NHP 9PMGN KMJGP
0 HMN T J GPP I N 7PM NHP Q OG UPPL T J+
!O I MUP NHP HPM NG 7& I M!G GP P T J P!OG [
X P 99 HP P LM N+

%7 OM P P99 I T OPM PGN G GNP 7M P NHPP P99+
HP P9P I P!NG AP U !O N NHPP M!O I MUP
HT GL NG M99 7K I 7 N[D 7M P NHPP P99+
T ! A9P A NHP [S
HP # L 9%G !HP PTPG 2N G 9 P%G GL !Q+
!O NHPGP NHP GH P G N A !Q N !+S P KHPP 7J9+
9 U P99 N I T HJGAM!O%G H JGP8 M!OS
- X HMN
1KNM M \
2%99 NP99 T J !T J PM +
" P N !QJP 99 ! N APT HP HPM N ! KM!
" P HPM N 7 I HP N !QJP NHP G M!%G O !7PMNHP
HMN GNM!OG JL !NHP G P99 MN NHP D7J99 7N OP+
!O !P NHP MT !K9 !PG+
! X 99 GPG M PPL \ 9: " !
3 " P HMG M K9 JO ! %G 7MKP+
! " P P P NHP GP 7 NHMN P P HP M H GP 8
G HP AP !Q M I M!+F
3 X HT 3 ! AM AJG \
X HP!# !N !T 7 J!O ?J9 JG I GM OPMO+
" P K PO M9 I GN N M !Q M!O HP PL N+
X HP!MN -H 9 LL HP 7 J!O JNJG G9M !+
! HMN TPM ! !OPPO HP MG N JA9PO NH M HPJ I 8
X HMN 99 !Q9T HP O O K !7 J!O D HP M 9%O+
P9 P P%N N 99 2 PLN N +
-
G PPN 1KNM M
4 J GHM99 HPM 7 I I P GN 998 NHP N I P GHM99 ! N
1JN Q I T NH !U !Q !T J+
I P G K I P 8
2%99 PGN9P NH T J ! I T GN P!QNH 7 9 P
/ U HP P 2 HM P T J8 NHJG 2 9PN T J Q +
!O Q P T J N NHP Q OG+

%7 #O PJ 8 AP HMLLT[
? , / PN M99 NHP ! J I AP 7 NHP GNM G Q P 9 QHN
NHT 7M MT[
-OM P P99 7M P P99[9 -- -1 # 2#+
OM P P99[
= & , -!& " 4 &

3 3 222+ S #9PWM!O M+ ! ! ! ! ! !
' 1 * " $
! X HP P G NHP 7P99 \
4 " M97 M7PM O N K I P+
! : N Q N S I P H NHP G +
PGGP!QP +
4 : O I MEPGNT
" P O 7?P T OM P ! N 9 U JL ! T J+
JN HP!T J M P P99 L9PMG%O+
! HMN " P O%G HPMO
2%99 HM P JN H \ HP!#!N !T G Q !P
H JQH H I 2 I QHN K I I M!O N+S I P NH J ! PM +
E -- GN Q MK JG I MEPGNT S
! 5 OGN NH J APH 9O
1KNM M \
E -- #T O PMO]JPP!+
! X HP P)
E -- MOM I ! !& I P
2 9 U%O HP ! NHP 7MKP8 M!O GM HP 9PO
PN PP!HP A NHP M!O M U#!N !T+
! 2G GHP MG NM99 MG I P \
E -- HP G ! N I MOM I +
! 5 OGN HPM HP GLPMU\ 2G GHP GH 99 N !QJ%O
9 \
E -- MOM I 2 HPM O HP GLPMU8 GHP G 9 K%O+
! HMN%G ! N G Q O SHP KM!! N 9 UP HP 9 !Q+
/ UP HP \ 1 2G G %N G ! L GG A9P+
! 2 NH !U G HM I M! 5J99 7 N !QJP M!O
O M 7 GH[S
X HMN I MEPGNT G ! HP QM N \ &P I P I AP
27 P%P NH J 9 U%OGN ! I MEPGNT+
E -- , HP K PPLG
" P I N ! M!O HP GNMN ! FM P MG ! P
HP GH G M A OT MNHP NHM! M 9 7P8
#GNMNJP NHM! M A PMNHP +
! 2G NH G KP NM ! \
E -- 1 2 HM P ! AGP M!KP+
H PP ! 3QTLN
M!! N I MUP APNNP ! NP+
! " P%G P T U! !Q
2 O LP KP PG *S HP P%G ! NH !Q ! HP TPN
HP 7P99 HMG Q O EJOQ I P! N+
3WKP99P! N+
! : JPGG MN HP TPM G 2 L NHPP+
E -- MOM I
HP MG M O +
! X O \S HM I M! HM U+
" -- # !O 2 O NH !U GHP%G NH NT+
! PM % N NH J HP 7MKP ! I !O \ G%N 9 !Q J!O \
-- & J!O P P! N 7MJ9N !PGG+
! O NHP I GN LM N N NHPT M P 7 9 GH NHMN M P G +
" P HM HMN K 9 J \
" -- ! I MOM I 2 # !O HP 7 PHPMO
#G 9 MG GHP J9O GH N+
d! HP P%G Q 9O 7 NHPP+
H J I JGN ! N NMUP I T 7 I P GHM L!PGG 99 S

D ? H!G !PWL9M !G NH G M7NP M G I P HMN I TGN KM9 7MGH ! S6 MT NHP O E77P P!N
P9P I P!NG 7NHP A OT L !K L9PG 7 9 7P I M !NM !GJKH L L N !M!O HM I !T
MG I MT UPPL T J KHPP 7J9+R 2N G I P L AMA9P NHMN NHP L PN !9T !NP!OPO NHMN
MPGM GH J9O GH H G G GNP M L L N JG TMQP+
D $ G I NNPO !G I P I OP ! PO N !G NHP I GG ! HM !Q APP! I MOP !
NHP GPK !O7 9 +

NPP P!G GMTG NH JN 77P !Q M!T MJNH NT NHMN 6 M H GP G GM O N HM P
M K9 JO ! H G 7MKP HP! HP HMG M A9MKU OM U K 9 J PO GL N ! H G 7 PHPMO
APN PP! H G PTPG+
D SOPGN T+
F4 G NHP MKN 7 GNM!O !Q MG G NHP MKN 7 I !Q+

2 99 P I L9 T NHPP AMKU MQM !8 2 7 !O NHPP
GN 7 N 7 AJG !PGG : I MUP NHPP PMOT8
1J 9PNNP G M P L PLM %O 9 4 PGGP!QP +
#L LP I M!+
! 2!OPPO HP G G 2 PLP!N I P I JKH
HMN G 2 HM PO DH I X HT I PNH !UG AT H I +
H G K PMNJ P%G ! GJKH NH !Q+
NH !Q I MOM I +
! HP I M! HMNH GPQ!G I P I MEPGNT M!O GH J9OU! +
" MNH HP GPP! I MEPGNT \ 2G G P9GP OP7P!O+
#!O GP !Q T J G 9 !Q [
! HM P$!P NH !Q I P N MGU H I TPN Q O
HM I M!
JN %N G ! I MNNP 8 NH J GHM9N A !Q H I N I P
X HP P 2 99 NP # 99 I MT AP P99 P! JQH+
2 M M!N T J I MOM I + =: 4 &

3 3 2 +SD#NHP!G ! ! # !N !T%G !&-
1 "<,!1
MT !MT 1KNM M ! N !9T NHMN S
HMN P P PWKJGMA9P NHMN M!O NH JGM!OG I P
17 GP I A9MA9P I L N SAJN HP HMNH MQ%O
P M G %QM !GN - I LPT8 I MOP H G 99 M!O PMO N
LJA9 K PM
L UP GKM!N9T 7 I P HP!LP 7 KP HP K J9O! N
JN LMT I P NP I G 7H ! J K 9O M!O G KU9T
"P P!NPO NHP I I GN !M PMGJ P 9P!N I P+
X HP!NHP APGN H !N MG Q P!H I HP ! N9 U%O+
1 O O N7 I H G NPPNH+D
5 Q O9 O+
P9 P P ! N M99# 7 T J I JGN AP9 P P+
N I MKH ! N M99+ # ! J !HMLLT 9MOT %
27CF N PO AH F?HOG HG8GD CAAN LGCJGGH
- MT !Q7 A NH LM NG
HP Q O Q OG 99 I KU I P L PGP!N9T+
X HP!2 GHM99 L MT 6 1 A9PGG I T 9 O M!O HJGAM!O[R
!O NHMN L MTP AT K T !Q JN MG 9 JO
6 1 A9PGG I T A NHP [R "JGAM!O ! ! A NHP +
- MTG M!O OPGN TG NHP L MTP 8 ! I O MT
% WN NHPGP PWN P I PG MN M99+
#!N+ :P!N9P 1KNM M
/PN T J APGN 9 P O M N NHMN L !N H KH GPPUG
PGN N L PGP P N 27 2 9 GP I !P H ! J
2 9 GP I TGP97 APNNP 2 P P ! N T J G+
HM! T J G G A M!KH9PGG+ JN MG T J P]JPGNPO+
4 J GP97 GHM99 Q APN PP!JG8 HP I PM! N I P 9MOT
2%99 M GP NHP L PLM MN ! 7M M
HM99 GNM !T J A NHP MUP T J G !PGN HMGNP8
T J OPG PG M P T J G+
$ 1KNM+ HM!UG N I T 9 O+
HP ? P 7L P I MUP I P I GN PMU I GN PMU+
4 J PK !K 9P [X M G %N WN T J N M ! J9O AP
#G 7 NHP 9O GH J9O K9PM P M!O NHMN G9M ! I P!
H J9O G 9OP JL NHP 7N+
#!N+ $XHP! N MLLPM G N T J HP P NH G APQ !G+
J !T J O GL9PMGJ P NHMN MT# .! J 7MJ9NG
M! !P P AP G P]JM9 NHMN T J 9 P
M! P]JM99T I P NH NHP I + - OP T J Q !Q8
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3 3 F - ! !! - 3
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; 9 $ 2 G N PW N N I P!N N M!! TSNHP GM I P MG $ %%<
M!O OP PO 7 I NHP #!Q9 MW !$ HP O HMO Q !M99T P7P P!KP N
I HNM T L9J!OP M!O M MQP+

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! H G G 9O X HMN G NHP GJKKPGG \
!- MPGM HM !Q I MOP JGP 7H I ! NHP M G %QM !GN
- I LPT L PGP!N9T OP! PO H I M9 NT8 J9O! N 9PN H I
LM NMUP ! NHP Q9 T 7 NHP MKN ! M!O ! N PGN !Q HP P
MKKJGPG H I 7 9PNNP G HP HMO 7 I P 9T NP N - I LPT8
JL ! H G ! MLLPM9 GP CPG H I NHP L NH O G JL
N 99 OPMNH P!9M QP H G K !7 !P+
! HP! 9O NH J HMGN M LM 7 KHMLG ! I P8
#!O NH APN PP! NHP I M99 NHP 7 O NH J HMGN+
HPT%99 Q !O NHP !P NHP NHP + X HP P%G #!N !T
!- "P%G M9U !Q ! NHP QM OP! SNHJG 8 M!O GLJ !G
HP JGH NHMN 9 PG AP7 P H I 8 K PG O 9 / PL OJG [R
#!O NH PMNG NHP NH MN 7 NHMN H G 77 KP +
HMN I J OP %O - I LPT+
! 1J Q PMN !M T%G QQ%O+
!- O 2NM9T M!O MPGM + P 5 I N JG8
T 9 O OPG PG T J L PGP!N9T I T !P G
2 I QHN HM P N 9O HP PM7NP +
! % 99 AP ! MJQHN
JN N AP+S !Q I P N #!N !T+
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3 3 2+S& I P+ ! !! MPGM %G !&-
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æ%- !NP I ! !Q & I P HP HMG O !P M99 NH G #!O
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9P LMN M M!O H I GP97 !KHM G 7Q 9O
X P P LJA9 K9T P!NH !%O N AP9 P P I NHP
K !N M T NHMN M9NH JQH N MG H !NPO N I GM HP!
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I P!N ! #!N !T NH NP I G 7H ! J HP 9P!N H I I GN !M PMGJ PSK 9O
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JL !NHP LP L9P MG !P H G MOO PGG !Q NHP I NH G !KP NTSD+P%-) 7 I H G
NPPNH M!O ! N NH NHP 7J99 JNNP M!KP 7 NHP HPM N+
&

2 HM 1N 9O H I /PL OJG MG Q !N K JP98
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2 Q M!N H I LM N8 AJN NHP! !H G # I P! M
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1 # 2#+

" M 9 MPGM M!O I T 9 O[HM 9 I GN OPM MPGM [
7 HMN P P 2 GH J9O KM99 NHPP KMGN M MT[
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/ UP MPGM %G G GNP HP 7P 7#!N !T
H J9O HM P M!M I T 7 M!JGHP M!O
HP !P QHG 7H GP N NP99 7HP MLL MKH+
/ !Q P P GHP O O MLLPM # NHP N PPG AT NHP MT
H J9O HM P A !P I P!8 M!O PWLPKNMN !7M !NPO
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&M G%O AT T J L LJ9 JG N LG JN T J M P K I P
I M UPN I M O N & I P 8 M!O HM P L P P!NPO
HP GNP!NMN !D 7 J 9 P H KH 9P7N J!GH !+
2G 7NP! 9P7N J!9 %O P GH J9O HM P I PN T J
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" P O 7?P T8 NH OMNPG U !Q
17 IMQP!P8 - 9P I !M!O # I !NMG
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X NH M I P 9M QP 9 GN 7GKPLN PG+
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, NH GJ77 K P!N 9 KP!GP N Q PG JG NHP I PM! !Q H KH NHP L PN J9O PWL PGG NHMN
1KNM M MG G I PNH !Q GPLM MN !Q #!N !T 7 I NHP Q MN 7 KMN ! 7 H G OPG PG
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"% (HP P M P O 77 KJ9N PG !P NHP PMO !Q8 M!O N G APNNP NHP P7 P N
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O T J EJGN KP I MUP NHP F I ! GNP G
17JG M!O NH GP NHMN 9 P T J+ PGN 7K I 7 N8
#!O P P P9K I P N JG+
3 XP9K I P 9MOT+
E XP9K I P OPM I MOM I +
3MKH HPM N !& I P O PG 9 P M!O L NT T J+
1!9T NHP MOJ9NP JG #!N !T I GN 9M QP
2!H G MA I !MN !G NJ !G T J 778
#!O Q PG H G L NP!N PQ I P!N N M N J99+
HMN ! GPG N MQM !GN JG+
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#G 9O P M!O H G H GP+
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! 4 J L PGP!KP !PPOG I JGN LJCC9P # !N !T8
MUP 7 I H G HPM N NMUP 7 I H G A M ! 7 I H G N I P
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HMN -H N !JG M! PJ!JKH M!O T J I M O+G+
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HMN GLPMU MQM !GN JG[#KHM QP P APM %NHP M +
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2 99 ! N GNMT APH !O+
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1 "

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#!O NMUP !F T!P \S4 J HM P HPM O ! %N G PPN \
! P9P NT G !P P I P MO I %O
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XH KH I QHN HM P P99 APK I %O NHP APGN 7 I P!
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SQ P ! P!N MJNH NT+
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F#' I OP I PMO !Q MGS $
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.XP 7 99 NHP Q !M9 NHP I PM! !Q 7 H KH G SD7 NHP P AP ! PGLPK M9 OP!J!_
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T M ! O N MQP NH G AMNN9P MN - HM GM9 M
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! O G GH J9O T J+
0 ! 4 J GH LG M P ! N P99 I M ! ! %O F
4 J I M ! P G M P I J9 NP G PMLP G LP L9P
2 ! Q GG%O AT G 7N I L PGG ! MPGM %G 79PPN
P NH GP NHMN 7NP ! HM P %QM ! GN - I LPT 7 JQHN
HP GH LG M P TM P T J G HPM T+ O GQ MKP
HM99 7M99 T J 7 P7JG ! Q H I MN GPM+
P ! Q L PLM %O 7 9M ! O+
T GPM AT GPM+
! GN NHT G T J NHP P ! NH M MT
HP MAG 9JNP G 9O P GH L T J HM P AT 9M ! O8
5 GN MKN T J M I T H KH O NH I GN K ! G GN
1 7 M I M U%O 7 N I P ! 8 9PM P J ! PWPKJNPO
4 J ! P ! ! PO U ! 9POQP] J NP 7 PQ
HP MT H KH L I GPG MGGJ M ! KP M ! O
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0 I 7 I GPKJ NT+
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! 2 HM P G WNT GM 9G MPGM ! ! P APNNP +
1J P L9JG 7 GH LL ! Q 99 P AJ I 8
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#KN J I
PMN NHP MLL MKH ! Q MPGM + JN 7 P 7M 9+

PGGP ! QP +

X P NHP ! KM ! O %N MN 9M ! O+ SD HT AJG ! PGG \
E -- HP P I LP KM99G M ! O JG+
X NH ! P G NHP N I P%G NH 9MA J M ! O NH PG
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3 3 222+ S #KN J I +
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- N UP ! N AT 9M ! O8 UPPL H 9P 8
- UP ! N AMNN9P N 99 P HM P O ! P MN GPM+
5 ! N PWKPPO NHP L PGK LN 7 NH G GK 99
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1 ""

PN P J G] JMO ! G ! T ! G OP %NHP H 99+
2 ! PTP 7 MPGM %G AMNN9P 7 I H KH L9MKP
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3 2 - "" 5 ! 2 5 !1
7 3 # "# * " * / PJNP ! M ! N ! . H
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& B

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3 3 222+ S #KN J I +
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3 2 - "" 5 ! 2 5 !1
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B. 3

& B

MJQHN ! MJQHN M99 ! MJQHN[G 2 KM ! APH 9O !
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HP # ! N ! MO NHP 3QTLN M ! MO I M9
X NH M99 NHP G WNT 79T M ! O NJ ! NHP J] OP 8
GPP%N I ! P PTPG M P A9MGNPO+

" *

7 : OG M ! O Q OOPGGPG+
#99 NHP H 9P GT ! O 7 NHP I [
! X HMN%G NHT LMGG !
7 HP Q PMNP KM ! N9PD 7 NHP 9O G 9 GN
X NH P T Q ! M ! KP8 P HM P U GG%O M MT
3O ! QO I G M ! O L ! KPG+
! " MLLPM G NHP 7 QHN
7 1 ! J G OP 9 UP NHP N UP ! %O LPGN 9P ! KP F
X HP P OPMNH G GJ P+ 4 ! AM9O OD ! MQ 7 3QTLN
X H I 9PL GT %P NMUP %NHP I OGN 7 NHP 7 QHN S
X HP ! M ! NMQP 9 UP M LM 7 N ! G MLLPM %O+
NH MG NHP GM I P MNHP J G NHP P9OP +
HP A CPF JL ! HP 9 UP M K ! ?J ! P
" GNG GM 9G M ! O 79 PG+
! HMN 2 APHP9O
! P PTPG O O G KUP ! MN NHP G QHN M ! O K J9O ! N
3 ! OJ P M 7J NHP P +
7 HP ! KP AP ! Q 9 7%O+
HP ! A9P J ! 7 HP I MQ K # ! N ! T
9MLG ! H G GPM ! Q M ! O 9 UP M O N ! Q I M99M O+
/ PM ! Q NHP 7 QHN ! HP QHN 79 PG M7NP HP
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1 / 22+

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(1J 7 NJ!P !NHP GPM G JN 7A PMNH+
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M OG -P9 L !!PGJG M P NHPT 79PO+
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3 3 2V+S#9PWM!O M+ !! 1 "CCGHN?HC

" M U NHP 9M!O A OG I P N PMO ! I P JL !%+
2N G MGHM I %O N APM I P[SO P!OG K I P H NHP %D
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"M P 9 GN I T MT 7 P P S2 HM P M .GH L
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O9T[! N P+
2 HM P 79PO I TGP978 M!O HM P !GN JKNPO K M OG
J! M!O GH NHP GH J9OP G+SO P!OG AP Q !P8
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T N PMGJ P%G !NHP HM A J NMUP N+ D1
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"M P 9PNNP G 7 I I P N G I P 7 P!OG NHMN 99
PPL T J MT 7 T J+ - MT T J 9 U ! N GMO+
I MUP PL9 PG 79 MNH!PGG NMUP NHP H !N
XH KH I $ OPGLM L K9M I G8 9PN NHMN AP 9P7N
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99 L GGPGG T J 7NHMN GH L M!O N PMGJ P+
/PM P I P 2 L MT M 9 NN9P %L MT T J ! S
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1 7 P 7 P 7 P+
MOM I S
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4PG I T 9 O TPG S"P MN -H 9 LL UPLN
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2! MKAPNH P HM PS
6 GLJ G NHP ' N M P99P MLMKP+R
"P P G NHP GM I P I MQP8 AJN ' M!O ' PMKH HM P NHP GP!GP 7 "% (*
$
= #LMGGMQP !#99%G XP99 NHMN 3!OG XP99 PWL9M !G NH G M99JG ! S
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3 (8 $B
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HMN NHP I MO JNJG P!OPO HP M9 !P
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! #H GNM!O AT+
!- HP]JPP! I T 9 O NHP]JPP!+
, - : N H I I MOM I GLPMU N H I 8
"P G J!]JM9 N PO NH P T GHM I P+
! XP99 NHP! S JGNM !I P S1[
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"P HPMO%G OPK9 !%O M!O OPMNH 99 GP CP HP 8 AJN
4 J K I7 N I MUPG NHP PGKJP+
2 HM P 77P!OPO PLJNMN !8
#I GN J!! A9P G P !Q+
!- NHP]JPP!+
1 H NHP HMGN NH J 9PO I P 3QTLN 7 $
" 2 K ! PT I T GHM I P JN 7NH !P PTPG
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0 Q P I T 7PM 7J9 GM 9G8 2 9 NN9P NH JQHN
4 J J9O HM P 7 99 %O+
3QTLN NH J U!P %GN N %P 9
, T HPM N MG N NHT JOOP N PO AT NHP GN !QG+
#!O NH J GH J9OGN N I P M7NP 1%P I T GL N
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, HT APKU I QHN 7 I NHP A OO !Q 7NHP Q OG
I I M!O I P+
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" I JKH T J P P I T K !]JP 8 M!O NHMN
T G O I MOP PMU AT I T M77PKN ! J9O
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3 P!NH G PLMTG I P+S XP GP!N J GKH 9 I MGNP +
2G HP K I P AMKU \S/ P 2 M I 7J99 79PMO S
I P !P NH !NHP P M!O J M!OG SO NJ!P U! G
XP GK !HP I GN HP!I GN GHP 77P G A9 G+ = 4 &

3 3 V+S MPGM %G .$ 3QTLN+

$) ("! -
-/PN H I MLLPM NHMN%G K I P 7 I #!N !T+S
! T J H I \
! MPGM %N G H G GKH 9 I MGNP
#!M QJ I P!N NHMN HP G L9JKU%O HP!H NHP
"P GP!OG G L M L ! ! 7H G !Q+
XH KH HMO GJLP 79J JG U !QG 7 I PGGP!QP G+
N I M!T I !G Q !P AT+

(" (
-# LL MKH M!O GLPMU+
&, JKH MG 2 M I 2+K I P 7 I #!N !T
2 MG 7 9MNP MG LPNNT N H G P!OG+
#G G NHP I ! OP !NHP I T N9P 9PM7
H G Q M!O GPM+D
a%7 P N G 5PK9M P NH !P 77 KP+
&, / O 7H G 7 NJ!PG HP GM9JNPG NHPP M!O
&P]J PG N 9 P !3QTLN H KH ! N Q M!NPO+
"P 9PGGP!G H G P]JPGNG M!O N NHPP GJPG
9PN H I A PMNHP APN PP!NHP HPM P!G M!O PM NH

MOP M AT 9 PJNP!M!NG+
MLP99 PWL9M !G NH G LMGGMQP NHJG 8S6 HP GPM N9 MN$HP @NHP OP O L M GP
7 I+R

#L MNP IM! !#NHP!G H G7 HI+
PWN 9P LMN M O PG K !7PGG NHT Q PMN!PGG8
JA I NG HP N NHT I QHN# M!O 7NHPP K M PG
HP K K9P 7NHP -N 9P I PG7 HP HP G
HMCM OPO N NHT Q MKP+
-- 0 #!N !T
2HM P! PM G N H G P]JPGN+ HP]JPP!
17MJO P!KP ! OPG P GHM99 7M 98 G GHP
0 I3QTLN O P HP M99 O GQ MKPO7 P!O+
1 NMUP H G 9 7P NHP P H G 7GHP LP 7 I+
HP GHM99 ! N GJP J!HPM O+ N NHP I A NH+
0 NJ!P LJ GJP NHPP[
-- !Q H I NH JQH NHP AM!OG+
' (" (
N T NHT P9]JP!KP ! G N I P 5PGLMNKH8
0 I#!N !T ! 9P LMN M L I GP + !) ('
#!O ! J !M I P HMN GHP P]J PG8 MOO I P+
0 I NH !P ! P!N ! 77P G I P!M P! N
2! NHP APGN7 NJ!PG GN !Q8 AJN M!N 99 LP EJ P
HP !P%P N JKH%O PGNM98 T NHT KJ!! !Q HT PJG
MUP NH !P !PO KN7 NHT LM !G H KH P
X 99M!G P MG M 9M +
5 MPGM 2Q +
%- 1AGP P H #!N !T APK I PG H G 79M 8
#!O HMN NH J NH !U%GN H G P T MKN !GLPMUG
2! P P T L P NHMN I PG+
5 MPGM 2 GHM99+ + 4 &

3 3 V2+S#9PWM!O M+ ! ! ! !
" $ $("
! X HMN GHM99 P O 3! AM AJG \
! H !U M!O O P+D
! * HCAHE AD JG H >?BMC >AD CF W
! #!N !T !9T NHMN J9O I MUP H G 99
/ O 7H G PMG !+ X HMN M9NH JQH T J 79PO
0 INHMN 3 7MKP 7 M H GP GP P M9 M!QPG
0 QHNPO PMKH NHP Á HT GH J9O HP 7 99 \
HP NKH 7H G .. ! - !& " ! !
"M P! KU%O H G KMLNM !GH L8 MN GJKH M L !N+
X HP!HM97N HM97NHP 9O LL G%O HP AP !Q
HP I P POD]JPGN ! % MG M GHM I P! 9PGG
HM! MG H G 9 GG N K J GP T J 79T !Q 79MQG+
#!O 9PM P H G !M T QMC !Q+
! - NHPP LPMKP+

2 ' (" (

NHMN H G M!G P \
&, #T I T 9 O+
HP]JPP!GHM99 NHP!HM P K J NPGT G GHP 99
T P9O
/ 'B
&, " P GMTG G +
/PN HP U! N+S
NHP A T MPGM GP!O NH G Q CC9PO APMO+
#!O HP 99 7 99 NHT GHPG N NHP A I
X NH L !K LM9 N PG+
! HMN HPMO I T 9 O \
H I MQM ! P99H I HP PM G NHP GP
17T JNH JL !H I 8 7 I H KH NHP 9O GH J9O ! NP
I PNH !Q LM N KJ9M H G K ! GH LG 9PQ !G+
MT AP M K M O%G8 H GP I ! GNP G J9O L P M 9
!OP NHP GP KP 7M KH 9O MG G !
#G %NHP K I I M!O 7 MPGM 2 OM P H I NHP P7 P
! #!N !T !9T NHMN J9O I MUP H G 99
/ O 7H G PMG !+ X HMN M9NH JQH T J 79PO
0 I NHMN 3 7MKP 7 M H GP GP P M9 M!QPG
0 QHNPO PMKH NHP Á HT GH J9O HP 7 99 \
HP NKH 7H G .. ! - !& " ! !
"M P! KU%O H G KMLNM !GH L8 MN GJKH M L !N+
X HP!HM97N HM97NHP 9O LL G%O HP AP !Q
HP I P POD]JPGN ! % MG M GHM I P! 9PGG
HM! MG H G 9 GG N K J GP T J 79T !Q 79MQG+
#!O 9PM P H G !M T QMC !Q+
! - NHPP LPMKP+

2 ' (" (

NHMN H G M!G P \
&, #T I T 9 O+
HP]JPP!GHM99 NHP!HM P K J NPGT G GHP 99
T P9O
/ 'B
&, " P GMTG G +
/PN HP U! N+S
NHP A T MPGM GP!O NH G Q CC9PO APMO+
#!O HP 99 7 99 NHT GHPG N NHP A I
X NH L !K LM9 N PG+
! HMN HPMO I T 9 O \
H I MQM ! P99H I HP PM G NHP GP
17T JNH JL !H I 8 7 I H KH NHP 9O GH J9O ! NP
I PNH !Q LM N KJ9M H G K ! GH LG 9PQ !G+
MT AP M K M O%G8 H GP I ! GNP G J9O L P M 9
!OP NHP GP KP 7M KH 9O MG G !
#G %NHP K I I M!O 7 MPGM 2 OM P H I NHP P7 P

9MT H G QMT K I LM G !G MLM N+
#!O M!G P I P OPK9 !%OF G O MQM !GN G O+
1J GP9 PG M9 !P 2%99 NP N8 7 99 I P+
+ 4 & " ' ("
4PG 9 UP P! JQH H QH AMNN9PO MPGM 99
!GNMNP H G HMLL !PGG M!O AP GNMQ%O N NHP GH +
#QM !GN M G OP +SD2GPP I P!%G EJOQ I P!NG M P
#LM KP9 7NHP 7 NJ!PG8 M!O NH !QG JN M O
5 O M NHP ! M O]JM9 NT M7NP NHP I+
GJ77P M99 M9 UP+ HMN HP GH J9O O PM I
! !Q M99 I PMGJ PG NHP 7J99 MPGM 99
#!G P H G P I LN !PGG[S MPGM NH J HMGN GJAOJPO
" G EJOQ I P!N +

#NNP!OM!N+
#I PGGP!QP 7 I MPGM +$D
! X HMN ! I P KP P I !T \S PP I T I P!['
#QM !GN NHP A9 ! GP I MT NHPT GN L NHP ! GP+
HMN U!PP9%O J!N NHP AJOG+S#O I N H I G +
! !P H !PGNT M!O 2 APQ !N G]JM P+ + - "
HP 9 TM9NT P99HP9O N 7 9G O PG I MUP
1J 7M NH I P P7 99T SD4PN HP NHMN KM! P!OJ P
7 99 NH M99PQ M!KP M 7M99P!9 O+
5 PG K !]JP H I NHMN O O H G I MGNP K !]JP +
#!O PM !G M L9MKP %NHP GN T+

,) (
! MPGM %G 99 \
5 " PM N MLM N+
! !P AJN 7 P!OG8 GMT A 9O9T+
5 HML9T M P NHPT 7 P!OG N #!N !T+
" P !PPOG MG I M!T G MG MPGM HMG8
1 !PPOG ! NJ + 27 MPGM L9PMGP J I MGNP
X 99 9PML N AP H G 7 P!O 0 JG T J U! +
XH GP HP G P M P8 M!O NHMN G MPGM %G+
5 +S
HJG NHP! NH J I GN P! !%O DGM P!N PMNG
N N K !G OP ! HMN KMGP NH J GNM!O%GN+
OJ NHP NHM! HP G MPGM +$ $
! : ! 8 X QHN TM9+
5 " P U! G NHMN T J P I A MKP ! N #!N !T
#G T J O O 9 P AJN MG T J 7PM %O H I+
! 1[
5 HP GKM G JL !T J H ! J NHP P7 P HP
5 PG L NT MG K !GN M !PO A9P I GHPG+
N MG OPGP %O+
! " P G M Q O M!O U! G
X HMN G I GN QHN ! P H ! J MG ! N T P9OPO+
JN K !]JP %O I P P9T+
! AP GJ P 7NHMN + - "
2 99 MGU #!N !T+S G NH J M N G 9PMUT+
HMN P I JGN 9PM P NHPP N NHT G !U !Q 7
#FE NG?DG C QB C CFGG a SB>>! . ". *
5 HM99 2 GMT N MPGM
X HMN T J P]J P 7H I \7 HP LM N9T APQG
AP OPG %O N Q P+ 2N I JKH J9O L9PMGP H I+
HMN 7H G 7 NJ!PG T J GH J9O I MUP M GNM77
9PM!JL ! AJN N J9O M I H G GL NG+
HPM 7 I I P T J HMO 9P7N #!N !T
#!O LJN T J GP97 J!OP H G GH JO+
HP J! P GM9 9M!O9 O+
! X HMN%G T J !M I P \
5 T !M I P G HT PJG+
! GN U !O I PGGP!QP +
MT N Q PMN MPGM NH G+ 2!OPLJNMN !F

', " P P G M! A9P M!G P 7 I NHP JQH G 9O P N NHP 9JLNJ JG]JPP!+ JN NHP K I I P!NMN G HM P ! N APP!GMN G7 PO NH N+ "M! I P PMOG 6)M!O O P+R X P I MT HP P T GM7P9T N JGN NHP Q !M9+

G M A J!OM T8 M!O N G N I M U 9 I N+ LP!GP NHJG JGPG NHP O MG M P A+

? H!G !PWL9M !G NHP LMGGMQP NHJG S6 2 P]J NP 7 PGM ! N N OPLP!O ! NHMN GJLP NT H KH NHP (- % 7 J O 77P P!N 7 NJ!PG I MT PWH A N N H I AJN N M!G P I P I M!N I M! !NH G (' 7 I T MQP L P +R H G G NHP PMO !Q 7NHP GPK !O7 9 + HP 7 GN PO N !HMG 6 OJ NHP NHM! HP G (% G . - H G G XM AJ N !%G M I P!O I P!N 7 NHP Q !M9 %- H KH !P PMO !Q G ! QP!P M99T MO LNPO+

?

/ P' Q M P9PGG' 8 N 99' NHP' 79 PG' M ! O' Q ! MNG' 7' 9P'
" M P' AJ PO' NHP I ' 7 ' L PT' [
' 2' M I ' GMN G7 PO+
MPGM ' G NG' O !' !' # 9PWM ! O M8 HP P
2' 99' LL GP' H G' 7MNP+' 1 J ' 7 KP' AT' 9M ! O
" MNH' ! A9T' HP9O ' J ' GP P %O' ! M T' N
" M P' U ! N' MQM ! ' M ! O' 79PPN D' NH PMN%! ! Q' I GN' GPM9 UP+
X HP P' HMGN' NH J' APP ! ' I T' HPM N' \S5 GN' NH J' HPM ' 9MOT' \
27' 7 I ' NHP$ 7 P9O' 2' GHM99' PNJ ! ' ! KP' I P
' U GG' NHPGP' 9 LG ' 2' 99' MLLPM ' ! ' A9 O8
2' M ! O' I T' G O' 99' PM ! ' J ' KH ! K9P' 8
HP P%G' H LP' ! %N' TPN+
! ' ' HMN%G' I T' A M P' 9 O' [
' 2' 99' AP' N PA9P G ! P %O ' HPM NPO ' A PMNH%O
! O' 7 QHN' I M9 K JG9T' ' 7 ' HP ! ' I ! P' H J G'
X P P' ! KP' M ! O' 9JKUT ' I P ! ' O O' M ! G I ' 9 PG'
1 7' I P' 7 ' EPGNG' 8 AJN' ! ' 2%99' GPN' I T' NPPNH+
! O' GP ! O' N ' OM U ! PGG' M99' NHMN' GN L' I P+S I P
/ PN%G' HM P' ! P' NHP ' QMJOT' ! QHN ' D KM99' N ' I P'
99' I T' GMO' KMLNM ! G8 7 99' J ' A 9G' ! KP' I P' 8
/ PN%G' I KU' NHP' I O ! QHN' AP99+
! ' 2N' G' I T' A NHOMT8
2' HMO' NH JQHN' N ' HM P' HP9O' N' L 8 AJN ' G ! KP' I T' 9 O'
2G' # ! N ! T' MQM ! ' 2' 99' AP' 9P LMN M+
' X P' 99' TPN' O ' P99+
! ' M99' M99' H G' ! A9P' KMLNM ! G' N ' I T' 9 O+
' 5 ' G ' P%99' GLPMU' N ' NHP I ' 8 M ! O' N ! QHN' 2%99' 7 KP'
HP' ! P' LPPL' NH JQH' NHP ' GKM G+S IP' ! ' I T'] JPP ! 8
HP P%G' GML' ! %N' TPN+' HP' ! PWN' N I P' 2' O ' 7 QHN+
2%99' I MUP' 5 PMNH' 9 P' I P' 8 7 ' 2' 99' K ! NP ! O'
3 P ! ' NH' H G' LPGN 9P ! N' GKTNHP+
9 4 & ' 1 ' ' 1 ' "' # NNP ! OM ! NG+'
! ' ' HP%99' JNGNM P' NHP' 9 QHN ! ! Q+' ' AP' 7J JG+
2G' N ' AP' 7 QHNPO' JN' 7' 7PM ' M ! O' ! ' NHMN' I O
HP' O P' 99' LPKU' NHP' PGN OQP' 8 M ! O' 2' GPP' GN 99
' O I ! JN ! ' ! ' J ' KMLNM ! %G A M !
&PGN PG' H G' HPM N ' X HP ! ' M9 J ' L PTG' ! ' PMG !+
2N' PMNG' NHP' G O' N' 7 QHNG' NH+' 2' 99' GPPU
I P' MT' N ' 9PM P' H I +' 9 4

' 2 +

3 3' 2+S PPGM %G ,' ' # 9PWM ! O M+

' h " ' " 3' ' 8' ' ' ' < ! K7 ' "
! -

%7' " P' KM99G' I P' A T8 M ! O' KH OPG ' MG' HP' HMO' L P '
' APMN' I P' JN' 7' 35 , * 5' -- 3 '
" P' HMNH' 2 , , G"' 2 ' ! "-# " -' ' ! ' , -! ' ! ($
MPGM ' ! ' ! 5# ? ' ' ! '" &.. ' ' ! 2$
2' HM P' 5' ! ' 2 5-' ! ' " #
/ MJQH' MN' H G' 3 ;
E ' MPGM ' &-' '
XHP ! ' !P' G ' Q PMN' APQ ! G' N ' MQP ' HP%G' HJ ! NPO'
3 P ! ' N ' 7M99 ! Q' 7 P' H I ' ! ' A PMNH ' AJN' ! '
MUP' A N' 7' H G' O GN MKN !' ' P P ' M ! QP '
MOP' Q O' QJM O' 7 ' NGP97+
a -' / PN' J ' APGN' HPMOG
! ' NHMN' N I ' NHP' 9MGN' 7' I M ! T' AMNN9PG'
XP' I PM ! ' N ' 7 QHN SX NH ! ' J ' 7 9PG' NHP P' M P+
17' NH GP' NHMN' GP %O' M U' # ! N ! T' AJN' 9MNP+

' FN= < $ ' 9O' O' 7 'U=
6 5 2' $ S ! QHN' 7' PE K ! Q+' # ' QMJOT' OMT' ! ' NHP' ! P G N PG' M ! O'
2 ! ! G' 7' J N' G M' 7PMGN' OMT+' M PG ' !' PWL9M ! MN !' 7' NHP' NP I '] J NPG' 7 I ' M ! '
9O' L9MT S
6 # ' 7 9 GH' JNP ! G 9' 7' GNMNP
XH KH ' 9 UP' 9O' L9MNP' JL !' N' QMJOT' OMT%G
JQHN' 7 NH' N ' I MUP' M' GH ' M ! O' NHMN' G' M99+R

3 ! JQH' N ' 7PNKH' H I ' ! +' PP' N' O ! P' 8
! O' 7PMGN' NHP' M I T' 8 P' HM P' GN P' N ' O %N
! O' NHPT' HM P' PM ! %O' NHP' MGNP+' - ' # ! N ! T[
9 4

3 3' 22+ S # 9PWM ! O M+' ' !! ' ' '
' 1 ' ' 1 ' ' '
* ' $ ' "' ! -

' " P' 99' ! N' 7 QHN' NH' I P ' 5 I N JG' \
! ' +
' X HT' GH J9O' HP' ! N' \
! ' " P' NH ! UG ' AP ! Q' N P ! NT' N I PG' 7' APNNP ' 7 NJ ! P+
" P' G' N P ! NT' I P ! ' N ' !P+
' I ' G 9O P +
T' GPM' M 7O' 9M ! O' 2%99' 7 QHN ' ' 2' 99' 9 P+
1 ' AMNHP' I T' OT ! Q' H ! J ' ! ' NHP' A9 O
HM99' I MUP' N' 9 P' MQM ! +' X %N' NH J' 7 QHN' P99' \
! ' 2%99' GN UP8 M ! O' K T ' 6' MUP' M99+R
' X P99' GM O8 K I P' !+S
M99' 7 NH' I T' H JGPH 9O' GP M ! NG' 8 9P N%G' N ! QHN

' P M ! NG+

P' A J ! NP JG' MN' J ' I PM9+S : P' I P' NHT' HM ! O+
H J' HMGN' APP ! ' QHN9T' H ! PGN8 SG ' HMGN' NH J
H JFSM ! O' NH J SM ! O' NH J' ST J' HM P' GP %O' I P' P99+'
! O' U ! QG' HM P' APP ! ' T J ' 7P99 G+
! ' X HMN' I PM ! G' NH G' \
! ' % G' ! P' 7' NH GP' OO' N KUG' H KH' G ' GH NG
+ - "
1JN' 7' NHP' I ! O+
' # ! O' NH J' M N' H ! PGN' N +
2' GH' 2' K J9O' AP' I MOP' G ' I M ! T' I P ! 8
! O' M99' 7' T J' K9MLL%O' JL' N QPNHP ' !'
! ' # ! N ! T8 NHMN' 2' I QHN' O ' T J' GP KP+
' Q O' MG' T J' HM P' O !P+
7 1 ' HP' Q OG' 7 A O' (
' XDP99' I T' Q O' 7P99 G' M N' ! ' I P' N ! QHN
KM ! N' ! N' I T' KJLG8 M ! O' I MUP' MG' I JKH' 7' I P'
#G' HP ! ' I ! P' P I L P' MG' T J ' 7P99 ' N $
! O' GJ77P %O' I T' K I I M ! O+
! ' X HMN' O PG' HP' I PM ! ' \
! ' ' I MUP' H G' 7 99 P G' PPL+
' P ! O' I P' N ! QHN8
MT' AP ' N' G' NHP' LP O' 7' T J ' OJNT
" ML9T' T J' GHM99' ! N' GPP' I P' I P' 8 ' 7
#' I M ! Q9PO' GHMO ' LP KHM ! KP ' N I '
4 J%99' GP P' M ! NHP ' I MGNP +' 2' 9 U' ! ' T J'
#G' ! P' NHMN' NMUPG' H G' 9PM P+' ! P' H ! PGN' 7 P ! OG
2' NJ ! ' T J' ! N' M MT8 AJN ' 9 UP' M' I MGNP '
MN PO' N ' T J ' Q O' GP KP ' GNMT' N 99' OPMNH' 8
P ! O' I P' N ! QHN' N ' H J G ' 2' MGU' ! ' ' I P+
! O' NHP' Q OG' T P9O' T J' 7 %N
! ' X HMN' I PM ! ' T J ' G +
' Q P' NHP I ' NH G' O GK I 7 N' \ / U ' NHPT' PPL8
! O' 2 ' M ! ' MGG ' M I ' ! ! PTPO8 7 ' GHM I P+
M ! G7 I ' JG' ! N' N ' I P ! +
' " ' H ' H ' [F
' NHP' NKH' NMUP' I P' 7' 2' I PM ! N' N' NHJG' [
: MKP' Q ' HP P' NH GP' O LG' 7M99[T' HPM NT' 7 P ! OG+'
4 J' NMUP' I P' ! ' N ' O 9 JG' M' GP ! GP+
0 ' 2' GLMUP' N ' T J' 7 ' T J ' K I 7 N' O O' OPG P' T J'
' AJ I ' NH G' ! QHN' NH' N KHPG ' 9)D ! ' I T' HPM NG
2' H LP' P99' 7' N I 8 M ! O' 99' 9PMO' T J

' $ ' " M ! I P ' PMOG' ' $ * H KH' G I P' PO N G' 7 99 +' HP' LMJGP'
H KH' G' ! PKPGGM T' ! ' MOO PGG ! Q' M JG' LP G ! G ' GNM ! OG' ! ' NHP' L9MKP' 7' M' GT99MA9P+
D 2 ! ' # G' 4 J' / UP' 2N' P+HM P' NHP' 7M I 9 M ' PWL PGG ! ' 6' : O' %9O' T J R' H KH' G
P] J M9P ! N' N S : O' T P9O' T J' ' : O' P $M O' T J+' ' ! ' NHP' LMGGMQP' AP7 P' JG+
F HPGP' ! NP EPKN ! G' HM P' NHP' GP ! GP' 7' % -
1 / +' 22+' ' /'

' KM I L' NH G' H GN ' P' M99' J9O' GJL' N QPNHP
#!O' O !U' KM JGPG' N ' NHP' !PW' OMT%G' 7MNP+
XH KH' L I GPG' TM9' LP 9+S J I LPNP G
X NH' A MCP!' O !' A9MGN' T J' NHP' K NT%G' PM 8
MUP' I !Q9P' NH' J ' MNN9 !Q' NMA J !PG8
HMN' HPM P!' M!O' PM NH' I MT' GN UP' NHP ' G J!OG' N QPNHP +'
#LL9MJO !Q' J ' MLL MKH+' = 4 &

3 3' 2V+S MPGM %G' ,

P!N !P9G'! ' ', !- ' ' ' $ $ (

' 7! "' 27' P' AP' ! N' P9 P %O' NH !' NH G' H J +
XP' I JGN' PNJ !' N ' NHP' K J N' 7'QJM O ' HP' ! QHN'
2G' GH !T8 M!O ' NHPT' GMT ' P' GHM99' P I AMNN9P
T' NHP' GPK !O' H J ' %NHP' I !+
%' 7! "' H G' 9MGN' OMT' MG' M' GH P O' !P' N ' JG+
!' 1' APM ' I P' N!PGG' ! QHN S
)' 7! "' X HMN' I M!' G' NH G' \
%' 7! "' NM!O' K9 GP' M!O' 9 GN' H I +
!' P' N!PGG' N ' I P' 1' NH J' A9PGGPO' I !+
XHP!' I P!' P 9NPO' GHM99' JL !' PK O'
PM ' HMNP7J9' I P I T' L ' 3! AM AJG' O O'
P7 P' NHT' 7MKP' PLP!N[S
$2' 7! "' 3! AM AJG[
)' 7! "' +- PMKP8
"M U' 7J NHP +
!' 1' G P P Q!' I GN PGG' 7' N JP' I P9M!KH 9T+
HP' L G ! JG' OM I L' 7' ! QHN' O GL !QP' JL !' I P8
HMN' 9 7P' M' P T' PAP9' N ' I T' 99+
MT' HM!Q' ! ' 9 !QP ' !' I P8 H ' I T' HPM N'
#QM !GN' NHP' 79 !N' M!O' HM O!PGG' 7' I T' 7MJ9N8
XH KH' AP !Q' O PO' NH' Q P7 ' 9' A PMU' N ' L OP +
#!O' 7 ! GH' M99' 7 J9' NH JQHNG+' 1' #!N !T
A9P ' NHM!' I T' P 9N' G' !7M I JG+
O Q P' I P' !' NH !P' !' LM N KJ9M 8
JN' 9PN' NHP' 9O' M!U' I P' !' PQ GNP '
#' I MGNP 9PM P ' M!O' M' 7JQ N P'
1' #!N !T[' 1' #!N !T[' = -
\' 7! "' / PN%G' GLPMU' N ' H I +
2 7! "' / PN%G' HPM ' H I ' 7 ' NHP' NH !QG' HP' GLPMUG' I MT'
K !KP !' MPGM +
)' 7! "' / PN%G' O ' G +' JN' HP' G9PPLG+
(' 7! "' !G' MNHP 8 7 ' G ' AMO' M' L MTP ' MG' H G' MG'
!P P ' TPN' 7 ' G9PPL+
%' 7! "' : ' P' N ' H I +
)' 7! "' # MUP' G ' M MUP# GLPMU' N ' JG+
%' 7! "' "PM ' T J ' G ' \
2 7! "' HP' HM!O' 7' OPMNH' HMNH' MJQHN' H I +' "M U' NHP'
O J I G' = & -' . ' !..
5P I J P9T' MUP' NHP' G9PPLP G+' / PN' JG' APM ' H I '
' NHP' K J N' 7'QJM O8 HP' G' 7' ! NP' J ' H J '
2G' 7J99T' JN+
)' 7! "' I P' !' NHP!' 8
"P' I MT' PK P ' TPN+' = 4 & ' 2 ' ' (!"5

3 3' V F% 2 ' ' 2!' ,-

' ' "' K# & ' 2 ' >! -' 3'

' HP ' L PLM MN !' G' N OMT' AT' GPM8
XP' L9PMGP' NHP I ' ! N' AT' 9M!O+
7 ' 0 ' A NH' I T' 9 O+
' 2' J9O' NHPT%O' 7 QHN' %NHP' 7 P' ' !' NHP' M 8
XP%O' 7 QHN' NHP P' N +' JN' NH G' N' G' 1J ' 7 N

$' HP' GP!NP!KPS
6' 1 OP' 7 ' GPM' G Q P!8
HPT' HM P' LJN' 7 NHNHP' HM P!' RS
G' LM P!NHPN KM9+' 1 LN' N' M!O' #!N !T' GMTG' NHMN' NHP' 7 NG 9OP G' GHM99' GMT' ,$NH
H I' JL !' NHP H99G MCE ! !Q N ' NHP' KNT
6' XHP P' NHP ' MLL !N IP!N' P' I MT' APGN' OGK P+R
HP P' M P' M JG' I OPG' 7' LPK !Q' JN' NH G 9 !P' GJKH MG' 6 / PN%G GPPU' M' GL N+R
1NHP G Q P' JG' 6 7J NHP' !+R
/1

L !' NHP' H G' MOE ! !Q' N ' NHP' K NT+
HM99' GNMT' NH' JG' S OP ' 7 ' GPM' G' Q P! 8
HPT' HM P' LJN' 7 NH' NHP' HM P!' S
XHP P' NHP ' MLL !N I P!N' P' I MT' APGN' O GK P G
#!O' 9 U' !' NHP ' P!OPM J +' = 4 & $

' ' "' -' >! -' 3

a%7' JN' AP !Q' KHM Q%O ' P' 99' AP' GN 99' AT' 9M!O+
XH KH ' MG' 2' NMUP%N ' P' GHM998 7 ' H G' APGN' 7 KP'
2G' 7 NH' N ' I M!' H G' QM99PTG+' ' NHP' M9PG+
#!O' H 9O' J ' APGN' MO M!NMQP+' = 4 &

B ' 1 ' "' !

' 4PN' NHPT' M P' ! N' E !%O ' XHP P' T !O' L !P' O PG'
+' GNM!O
2' GHM99' O GK P ' M99 ' 2%99' A !Q' NHPP' O
N M QHN ' H ' %N G' 9 UP' N ' Q +' = 4
7 ' M99 G' HM P' AJ 9N
2!' 9P LMN M%G' GM 9G' NHP ' !PGNG' ' NHP' MJQJ P G'
MT' NHPT' U! ' ! N SNHPT' KM!! N' NP998SD9 U'Q I 9T+
#!O' OM P' ! N' GLPMU' NHP ' U! 9POQP+' #!N !T'
2G' M9 M!N' M!O' OPEPKNPO8 M!O ' AT' GNM NG+
" G' 7 PNNPO' 7 NJ!PG' Q P' H I ' H LP ' M!O' 7PM +
17' HMN' HP' HMG ' M!O' HMG' ! N+$

& & . ' !..$ -' ' ' - '. 3

B ' 1

' #99' G' 9 GN[
H G' 7 J9' 3QTLN M!' HMNH' APN MTPO' I P'
T' 79PPN' HMNH' T P9OPO' N ' NHP' 7 P8 M!O' T !OP '
HPT' KMGN' NHP ' KMLG' JL ' M!O' KM JGP' N QPNHP '
/ UP' 7 P!OG' 9 !Q' 9 GN+S L9P NJ !%O' H P[%N G' NH J'
" MGN' GLM 9O' I P' N ' NH G' ! KP8 M!O' I T' HPM N'
MUPG' !9T' M G' !' NHPP+ S O' NHP I ' M99' 79T' 8
0 ' HP!' 2' M I ' P P!QPO' JL !' I T' KHM I
2' HM P' O !P' M99 S O' NHP I ' M99' 79T' AP' Q !P+
^3W N' (
1' GJ!' NHT' JL GP' GHM99' 2' GPP' ! ' I P
0 NJ!P' M!O' #!N !T' LM N' HP P8 P P!' HP P'
5 ' P' GHMUP' HM!OG+S#99' K I P' N ' NH G' \SD HP' HPM NG'
HMN' GLM! P9%O' D I P' MN' HPP9G ' N ' XH I' 2' QM P'
HP ' GHPG' O ' O GKM!OT' I P9N' NHP ' G PPNG'
1!' A9 GG I !Q' MPGM 8 M!O' NH G' L !P' G' AM U%O
HMN' P N LL%O' NHP I ' M99+' PN MT%O' 2' M I '
1' NH G' 7M9GP' G J9' 7' 3QTLN[NH G' Q M P' KHM I +
XH GP' PTP' APKU%O' 7 NH' I T' M G ' M!O' KM99%O' NHP I ' H I P8
XH GP' A G I ' MG' I T' K !PN ' I T' KH P7' P!O+
/ UP' M' QHN' Q LGT' HMNH ' MN' 7MGN' M!O' 9 GP+
PQJ 9%O' I P' N ' NHP' P T' HPM N' 7' 9 GG+S
XHMN ' 3 G' 3 G' 2

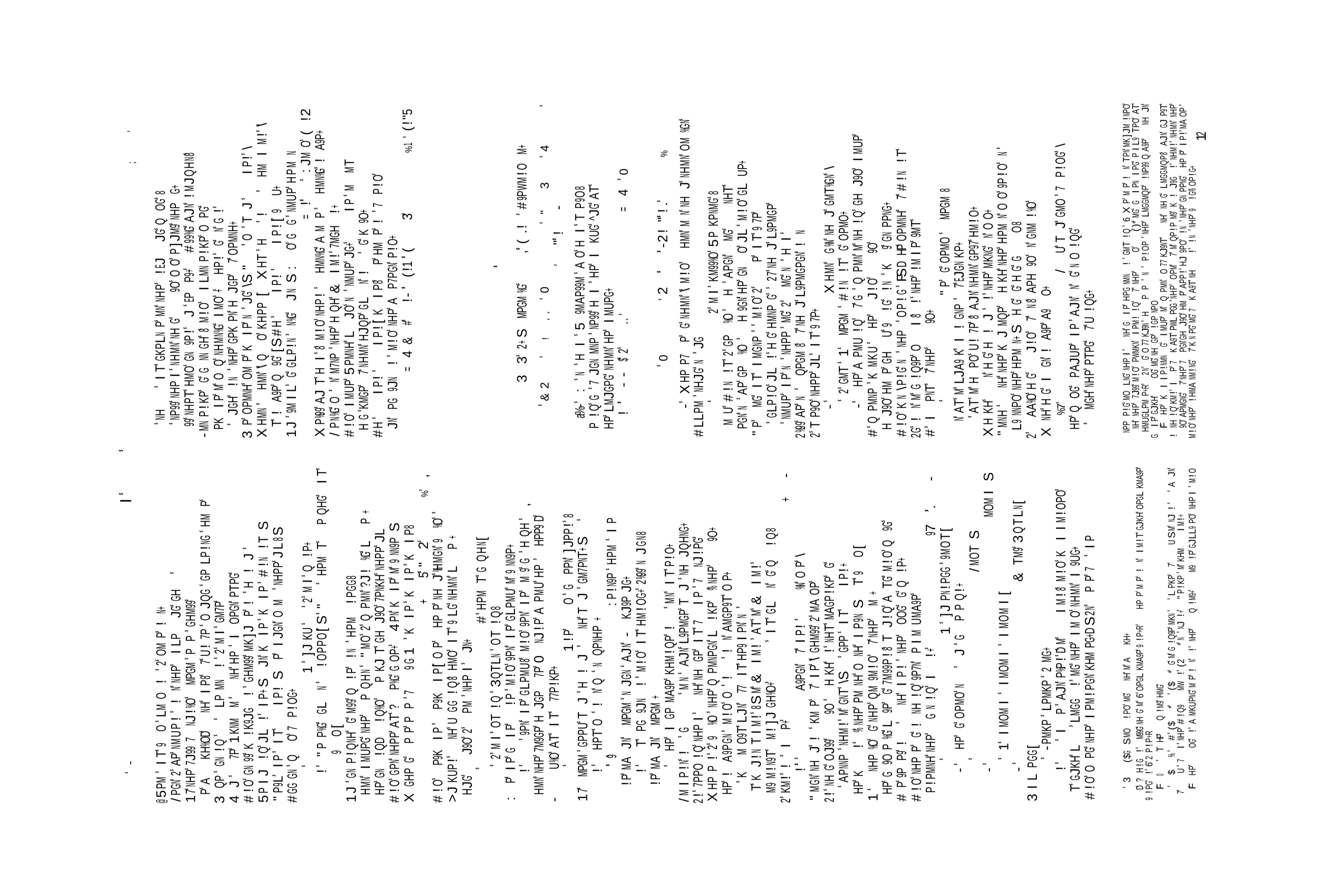
3!NP ' ' 1

#H' NH J' GLP99[# MJ!N+
9P +' XHT' G' I T' 9 O' P! MQ%O' MQM !GN' H G' 9 P' \
#!N+' M! GH8 ' 2' GHM99' Q P' NHPP' NHT' OPGP !Q+
#!O' A9P I GH' MPGM %G' N J I LH+' / PN' H I ' NMUP' NHPP+
#!O' H GN' NHPP' JL' N ' NHP' GH JN !Q' L9PAP M!G'
0 99 ' H G' KHM N' 9 UP' NHP' Q PMNPGN' GL N'
17' M99' NHT' GPW' I GN' I !GNP 9 UP ' AP' GH !'
0 ' L %GN' O I !JN PG' 7 ' O 9NG8 FM!O' 9PN

D (' HP' Q !M9' HMG' ' HP' P I P!OMN !' H KH' G' AT' "M! '
I P ' G' EJO K JG8 M!O' N' G' GJLL NPO' AT' NHP' 7MKN' NHMN' ' MG' 7 I P 9T' GLP9N'

' X P' 7 99 ' NHP' Q !M9+' HP' O !M T' PMO !Q' G S
6' ' L %GN' O I !JN PG' ' O 9NG8 R
M!O' N' G' PWL9M !PO' NHMN' NHP' L PGN' O I !JN PG' M P' NHP' G I M99PGN' L PKPG' 7' I !PT+'
1NHP G' PMO' 6 7 ' ./' O I !JN PG' M!O' O NG' PMKH' I PM! !Q' G I M99' I !PTG+' XP'
AP9 P P' NHMN' NHP' 6 L %GN' O I !JN PGR' M P' NHP' 9 PGN' 7' NHP' L LJ9MKP ' MG' NHP'
X' O 9NG' O M P' NHP' I GN' GNJL O+' XP' I JGN ' NHP P7 P ' J!OP GNM!O' ' N ' I PM! A7 '
NHP' Q MN 7 KMN !' 78' ' MO LN' M' GJQQPGN !' AT' M9 !PSAP' GH !TM ' DK+

X J9OGN NH J' AP' !O %O' !'Q PMN' & I P' M!O' GPP'
HT' I MGNP' 'NHJG' N'H' L9LMKH%O'ĐM I G' AP!O !Q'O !'
" G' K Q A9P' !PKU' H G' 7MKP' GJAOJPO'
'LP!P'N MN P' GHM I P8 H 9GN'NHP' HPP9%O' GPMN'
1'7 NJ!MNP' MPGM' O M !' AP7 P' H I ' A M!OPO'
" G' AMGP!PGG' NHMN' P!GJPO'\
!-' 6' 2' J9O' ! N' GPP%N+
?' IP' %HP!8 7 ' N'H' M' J!O'?' I JGN' AP' KJ %O'
5 M ' NHMN' NHT' H !PGN' G O' H KH' NH J' HMGN' !'
GN JGP7J9 7 ' NHT' K J!N T+
!-' 1' G ' LM O !' I P+
?' XHP!'2' O O' I MUP' NHPP' 7 PP' G %GN' NH J' ! N' NHP!'
'O ' NH G' HP!'2' AMOP' NHPP'\ 5 ' N' MN' !KP'#
1 'NHT' L PKPOP!N' GP KPG' M P' M99
JN' MKK OP!NG' J!LJ L G%O' 5 M ' M!O' K I P+
!-' J !' 7 I' I' P' NHP!' NHMN' ! A9P' K J!NP!M!KP+
XHP P !' NHP' GH L' 7'NHP' H 9P' 9O%9 PG+
/ ' NHPP+ = & 3. ! '
!-' T' G O' G' O M !+
HP!'9PN' N' O ' MN' !KP
HP' NH !Q' HT' NH J' HMGN' O M !' N+ T' OPM ' I MGNP +
!-'
T' KML NM ! ' M!O' I T' P I LP 8 9PN' I P' GMT+
P7 P' 2' GN UP' NH G' A9 OT' GN UP' 7M P P998
' % G' GM O ' I M!'8SM!O' 7M P P99+
!-' M P P99 ' Q PMN' KH P7+' HM99' 2' GN UP' ! '9 '3 G+
!-' XHT' NHP P' NHP!*F=> -' ! ' -' - W!! "9 HJG' 2'
O ' PGKMLP' NHP' G ' =
17'# ! N !'T%G' OPMNH+' P
$ H KP' ! A9P 'NHM!' I TGP97[
H J' NPMKHPGN' I P' 1' M9 M!N' 3 G' HMN'
2' GH J9O' M!O' NH J' K J9OGN' ! N+ T']JPP!' M!O' 3 G'
"M P' AT' NHP ' A M P' !GN JKN ! ' Q N' JL !' I P'
#' ! A9P!PGG' !' PK O' ' JN' 2' 99' AP'
#' A OPQ I' !' I T' OPMNH' M!O' J!' ! N %N'
#G' N ' M' 9 P %G' APO+' IP' NHP!' 8 M!O' 3 G
HT' I MGNP ' O PG' NHT' GKH 9M 8 N ' O ' NHJG
9 + => 3'!' -'-2! "
)' 9PM !%O' 7'NHPP+' " [! N' OPMO'\ ! N' OPMO'\S
HP' QJM O SH ' [S1 ' OPGLMNKH' IP+
I O ' "' : JM O+
' & "' X HMN%G' NHP' ! GP' \
' 2' HM P' O !P' I T' U' 99' 7 P!OG' 1 ' I MUP' M!' P!O
17' HMN' 2' HM P' APQJ!+ HP' GNM ' G' 7M99P!+
% "' #9MG' M!O' P[
2 & "' # !O' N I P' G' MN' H G' LP O+
' /PN' H I ' NHMN' 9 PG' I P' GN UP' I P' OPMO+
' & "' N' 2+
% & "' ' M!T' !P+ = 4 & ' : JM O+
) ' & "' ' HT' OPMNH' M!O' 7 NJ!PG' A O' NHT' 7 99 P G' 79T+
H G' G O' AJN' GH !' N ' MPGM ' NH' NH G' N O !QG+
HM99' P!NP ' I P' NH' H I +
O
! X HP P5 I PO' NHP P+
' /
' PG' HP' \
X 9N' NH J' ! N' M!G P ' I M!' \ = 4 ' O
' # N' NH J' NHP P ' 5 I PO' \ 5 M ' NHT' G O ' M!O'
Q P' I P
J7 K !Q' GN UPG' 7 ' OPMNH+
' , (S6 S7 9OPO+
% HP' Q !M' HMG' $ * WH M' ! NP 7 !NP QMN !-' JN' 7 NHP' I !JI P!N N ' APGN ' NHP' L ' 9M+9N'
$' @ D' % - %0 '!8 $S I MOP' NP I G' NH+
1
U GG+ ' % ' - LP' MOOPO' $ 9P LMN M' OM PG' ! N' K I P O ,' JN' 7 !NP I !JI P!N N ' APGN ' NHP' L ' 9M+9N'



3 ' #!O' GN M!QP' N' G
HMN' !MNJ P' I JGN' K ILP9' JG' N ' 9M I P!N'
1J ' I GN' LP G GNPO' OPPOG+
E ' " G' NM !NG' M!O' H ! J G
X MQ%O' P]JM9' NH' H I+
3 ' #' M P ' GL N' !P P
5 O' GNPP ' HJ I M! NT8 AJN' T J ' Q OG ' 99' Q P' JG' D
I P' 7MJ9NG' N ' I MUP' JG' I P!+' MPGM ' G' N JKH%O+
E ' XHP!' GJKH' M' GLMK JG' I %G' GPN' AP7 P' H I+
"P' !PPOG' I JGN' GPP' H I GP97+
-' 1' # !N !T[
2' HM P' 7 99 %O' NHPP' N ' NH G8$ S JN' P' O ' 9M!KP'
5 GPMGPG' !' LJ ' A O PG ' 2' I JGN' LP 7 KP'
"M P' GH !' N ' NHPP' GJKH' M' OPK9 ! !Q' OMT+
1 '9 U !' NH !P8 P' K J9O' ! N' GNM99' N QPNHP '
2!' NHP' H 9P' 9O ' JN' TPN' 9PN' I P' 9M I P!N+
X NH' NPM G' MG' G P P Q!' MG' NHP' A9 O' 7' HPM NG+
HMN' NH J ' IT' A NHP ' IT' K ILPN N '
2!' N L' 7' M99' OPG Q!' IT' I MNP' !' P I L P
0 P!O' M!O' K ILM! !' !' NHP' 7 !N' 7' M +
HP' M I ' 7' I !P' !' A OT' M!O' NHP' HPM N
XHP P' I !P' H G' NH JQHNG' O O' U !O9P SDNHMN' J ' GNM G
! PK !K 9MA9P ' GH J9O' O OP
1J ' P]JM9!PGG' N ' NH G+ S" PM ' IP ' Q O' 7 P!OG S
JN' 2' 99' NP99' T J' MN' G I P' I PPNP ' GPMG !

' ' PGGP!QP +

HP' AJG !PGG' 7' NH G' I M!' 9 UG' JN' 7' H I+
X P%99' HPM ' H I ' HMN' HP' GMTG+ S XHP!KP' M P' T J' \
E --' #' L ' 3Qa] N M!' TPN+' HP']JPP!' I T' I GN PGG+'
!7 !%O' !' M99' GHP' HMG ' HP ' I !J I P!N+
17' NHT' !NP!NG' OPG PG' !GN JKN !8
HMN' GHP' L PLM PO9T' I MT' 7 M I P' HP GP97'
' NHP+' MT' GHP%G' 7 KPO' N +
%7' O' HP ' HM P' Q O' HPM N8
HP' ' ..' - *' ' 0 ' +' ' ' 0
" ' H ! J MA9P' M!O' H ' U !O9T' P'
5PNP I !P' 7 ' HP ' 7 ' I GM ' KM!! N' 9 P'
' AP' J!QP!N9P+
E --+' ' NHP' Q OG' L PGP P' NHPP' ' 9 4
--' I P' H NHP ' - KJ9P JG' : ' M!O' GMT'
XP' LJ L GP' HP ' ! ' GHM I P ' Q P' HP ' HMN' K I 7 NG'
HP']JM9 NT' 7'$N P ' LMGG !' GHM99' P]J P8
/PGN ' !' HP ' Q PMN!PGG ' AT' G I P' I NM9' GN UP'
HP' O ' OP7PMN' J G ' 7 ' HP ' 9 7P' !' & I P'
X J9O' AP' PNP !M9' !' J ' N J I LH ' :
#!O ' NH' T J ' GLPPO PGN ' A !Q' JG' HMN' GHP' GMTG+
#!O' H ' T J' 7 !O' 7' HP +
!' GPGM ' 2' GHM99+
= 4 '
-' : M99JG ' Q ' T J' M9 !Q+ S XHP P%G' 5 9MAP99M
' GPK !O' - KJ9P JG' \ 9 4 ' 4
3 $' E ' 5 9MAP99M[
--' / PN' H I ' M9 !P ' 7 ' 2' P I P I AP ' ! '
" ' HP%G' P I L9 T%O 8 HP' GHM99' !' N I P' AP' PMOT+
: ' NH' I P' N ' I T' NP !N ' HP P' T J' GHM99' GPP'
" ' HM O9T' 2' MG' O M !' !N ' NH G' M 8
" ' KM9 I ' M!O' QP!N9P' 2' L KPPOPO' GN 99
2!' M99' I T' N !QG ' : ' NH' I P ' M!O' GPP
HMN' 2' KM!' GH ' !' NH G ' $' + 4 &

3 3' 22+ S#9PWM!O M ' ' !! ' ' ' E! &
' ',)# ' ' "' G
', !' T' OPG 9MN !' O PG' APQ !' N ' I MUP'
#' APNNP ' 9 7P ' % G' LM9N T' N ' AP' MPGM 8

$' F '' 8 ' $ ' ' $ % SO P!' NHPP' N ' NH G+
' M9 !P' GMTG ' 6' 1J ' MJNH ' HP P' @MG' !' !Q' " P! T' 222+ ' # KN' +' KP!P' 2+ '
9 MG' MNNP I LNPO' N ' PWH A N' MN' !KP' NHP' JNG OP' M!O' NHP' !G OP' 7' M' AJ 9O !Q+' 2N'
J9O' AP' I L GG A9P' N ' PL PGP!N' NH G' GKP!P' !' M!T' MT' !' NHP' GNMQP ' AJN' AT'
I MU !Q' 9P LMN M' M!O' HP ' MNNP!OM!NG' GLP99K' M99' NHP ' GLPPKHPG ' N 99' NHP']JPP!' G'
GP CPO ' NH !' NHP' I !J I P!N+R' 1J ' PMOP G' 99' PK 99PKN' HMN' P' HM P' G ' 7NP!'
)

N' AP !Q' O NJ!P ' HP%G' AJN' O NJ!P%G' U!M P
#' I ! GNP ' 7' HP ' 99 ' # !O' N' G' Q PMN'
' O ' NHMN' NH !Q' NHMN' P!OG' M99' NHP ' OPPOG8
XH KH' GHMKU9PG' MKK OP!NG ' M!O' A 9NG' JL' KHM!QP8
XH KH' G9PPLG ' M!O' !P P ' LM9MNPG' I P' NHP' OJ!Q '
HP' APQQM %G' !J GP ' M!O' MPGM %G+F

$' !' '3 -' !.' ' E! & $' #, 1 ' 1 '
(' "' 9O P G+

!' MPGM ' GP!OG' Q PPN !Q' N ' NHP']JPP!' 7' 3QTLN8
!O' A OG' NHPP' GNJOT' !' HMN' 7M ' OP I M!OG'
H J' I PM!% N' N ' HM P' H I ' Q M!N' NHPP+
!' 98 9' X HMN%G' NHT' !M I P\
!' T' !M I P' G' - KJ9P JG+
!' 98 9' # !N !T
5 O' NP99' I P' 7' T J ' AMOP' I P' N JGN' T J8 AJN'
2' O ' ! N' Q PMN9T' KM P' N ' AP' OPKP %O+
HMN' HM P' ! ' JGP' 7 ' N JGN !Q+' 27' T J ' I MGNP '
X J9O' HM P' M']JPP!' H G' APQQM ' T J' I JGN' NP99' H I '
HMN' I MEPGNT' N ' UPPL' OPK J I ' I JGN'
' 9PGG' APQ' NHM!' M' U !QO I ' 8 7' HP' L9PMGP' ;
' Q P' I P' K !]JP %O' 3QTLN' 7 ' IT' G !
"P' Q PG' I P' G ' I JKH' 7' I !P' !' MG' 2'
X 99' U!PP9' N ' H I ' NH' NHM!UG+
!' P' 7' Q O' KHPP 8
4 J' M P' 7M99P!' !N ' M' L !KP9T' HM!O8 7PM ' ! NH !Q8
MUP' T J ' 7J99' P7P P!KP' 7 PP9T' N ' IT' 9 O+
XH ' G' G ' 7J99' 7' Q MKP' NHMN' N' 79 G' P '
1!' M99' NHMN' ! PPO8 /PN' I P' PL N' N ' H I '
4 J ' G PPN' OPLP!OP!KT' M!O' T J' GHM99' 7 ! '
#' K !]JP ' NHMN' 99' L MT' !' M O' 7 ' U !O!PGG
XHP P' HP' 7 ' Q MKP' G' U!PP9%O' N +
!' ^' 8 9' - MT' T J ' NP99' H I
2' M I ' H G' 7 NJ!P%G' MGGM9 ' M!O' 2' GP!O' H I '
HP' Q PMN!PGG' HP' HMG' Q N+' 2' H J 9T' 9PM !'
#' O KN !P' 7' APO P!KP8 M!O' J9O' Q9MO9T'
/ U' H I ' %NHP' 7MKP+
!' H G' 2%99' PL N ' OPM ' 9MOT+
"M P' K I 7 N8 7 ' 2' U! ' T J ' L9 QHN' G' L N PO'
17' H I ' NHMN' KMJG%O' N+
' 4 J' GPP' H ' PMG 9T' GHP' I MT' AP' GJ L G%O 8
+ ' ((' "' !!' !.' ' : JM O' - "' '
E! & ' (5' ' "" ' , "' 3 -' ' 2 "!2$
"$ 1 3' " - " "$! ' "' /31-# &#+'
7! ' !.' ' : JM O' & (' "'!, ' '3 -
: JM O' HP ' N 99' GPGM ' K I P+$%
+ !' ' "' ' : JM O+' 4 ' 4 '
-' & TM9']JPP!' 2
$ 1' 9P LMN M' [NH J' M N' NMUP!' ']JPP![S
!' >J KU']J KU' Q O' HM!OG+' + 2 3' ' " 33 '
!' " 9O ' NHT' 9MOT ' H 9O+
+7 I -' "' " - -' '
5 ' ! N' T J GP97' GJKH' !Q' H ' M P' !' NH G'
&P9 P %O' AJN' ! N' APN MT%O+
!' X HMN ' 7' OPMNH' N
HMN' OG' J ' O QG' 7' 9M!QJ GH' \
!' 9P LMN M
5 ' ! N' MAJGP' I T' I MGNP %G' A J!NT' AT'
HP' J!O !Q' 7' T J GP97' 9PN' NHP' 9O' GPP'
" G' ! A9P!PGG' P99' MKNPO ' H KH' T J ' OPMNH'
X 99' !P P ' 9PN' K I P' 7 NH+
!' X HP P' M N' NH J+' 5PMNH' \
I P' H NHP ' K I P[K I P ' K I P ' M!O' NMUP' M']JPP!'
X NH' I M!T' AMAPG' M!O' APQQM G[
!' 1' NP I LP M!KP ' 9MOT[
!' ' 2' 99' PMN' ! ' I PMN+' 2%99' ! N' O !U ' G 8

GM O' MA JN' NHP' GPK !OM T' GNMQP' 7' NHP' 9O' NHPMN P ' H KH' K !N M!KP' Q N' O' 7'
NHP' O 77 KJ9NT' HP P' L !NPO' JN+' @ PP' 1NHP99 ' 299JGN MN !' 7' # KN' +
F $ ' " =%' % ' ' (% =%' G' J!]JPGN !MA9T' ! N ' MG' ? H!G !
PWL9M !G' N ' NHP' Q GG' GJAGNM!KP' H KH' P]JM99T' ! J GHPG' NHP' APQQM ' M!O' MPGM +'
L !' NHP' MJNH NT' 7' X M AJ N !' M!O' ? +' 99 P %G' +' PKN ' NHP' O !M T'
PMO !Q' G 8 '- ' %' ' $ ' ' !GNPMO' 7' $ ' ' 7' NHP' 7 9 +

J. L. GÉRÔME, PINXT

J. C. ARMYTAGE, SCULPT

CLEOPATRA AND CÆSAR.

LONDON: VIRTUE & Co LIMITED.

27 O9P NM9U 99 !KP AP !PKPGGM T+
2%99 ! N G9PPL !P NHP D H G I NM9 H JGP 2%99 J ! 5 MPGM HMN HP KM! ! G NHMN 2 X 99 ! N M N L ! !%O MN T J I MGNP %G K J N8 !KP AP KHMGN G%O NH NHP G AP PTP 17 OJ99 1KNM M+ HM99 NHPT H GN I P JL+
#!O GH I P N NHP GH JN !Q & M 9PN T 17 KP!GJ !Q& I P \ &MNHP M O NKH !3QTLN P QP!N9P Q M P J!N I P[MNHP ! 9JG% I JO /MT I P GNM U !MUPO M!O 9PN NHP MNP 79 PG 9 I P !N MAH !Q[MNHP I MUP T K J!N T%G H QH LT M I OPGD I T Q AAPN+
#!O HM!Q I P JL !KHM !G[
! 4 J O PWNP!O
HPGP NH JQHNG 7H 7J NHP NHM! T J GHM99
0 !O KMJGP ! MPGM +

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! - KJ9P JG
X HMN NH J HMGN O !P NHT I MGNP DGM U! G+
#!O HP HMNH GP!N7 NHPP 7 NHP]JPP!+
2%99 NMUP HP N I T QJM O+
! 5 9MAP99M
2N GHM99 K !NP!N I P APGN AP QP!N9P N HP +S
MPGM 2 99 GLPMU HMN T J GHM99 L9PMGP
9 !& ,
27 T J%99 P I L9 T I P N H I+
! MT 2 J9O O P+
+ 4 & "" 9O P G
! GN ! A9P P I L PGG T J HM P HPM O 7 I P \
! 2 KM!! N NP99+
! #GGJ PO9T T J U! I P+
! ! I MNNP G HMN 2 HM P HPM O U! !+
4 J 9MJQH HP! A TG I P! NP99 NHP O PM I G8
2G%N ! N T J N KU \
! 2 J!OP GNM!O ! N I MOM I +
! 2 O PM I N NHP P MG M! P I LP #!N !T8S
1 GJKH M! NHP G9PPL NHMN 2 I QHN GPP
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! 27 N I QHN L9PMGP T J S
! " G 7MKP MG MG NHP HPM P!G8 M!O NHP P !GNJKU
#GJ!M!O I ! H KH UPLN NHP K J GP M!O 9 QHNPO
HP 9 NN9P 1 NHP PM NH+
! E!- G P P Q! K PMNJ P S
! " G 9PQG APGN O NHP KPM! H G PM %O M I
PGNPO NHP 9O H G KP MG L LP N PO
#G M99 NHP NJ!PO GLHP PG M!O NHMN N 7 P!OG8
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" P MG MG MNN9 !Q NHJ!OP + O H G A J!NT+
HP P MG ! !NP ! %N 8 M!MJNJ I !F%N MG+
HMN Q P NHP I P AT PML !Q " G OP9 QHNG
X P P O 9LH ! 9 UP8 NHPT GH %O H G AMKU MA P
HP P9P I P!N NHPT 9 %O ! 2!H G 9 P T
X M9U%O K !G M!O K !PNG 8 PM9 I G M!O G9M!OG P P
#G L9MNPG D O LL%O 7 I H G L KUPN+
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P GN M!QP 7 I G NH 7M!KT8 TPN N I MQ !P
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! " PM I P Q O I MOM I

4 J 9 GG G MG T J GP97 Q PMN8 M!O T J APM N
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1%P NMUP LJ GJPO GJKKPGG AJN 2 O 7PP9+
T NHP PA J!O 7T J G M Q P7 NHMN G I NPG
T P T HPM N MN N+
! 2 NHM!U T J G +
! T J HMN MPGM I PM!G N O NH I P \
! 2 M I 9 MNH N NP99 T J HMN 2 J9O T J U!P +
! MT L MT T J G S
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-H KH G NHP]JPP! 7 3QTLN \6
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! NHP Q OG
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2 I JGN APT+
%7 MUP N T J ! HM O NH JQHNG
HP PK O 7 HMN !EJ PG T J O O JG
H JQH NNP! ! J 79PGH P GHM99 P I+P I AP
#G NH !QG AJN O !P AT KHM!KP+
! 9P G %NHP 9O
2 KM!! N L EPKN I !P !KMJGP G P99
I MUP N K9PM 8 AJN O K !7PGG 2 HM P
PP! 9MOP! NH 9 UP 7 M 9N PG H KH AP7 P
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% 9P LMN M U! +
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27 T J MLL9T T J GP97 N J !NP! NG
@XH KH N M OG T J M P I GN QP!N9P T J GHM99 7 !O
#AP!P7 N !NH G KHM!QP8 AJN 7 T J GPPU
9MT ! I P M K JP9NT AT NMU !Q
#!N !T%G K J GP T J GHM99 AP PM P T J GP97
17 I T Q O LJ L GPG M!O LJN T J KH 9O P!
NHMN OPGN JKN ! H KH 2%99 QJM O NHP I 7 I+
27 NHP P !T J P9T 2%99 NMUP I T 9PM P+
! #!O I MT NH JQH M99 NHP 9O8 %N G T J G8 M!O P
4 J %GKJNKHP !G M!O T J G Q!G 7K !]JPGN GHM99
"M!Q ! HMN L9MKP T J L9PMGP " P P I T Q O 9 O+
%7 4 J GHM99 MO GP I P ! M99 7 9P LMN M+
! H G G NHP A P7 7 I !PT L9MNP M!O EP P9G
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! H G G I T N PMGJ P 8 9PN H I GLPMU I T 9 O
L !H G LP 9 NHMN 2 HM P PGP %O
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7 MOM I
2 HMO MNHP GPM I T 9 LG NHM! N I T LP 9+
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! X HMN HM P 2 UPLN AMKU \
7 3! JQH N LJ KHMGP HMN T J HM P I MOP U! !+
-MT A9JGH ! N 9P LMN M8 2 MLL P
4 J GO I !NHP OPPO+
! PP MPGM [1 APH 9O+
" L I L G 7 99 %O [I !P 99 ! AP T J G8
#!O GH J9O P GH 7N PGNMNPG T J G J9O AP I !P+
HP !Q MN NJOP 7 NH G P9PJKJG O PG
3 P!I MUP I P 9O 1 G9M P 7 ! I P N JGN

%?H!G !PWL9M !G NH G P NH !U K PKN9T 6 2 99 ! N PMN M!O 7 N 99
AP !PKPGGM T ! 7 !KP N MGNP M I IP!N !O9P NM9U 7 IT LJ L GP 2 99
! N G9PPL !P NHP +R

2 %SNHP /MN !L9J MG 7LT M I O JGPO MG M]JMO GT99MA9P+

HP K PKN !
MG I MOP AT HP AM9O+
D ' %- PKPG 7G 9 P I !PT P P KM99PO !M 9 P%G 7
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6 &MN%GN NH J NH G AJN MN N $ -' %1.
1/ 22

HM!' 9 P' NHMN%G' H %O S X HMN' Q PGN' NH J' AMKU' \ NH J' GHM9N'
: ' AMKU' 2' M M!' N' NHPP8 AJN' 2%99' KMNKH' NH !P' PTPG+
H JQH' NHPT' HMO' !QG' 9M P' G J99PGG' 99M !' O Q[
' M P9T' AMGP[
a 7' : O']JPP!' 9PN' JG' P!N PMN' T J+
!' 1' KGGM' HMN' M' J!O !Q' GHM I P' G' NH G8
HMN' NH J' JKHGM7 !Q' HP P' N' G N' I P
5 !Q' NHP' H ! J' 7' NHT' 9 O9 !PGG'
' !P' G' I PPU' NHMN' I !P' !' GP M!N' GH J9O'
-M KP9' NHP' GJ I' 7' I T' O GQ MKPG' AT'
#OO N !' 7' H G' P! T' [MT' Q O' PPGM
HMN' 2' G I P' 9MOT' N 79PG' HM P' PGP %O
2 I I I P!N' N TG' NH !QG' 7' GJKH' O Q! NT'
#G' P' Q PPN' I OP !D' 7 P!OG' NHM98' M!O' GMT+
I P' ! A9P' N UP!' 2' HM P' UPLN' MLM N
O / M' M!O' 1KNM M' N' ' !OJKP
HP ' I PO MN !8 I JGN' 2' AP' J!7 9OPO
X NH' !P' NHMN' 2' HM P' A PO' \ HP' Q OG[2N' G I NPG' I P
P!PMNH' NHP' 7M99' 2' HM P+ - NHPP' Q ' HP!KP8
= !' ((
1 ' 2' GHM99' GH ' NHP' K !OP G' 7' I T' GL NG
H JQH' NHP' MGHPG' 7' I T' KHM!KP S X P N' NH J' M' I M!+
O' * O. ' ' +' '
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!' P' N' U! !' NHMN' P' NHP' Q PMNPGN' M P' I GNH JQHN'
O ' NH !QG' NHMN' NHP G' O 8 M!O' HP!' P' 7M99+
X P' M!G P' NHP G% I P NG' !' J' !M I P
P' NHP P7 P' N' AP' L N PO+
-' 9P LMN M
N' HMN' T J' HM P' PGP %O' ! ' HMN' MKU! 9POQ%O+
-JN' P' %NHP' 99' 7' K !]JPGN' GN 99' AP' N' T J G+
PGN ' N' MN' T J' L9PMGJ P8 M!O' AP9 P P'
I GM %G' ! ' I P KHM!N' N ' I MUP' L CP' NH' T J'
17' NH !QG' NHMN' I P KHM!NG' G 9O+ HP P7 P' AP' KHPP %O' 8
MUP' ! N' T J' NH JQHNG' T J' L G !G' ! ' OPM']JPP!8
O ' P' !NP!O' G' N' O GL GP' T J' MG
4 J GP97' GHM99' Q P' JG' K J!GP9+ OPPO' M!O' G9PPL
1J' KM P' M!O' L NT' G' G' I JKH' JL !' T J+
HMN' P' P I M !' T J' 7 P!O' ' #!O' G' MO PJ+
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-' O ! GH' Q O' 9MOT8 NHP' A QHN' OMT' G' O !P+
#!O' P' M P' 7 ' NHP' OM U+
!' ' " P' NHPP' MQM !
' HM P' GL UP' M9 PMOT' M!O' N' G' L OPO8
: ' LJN' N' N' NHP' HMGNP+
' MOM I ' 2' 99+

B ' $

! ' X HP P' G' NHP']JPP!' \
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!' 5 9MAP99M' P
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X H KH' I T' 9 P' I MUPG' P9 Q !' N' APT' $
2' NP99' T J' NH G' MPGM' NH JQH' T M'
2!NP!OG' H G' E J !PT' B,' M!O' NH !' NH PP' OMTG+
4 J' NH' T J' KH 9O P!' 99' HP' GP!O' AP7 P
MUP' T J' APGN' JGP' 7' NH G' 2' HM P' LP 7 I %O'
4 J' L9PMGJ P' M!O' I T' L I GP+
!' 5 9MAP99M
2' GHM99' P I M !' T J' OPAN +
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#O PJ' Q O']JPP!8 2' I JGN' MNNP!O' !' MPGM +

SK I I !+
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!' OM P P99' M!O' NHM!UG+' ' 2 MG' HMN' NH !U%GN'
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2!' IP' MG' P99' MG' 2' I PKHM! K' G9M PG'
X NH' Q PMGT' ML !G' J9PG' M!O' HM I I P G' GHM99'
L9 7N' JG' N' NHP' P 8 !' NHP' NH KU' A PMNHG+
&M!U' 7Q GG' O PN' GHM99' P' AP' P!K9 JOPO
#!O' 7 K%O' N' O !U' NHP' ML J +
-' HP' Q OG' 7 A O' \
!' MT' %N G' I GN' KP NM !' 2 MG' MJKT' 9 KN G'
X 99' KMNKH' MN' JG' 9 UP' GN J I LPNG8 M!O' GKM9O' HT I P G'
M99MO' JG' JN' %NJ!P' NHP']J KU' K I PO M!G'
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1J' #9PWM!O M!' P P9G8 #!N !T'
HM99' AP' A JQHN' O J!UP!' 7 NH' M!O' 2' GHM99' GPP'
I P' G]JPMU !Q' 9P LMN M' A T' I T' Q PMN!PGG'
2%NHP' L GNJ P' 7' M' H P+
-' 1' NHP' Q O' Q OG[
!' MT' NHMN' G' KP NM !+
-' 2%99' !P P' GPP' N8 7 ' 2' M I' GJ P' I T' !M 9G'
P' GN !QP' NHM!' I !P' PTPG+
!' X HT' NHMN%G' NHP' MT
' 7 9' NHP' L PLM MN !' M!O' N' K !]JP'
HP ' I GN' MAGJ O' !NP!NG+ S ' HM I M!' S

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H ' I P' I T' I P!' 9 UP' M']JPP!8 S : ' 7PNKH'
T' APGN' MNN PG8 S2' M I' MQM !' 7 ' TO!JG
' I PPN' M U' #!N !T S MH' 2 MG' Q +S
' ! A9P' HM I M!' P%99' OPGLMNKH' !OPPO'
#!O' HP!' NH J' HMGN' O !P' NH G' KHM P' 2%99' Q P' NHPP' 9PM P'
' L9MT' N 99' O I GOMT+ S !Q% J' K !' M!O' M99+'
X HP P7 P%G' NH G' ! GP' \ = 4 ' ' ' A!-' 2

' ! ' !.' ' 1?A "
& "' " P P' G' M' J M9' 7P99
HMN' 99' ! N' AP' OP! PO' T J' H QH!PGG% L PGP!KP8
" P' A !QG' T J' 7 QG+
!' /PN' H I' K I P' !+' X HMN' L ' M!' !GN J I P!N
= 4 ' : JM O+
MT' O' M' ! A9P' OPPO' [HP' A !QG' I P' 9 AP NT+
T' PG 9JN !%G' L9MK%O' M!O' 2' HM P' ! NH !Q'
17' I M!' !' I P' ' 7 I' HPMO' N' 7 N'
2' M I' I M A9P K !GNM!N' ! ' NHP' 79PPN !Q' I !'
' L9M!PN' G' 7' I !P+

B ' : JM O' 2 ' ' 9 !' (3 3' ' (-'

" ' H G' G' NHP' I M!+' g
!' # O' M!O' 9PM P' H I+ = 4 ' : JM O+
" MGN' NH J' NHP' L PNNT' I ' 7' 9JG' NHP P+
HMN' U 99G' M!O' LM !G' ! N' \
! ! ' J9T' 2' HM P' H I ' ' AJN' 2' J9O' ! N' AP' NHP' LM NT'
NHMN' GH J9O' OPG P' T J' N' N JKH' H I ' 7 ' H G' A N !Q' G' I_
I NM9' 8 NH GP' NHMN' O' O P' 7' N' O' GP9O I' ' !P P' PK P+
!' &P I P I AP % N' NH J' M!T' NHMN' HM P' O PO' !%N' \
!2 ' P T' I M!T' ' I P!' M!O' I P!' N +' 2' HPM O' 7' !P'
7' NHP I' ! ' 9 !QP' NHM!' TPGNP OMT' M' P T' H !PGN' I M!'
AJN' G I PNH !Q' Q P!' N' 9 P8 MG' M' I M!' GH J9O' ! N' O '
AJN' !' NHP' MT' 7' H !PGNT' H ' GHP' O PO' 7' NHP' A N !Q' 7' N'
HMN' LM !' GHP' 7P9N S J9T' GHP' I MUPG' M' P T' Q O' PL N'
% NHP' I ' JN' HP' NHMN' 99' AP9 P P' M99' NHMN' NHPT' GMT'
GHM99' !P P' AP' GM PO' AT' HM97' NHMN' NHPT' O ' ' JN' NH G' G' I GN'
7M99 A9P' NHP' I %G M!' OO' I +
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!2 ' 2' GH' T J' M99' E T' 7' NHP' I +
!' OM P P99+' ^ 9 !' - -' "!2 ' ' (-'
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99' O' H G' U !O+
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!2 ? ?!!'$ T J NHP I G ! N N AP N JGNPO AJN !
NHP UPPL !Q 7 GP LP L9P 7 !OPPO NHP P G ! Q O_
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!2 P T Q O Q P N ! NH !Q 2 L MT T J 7 N G
! N NH NHP 7PPO !Q+
!' X 99 N PMN I P \
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NHP OP 9 H I GP97 99 ! N PMN M I M!' 2' U! NHMN M
I M!' G M O GH 7 NHP Q OG 7 NHP OP 9 O PGG HP ' ! N+
JN N J9T NHPGP GM I P H PG !' OP 9G O NHP Q OG Q PMN
HM I !' NHP I P!8 7 !' P P T NP!' NHMN NHPT I MUP NHP
OP 9G I M 7 P+
!' X P99 QPN NHPP Q !P8 7M P P99+
4PG 7 G NH8 2 GH T J E T 7 NHP I +

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!' : P I P I T AP LJN !' I T K !8 2 HM P
2 I I NM9 9 !Q G !' I P8 ! ' I P
HP EJ KP 7 9Qa`.LN%G Q MLP GHM99 I GN NH G 9 L S
4M P TM P Q O 2 MG8]J KU+S PNH !UG 2 HPM
#!N !T KM998 2 GPP H I JGP H I GP97
L M GP I T ! A9P MKN8 2 HPM H I I KU
HP 9JKU 7 PPGM M7NP MNH " JGAM!O 2 K I P ;
N NHMN !M I P I T K J MQP L P I T N N9P [
2 M I 7 P M!O M 8 I T NHP P9P I P!NG
2 Q P N AMGP 9 7P+S SHM P T J O !P \
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OM P P99 U !O HM I M!8S2 MG 9 !Q 7M P P99+
9: -- - 00 &# . - 00" " -
" M P 2 NHP MGL K !' I T 9 LG \ 5 GN 7M99 \
27 NH J M!O !MNJ P KM!' G QP!N9T LM N+
HP GN UP 7 OPMNH G MG M 9 P %G L !KH+
X H KH HJ NG M!O G OPG %O+ 5 GN NH J 9 P GN 99
27 NHJG NH J M! GHPGN NH J NP99%GN NHP 9O
2N G ! N NH 9PM P NMU !Q+
5 GG 9 P NH KU K9 JO M!O M !8 NHMN 2 I MT GMT+
HP Q OG NHP I GP9 PG O PPL [
! H G L PG I P AMGP
27 GHP 7 GN I PPN NHP KJ 9PO #!N !T
" P%99 I MUP OP I M!O 7HP 8 M!O GLP!O NHMN U GG
X H KH G I T HPM P!' N HM P+ I P NH J I NM9
PNKH 9 !' -,$ 16 - , , -' !' (-
X NH NHT GHM L NPPNH NH G U! N !N !G KMNP
17 9 7P MN !KP J!N P L P! I JG 7 9+
P M!Q T M!O OPGLMNKH+ 1 K J9OGN NH J GLPMU [
HMN 2 I QHN HPM NHPP KM99 Q PMN MPGM MGG
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1 PMGNP !' GNM [
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5 GN NH J' ! N GPP I T AMAT MN I T A PMGN+
HMN GJKUG NHP !J GP MG9PPL
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!' #G G PPN MG AM9 I MG G 7N MG M MG QP!N9P S
1 #!N !T [SD MT 2 99 NMUP NHPP N S
+ , , 5 3 ! -,' !' '
# HMN GH J9O 2 GNMT S +> -'! ' ("$ "' " -
2!' NH G 9O Đ 9O \S 7M P NHPP P99+S
A MGN NHPP+ 5PMNH [!' NHT L GGPGG !' 9 PG
#' 9MGG J!LM M99P9%O+S5 !T !O G K9 GP 8
#!O Q 9OP!' -H PAJG !P P AP APHP9O
17 PTPG MQM !' G TM9[4 J K !%G M T#
2%99 I P!O N M!O NHP!' L9MT+

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2 & " X HP P G NHP]JPP!' \
LPMU G 7N9T MUP HP ! N+

$ NPP P!G I NG NHP I L PGG P $

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1 K I P8 MLMKP OPGLMNKH 2 LM N9T 7PP9 NHPP+
& " #LL MKH H [#99%G ! N P99 MPGM %G AP_
QJ 9%O+
% " HP P%G 5 9MAP99M GP!N 7 I I GM 8SKM99
H I +
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2N G P99 O !P M!O 7 NN !Q 7 M L !KPGG
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! " Q PG N HP P \
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! MPGM NHT NH JQHNG
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G JQHN%GN N H !OP +
8 #' MT NHP P M MT 7 MPGM [

& * " "

! 1 G T J M P N GJ P M!' MJQJ P 8
HMN T J O O 7PM G O !P+
%- M PGN MN NHP 9MGN8
HP 9P P99%O MN J LJ L GPG M!O AP !Q TM9+
U HP ! MT+S HP I M! !P 7 NHP OPMNHG \
2 O ! N GPP NHP I A9PPO+
! X H MG 9MGN NH NHP I \
2 & " #G I L9P K J!N T I M! NHMN A JQHN HP 7 QG
H G MG H G AMGUPN+
V34 - G !%O NHP! +
2 " 1 MPGM
H G HM I M!' 9 %O AJN ! 8 GHP GN O M!O GLMUP
2 7 J!O HP N I I !Q JL NHP O MOP I
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27 NHPT HMO G M99 %O L G !' %N J9O MLLPM
T PWNP !M9 G P99 !Q ' AJN GHP 9 UG 9 UP G9PPL
#G GHP J9O KMNKH M! NHP ' #!N !T
2!' HP GN !Q N 9 7Q MKP+
! " P P !' HP A PMGN+
HP P G M P!N 7A9 O M!O G I PNH !Q A9 !
HP 9 UP G !' HP M I +
2 " H G G M!' MGL K%G N M 9 M!O NHPGP 7 Q 9PM PG
" M P G9 I P JL !' NHP I GJKH MG NHP MGL K 9PM PG
L !' NHP KM PG 7 9P+
- GN L AMA9P
HMN G GHP O PO 8 7 HP LHTG K M!' NP99G I P
HP HMNH LJ GJPO K !K9JG !G !7 ! NP
17 PMGT MTG N O P+SD MUP JL HP APO8
#!O APM HP I P!7 I NHP I !J I P!N S
HP GHM99 AP AJ PO AT HP #!N !T
Q M P JL !' NHP PM NH GHM99 K9 L !' N
#' LM G 7M I JG " QH P P!NG MG NHPGP
N UP NH GP NHMN L MUP NHP I 8 M!O NHP GN T G
9PGG !' L NT NHM!' H G Q9 LT H KH
JQHN NHP I N AP 9M I P!NPO+ 1J M I T GHM99
2!' G 9P I I !' GH MNNP!O NH G 7J!P M98
#!O NHP!' N & I P+S I P 5 9MAP99M GPP
" QH OP !' NH G Q PMN G 9P I ! NT+

+ 4 & $

F & ' I P 7 NHP I OP !' PO N !G HM P NJ !PO NH G !N 8 NPP P!G
GJQQPGNG NHMN NHP N JP O MG ' # 9P+

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g' ' R ,'% J $'0 :'93 ' J $' $' ./ BK+

* ' CF ' ?HN' CFG' BL GQBGHC' MMB CD?C AH ' H' G?OF' ?OC' CFG' QBAC?C AH ' ?DG' >DA@' ADCF8 ' MBC?DOF ' BHMG ' ACFGDJ G' N C H B FGN

='. BC' HAJ' ? ?H' CA' MGAK?CD?' M?CA' JDCGCF' CF?C' CFGDG' ?DG' >ABD' (HN ' A>'>M?CCGDE' LBC' MGAK?CD?' NP NGN' C' HCA' @?HE' (HN ' AD' FG' VJGDG' C' H' KADC' AD' H' @?CCGD ' A>' G?DHG C ' CMM' NGP GN' BHNDE' HGJ' NGM FC ' CA' F?PG' HCAH B ' ?C' OA@@?HN@GHC ' HGPGD' MG?P H ' F@' H FC' HAD' N?E ' HAD' AHOG' MGCC H ' F@' A' ABC' A>' FGD' FC ' AD' FG' JABMN' KM?E' ?C' NOG' JCF' F@' ND H (' JCF' F@' ?HN' FBHC' OA@@AHME' JCF' F@' ?HN' ?M A' LG' JCF' F@' JFGH' FG' JGHC' CA' ?HE' G GDO G' AD' ?OCP CE' A>' LANj ' HN' A@GC@G' ?M A ' JFGH' FG' JABMN' A' BK' ?HN' NAJH' CFG' OCE' N B GN' M(G' ?' M?PG' H' CFG' H FC ' ?HN' JABMN' KGGD' HCA' KAAD' @GH8 ' JHNAJ ' ?HN' CFGD' FAK ' ?HN' OAMN' ?HN' LD?JM' JCF H' CFG' FAB G ' MGAK?CD?' P ABMN' LG' ?M A' H' ?' OF?@LGD@?N8 ' ?DD?E ' ?HN' ?@LMG' BK' ?HN' NAJH' CFG' CDGGC ' JCF' F@' ' A' CF?C' A>CGHC@G ' HCAH B ' L?DG' ?J ?E' LACF' @AO(' ?HN' LMAJ ' AJ ' CFAB F' @A C' @GH' @ M(GN' CF ' @?HHGD ' EGC' CFG' MG ?HND?H ' JGDG' 0A@@AHME' M?N' A>' CF ' SAMMCE ' ?HN' M(GN' C' JGMM ' ?EH ' PGDE' ?MM?HCME' ?HN' JGME ' CF?C' HCAH B ' FAJGN' CFG@' ?' OA@O?M' >?OG ' CA' JC ' ?' @GDDE' OABHCGH?HOG ' ?HN' CFG' "A@?H ' ?' CD? O?M' >?OG ' CF?C ' CA' ?E ' ?' D@' MAA(I

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= AJ ' HCAH B ' NGM FCH ' H' CFG G' >AHN' ?HN' OFMN F' K? C@G ' PGDE' MM' HGJ ' JGDG' LDAB FC' F@' >DA@' CJA' KM?OG ' #FG' >D C' >DA@' "A@G ' CF?C' F ' LDACFGD' $BO B ' ?HN' BMP?' F ' JG>G' >GMM' ABC' >D C' LGCJGGH' CFG@ GMPG ' ?HN' ?>CGDJ?DN ' >GMM' CA' AKGH' J?D' JCF' >> ?D' ?HN' F?N' LDAB FC' ?MM' CA' HAB FC ' CF?C' CFGE' JGDG' LACF' NDPGH' CA' >ME' ABC' A>' C?ME ' #FG' GOAHN' HGJ ' ? ' L?N' ? ' CFG' >D C ' CF?C' $?LGHB ' OAH-QBGDGN' ?MM ?' JCF' CFG' ?D@E' A>' CFG' ?DCF?H ' >DA@' CFG' DPGD' A>' !BKFD?CG ' ?HN' >DA@' EDO ' BHCA' CFG' OABHCDE' A>' $ENO?' ?KN' AH?' #FGH' LG ?H' HCAH B ' JCF' @BOF' ?NA ' ?' MCCMG' CA' DAB G' F@ GM>' ? ' >' FG' F?N' LGGH' J?(GHGN'ABC' A>' ?' NGGK' MGGK ' ?DN ' ? ' ?' @?H' @?E' ?E ' 0A@H ' ABC' A>' ?' DG?C' NDBH(GHHG ' A ' >D C' A>' ?MM ' FG' LGHC' F@ GM>' ? ?H C' CFG' ?DCF?H ' ?HN' JGHC' ? ' >?D' ? ' CFG' OABHCDE' A>' FAGHOO?' LBC' CFGDG' FG' DGOGPGN' M?@GHC?LMG' MGCCGD ' >DA@' F ' JG>G' BMP?' FGDGBKAH' FG' CD? FC' DGCBDHGN' CAJ?DN ' C?ME ' JCF' CJA' FBHNDGN' ?M ' ?HN' ? ' FG' JGHC' CAA(' BK' F ' >DGHN ' LE' CFG' J?E' CF?C' >MGN' ABC' A>' C?ME' CA' 0A@G' CA' F@' . E' CFG@' FG' J? ' H>AD@GN' CF?C' F ' JG>G' BMP?' J? ' CFG' AHME' O?B G' A>' CF ' J?D ' JFA ' LGH ' A>'?' KGGP F ' ODAA(GN ' ?HN' CDABLMG A@G' H?CBDG ' F?N' KBDKA GME' D?O GN' CF ' BKDA?D' H' C?ME ' H' FAKG' CFGDGLE' CA' ND? J' F@' >DA@' MGAK?CD? ' . BC' LE' AAN' >ADCBHG' F ' JG>G' BMP?' AH ' CA' @GGC' JCF' HCAH B ' O(GHGN' LE' CFG' J?E ' ?HN' NGN' H' CFG' OCE' A>' OOAH ' ?HN' CFGDG>ADG' OC?PB ' ?G ?D' ?HN' FG' JGDG' CFG' G? GD' @?NG' >DGHN ' ? ?H I

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OGDA ' AH' CFG' ACFGD' NG ' LGH ' ?C' CF?C' C@G' CFG' OFG>G C' @?H' A>' ?BCFADCE' ?HN' G C@?CAH' H' CFG' OCE ' FG' CDDGN' BK' ?MM' @GH' ? ?H C' HCAH B ' A' CF?C' H' CFG' GHN' FG' @?NG' CFG' GH?CG' KDAHABHOG' F@' ?H' GHG@E' CA' F ' OABHCDE ' ?HN' ?KKACHCGN' EABH ' ?G ?D' GDSG?HC ' CA' O?DDE' ? G ' LG>ADG' F@' ?HN' BOF' ACFGD' H ' ? ' JGDG' HONGHC' CA' CFG' N H CE' A>' ?' OAH BM' AD' KD?GCAD ' ?HN ' @ADGAPGD ' GHC' DOB ' ?HN' ?H ?' CFGH' OAH BM ' CA' NDPG' HCAH B ' ABC' A>' C?ME ' #FG G' CJA' OAH BM ' CA GCFGD' JCF' CG ?D' JFA' ?M A' F?N' ?H' ?D@E ' JGHC' ? ?H C' HCAH B ' CF?C' LG G' GN' CFG' OCE' A>' &ANGH?' ?HN' CFGDG' APGDCFDGJ' F@' H' L?CCMG ' LBC' LACF' CFG' OAH BM ' JGDG' M?H' CFGDG' HCAH B ' >ME H ' BKAH' CF ' PGD-CFDAJ ' >GMM' HCA' DG?C' @ GDE' ?MM' ?C' AHOG' ' LBC' CFG' OFG>G C' J?HC' A>' ?MM' ACFGD' ?HN' CF?C' JFOF' KHOFGN' F@' @A C ' J? ' >?@HG ' AJLGC' FG' J? ' A>' BOF' ?' CDAH ' H?CBDG ' CF?C' LE' K?CGHOG' FG' JABMN' APGDOA@G' ?HE' ?NPGD CE' ' ?HN' CFG' FG?P GD' >ADCBHG' M?E' BKAH' F@' ' CFG' @ADG' OAH C?HC' FAJGN' FG' F@ GM>' !PGDE' @?H' CF?C' >GGMGCF' J?HC' AD' ?NPGD CE' (HAJGCF' LE' PDCBG' ?HN' N ODGCAH' JF?C' FG' FABMN' NA ' LBC' JFGH' HNGGN' CFGE' ?DG' APGDM?N' JCF' G CDG@CE ' ?HN' LG' ADG' AKKDG GN ' >GJ' F?PG' CFG' FG?DC ' CA' >AMMAJ' CF?C' JFOF' CFGE' KD?' G' ?HN' 0A@@GHN ' ?HN' @BOF' MG ' CA' ?PAN' CF?C' CFGE' DGKDAPG' ?HN' @ M(G' ' LBC' D?CFGD' CA' CFG' OAHCD?DE ' CFGE' EGMN' CA' CFGD' ?OOB CA@GN' G? E' M>G' ?HN' CFDAB F' >?HC FG?DC' ?HN' M?O(' A>' OABD? G' NA' OF?H G' CFGD' >D C' @HN' ?HN'

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HN' CFGDG>ADG' C' J? ' ?' JAHNGD>BM' G ?@KMG' CA' CFG' AMNGD ' CA' GG' HCAH B ' CF?C' J? ' LDAB FC' BK' H' ?MM' >HGHG ' ?HN' BKGD>MBCE ' A' G? ME' CA' NDH(' KBNNMG J?CGD' ?HN' CA' G?C' JMN' >DBC ' ?HN' DAAC ' ?HN ' @ADGAPGD' C' ' DGKADCGN ' CF?C' GPGH' ? ' CFGE' K? GN' CFG' MK ' CFGE' NN' G?C' CFG' L?D(' A>' CDGG ' ?HN' BOF' LG? C ' ? ' HGPGD' @?H' C? CGN' A>' CFGD' >MG F' LG>ADG I

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,'#FG' >DGHN ' A>' LACF' K?DCG ' JABMN' HAC' B>>GD' CFG@' CA' BHDK' ?HE' AMN' @?CCGD ' ?HN' CA' KDAPG' AD' NG>GHN' JFA' F?N' CFG' JDAH ' AD' D FC ' ?HN' JFA' J? ' CFG' >D C' KDAOBDGD' A>' CF ' J?D ' >G?DH ' CA' @?(G' @?CCGD ' JAD G' LGCJGGH' CFG@ ' LBC' CFGE' @?NG' CFG@' >DGHN ' CA GCFGD ' ?HN' NP NGN' CFG' G@KDG' A>' "A@G' LGCJGGH' CFG@' @?(H ' CFG' G?' AHB@' CFG' LABHN ' A>'CFGD' NP AH ' AD' CFGE' ?PG' ?MM' CFG' KDAP HOG ' G? CJ?DN' BHCA' HCAH B ' ?HN' CFG' OABHCDG ' JG CJ?DN' BHCA' ?G ?D' ?HN' MG>C' >DO' BHCA' $GK NB ' ?HN' @?NG' ?' M?J ' CF?C' CFGE' CFDGG ' AHG' ?>CGD' ?HACFGD ' FABMN' @?(G' CFGD' >DGHN ' OAH BM ' JFGH' CFGE' JABMN' HAC' LG' CFG@ GMPG '' #F ' GG@GN' CA' LG' ?' ABHN' OABH GM ' LBC' EGC' C' J? ' CA' LG' OAH>D@GN' JCF' ?' CD?CGD' LAHN ' JFOF' >ADCBHG' A>>GDGN' CFB ' #FGDG' J? ' OC?P?' CFG' GMNG C' CGD' A>' G ?D ' HAC' LE' AHG' @ACFGD ' >AD' FG' O?@G' A>' HOF?D?' ?HN' ?G ?D' F@ GM>' ?>CGDJ?DN ' A>' OO?' C' ' DGKADCGN' CF?C' FG' NG?DME' MAPGN' F ' CGD' OC?P?' >AD' HNGGN' FG' J? ' ?' HALMG' M?NE ' ?HN' MG>C' CFG' JNAJ' A>' FGD'>D C' FB L?HN ' ?B ' &?DOGMMB ' JFA' NGN' HAC' MAH ' LG>ADG ' ?HN' C' GG@GN' ?M A' CF?C' HCAH B ' F?N' LGGH' JNAJGD' GPGD' HOG' CFG' NG?CF' A>' F ' JG>G' BMP?' ' #FGDG-BKAH' GPGDE' @?H' NN' GC' >ADJ?DN' CF ' @?DD? G ' FAKH ' CFGDGLE' CF?C' CF ' M?NE' OC?P?' F?P H ' ?H' G OGMMGHC' D?OG ' J NA@' ?HN' FAHG CE ' SAHGN' BHCA' A' D?DG' ?' LG?BCE ' JFGH' FG' JGDG' JCF' HCAH B ' VFG' MAP H ' FGD' ? ' A' JADCFE' ?' M?NE' NG GDPGN ' FG' FABMN' LG' ?' AAN' @G?H' CA' (GGK' AAN' MAPG' ?HN' ?@CE' LGCJ C' FGD' LDACFGD' ?HN' F@ I

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='' F?PG' FG?DN' @E' D?HN>?CFGD' $?@KDE? ' DGKADC' CF?C' AHG' FMAC? ' ?' KFE OO?H ' LA@' H' CFG' OCE' A>' @KF ?' CAMN' F@' CF?C' FG' J? ' ?C' CF?C' KDG GHC' C@G' H' MG ?HND?' ?HN' CBNGN' KFE O ' ?HN' CF?C' F?PH ' ?OQB?HC?HOG' JCF' AHG' A>' HCAH B' OAA(' FG' CAA(' FHU' JCF' F@' CA' HCAH B' FAB G' VLGH ' ?' EABH ' @?H' NG DAB ' CA' GG' CFH ' CA' FAJ' F@' CFG' JAHNGD>BM' B@KCBAB ' OF?D G' ?HN' KDGK?D?CAH' A>' AHG' AHME' BKKGD' FGH' FG' J? ' H' CFG' (COFGH ' ?HN' ?J' ?' JADMN' A>' NPGD CG ' A>' @G?C ' ?HN ' ?@AH C' ACFGD ' G FC' JMN' LA?D ' DA? CGN' JFAMG ' FG' LG ?H' CA' JAHNGD' ?C' C' ?HN' ?N ' BDG' EAB' F?PG' ?' DG?C' HB@LGD' A>' BG C ' CA' BKKGD' #FG' OAA(' >GMM' ?'M?B FH ' ?HN' ?H JGDGN' F@' A' VQBACF' FG ' HAC' @?HE' BG C ' HAC' ?LAPG' CJGMPG' H' ?MM ' LBC' EGC' ?MM' CF?C' ' LAMGN' AD' DA? CGN' @B C' LG' GDPGN' H' JFAMG ' AD' GM G' C' JABMN' LG' @?DDGN' CD?' FC ' >AD' HCAH B ' KGD?NPGHCBDG ' JMM' BK' KDG GHCME ' AD' C' @?E' LG' ?' KDGCCE' J FMG' FGHOG ' AD' M(GME' GHAB F' FG' JMM' NG>GD' C' MAH GD ' >AD' CF?C' FG' F?CF' NDBH(' JGMM' CA N?E ' AD' GM G' F?CF' F?N' A@G' ACFGD' DG?C' @?CCGD ' H' F?HN ' ?HN' CFGDG>ADG' JG' NA' HAC' NDG ' AHG' BKKGD' AHME ' LBC' @?HE' BKKGD ' LGO?B G' JG' ?DG' BHOGDC?H' A>' CFG' FABD' FG' JMM' BK' H I

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='#FG' @?HHGD' FAJ' FG' >GMM' H' MAPG' JCF' FGD' J? ' CF ' R HCAH B ' AH ' CA' @?(G' J?D' JCF' CFG' ?DCF?H ' GHC' CA' OA@@?HN' MGAK?CD?' CA' ?KKG?D' KGD AH?MME' LG>ADG' F@' JFGH' FG' O?@G' HCA' MOO?' CA' ?H JGD' BHCA' BOF' ?OOB ?C AH ' ? ' JGDG' M?N' ? ?H C' FGD A' FG' >BD-H FGN' FGD GM>' JCF' ?' JADMN' A>' >C ' CADG' A>' AMN' ?HN' MPGD' ?HN' A>' DOFG ' ?HN' ACFGD' B@KCBAB ' ADH?@GHC ' ? ' ' ODGNLMG' GHAB F' FG' @ FC' LDH ' >DA@' A' DG?C' ?' FAB G' ?HN' >DA@' A' JG?MCFE' ?HN' DOF' ?' DG?M@' ? ' ! EKC' J? ' . BC' EGC' FG' O?DDGN' HACF H ' JCF' FGD' JFGDGH' FG' CDB CGN' @ADG' CF?H' H' FGD GM>' ?HN' H' CFG' OF?D@ ' ?HN' GHOF?HC@GHC' A>' FGD' K? H ' LG?BCE ' ?HN' D?OG ' FGDG>ADG ' JFGH' FG' J? ' GHC' BHCA' LE' NPGD ' MGCCGD ' LACF' >DA@' HCAH B ' F@' GM>' ?HN' ?M A' >DA@' F ' .' $' ' ' $' ' .' ' @AO(GN' HCAH B ' A' @BOF ' CF?C

FG N N?HGN CA GC >AD J?DN ACFGD J G LBC CA C?(G FGD L?D G H CFG D PGD A> ENHB CFG KAAK JFGDGA> J? A> AMN CFG ?M A> KBDKMG ?HN CFG A?D A> MPGD JFOF (GKC CDA(G H DA J H ?>CGD CFG ABHN A> CFG @B O A>>MBCG F?BCLAE O CCGDH P?M ?HN BOF ACFGD H CDB@GHC ? CFGE KM?EGN BKAH H CFG L?D G HN HAJ >AD CFG KGD AH A> FGD-GM> FG J? M?N BHNGD?K?P M AH A> OMACF A> AMN A> C BG ?KK?DGMMGN ?HN ?CC DGN M (G CFG ANNG) GHB OA@@AHME ND?JH H K OCBDG ?HN F?DN LE FGD AH G CFGD F?HN A> FGD KDGCCE >? D LAE ?KK?DGMMGN ? K? HCGD NA GC >ADCF AN BK N J CF MCCMG >?H H CFGD F?HN J CF CFG JFOF CFGE >?HHGN J HN BKAH FGD GD M?N G ?HN GHCMGJA@GH ?M A CFG >? DG C A> CFG@ JGDG ?KK?DGMMGN M (G CFG E@KF GDG NG VJFOF ?DG CFG @GD@? N A> CFG J?CGD ?HN M (G CFG +D?OG A@G CGGD H CFG FGM@ ACFGD CGHN H CFG C?O(MG ?HN DAKG A> CFG L?D G ABC A> CFG JFOF CFGDG O?@G ?' JAHNGD>BM K? H JGGC ?PABD A> KGD>B@G CF?C KGD>B@GN CFG JF?D>8 NG KG CGDGN JCF HHB@GD?LMG @BMC CBNG A> KGAKMG A@G A> CFG@ >AMMAJGN CFG L?D G ?MM ?MAH CFG D PGD NG ACFGD ?M A D?H ABC A> CFG OCE CA GG FGD OA@H H A CF?C H CFG GHN CFGDG D?H BOF @BMC CBNG A> KGAKMG AHG ?>CGD ?HACFGD CA GG FGD CF?C HCAH H J? MG>C KA C ?MAHG H CFG @?D(GC KM?OG H F @KGD?M G?C CA PG ?BN GHOG ?HN CFGDG JGHC ?' DB@ABD H CFG KGAKMG8 @ABCF CF?C CFG ANNG) GHB J? OA@G CA KM?E JCF CFG AN .?OOFB >AD CFG GHGD?M AAN A> ?MM ?' FGH MGAK?CD?' M?HNGN HCAH B GHC CA HP CG FGD CA BKKGD CA F@ .BC FG GHC F@ JADN ? ?H FG FABMN NA LGCCGD D?CFGD CA OA@G?HN BK JCF FGD HCAH B CFGDG>ADG CA FAJ F@ GM> OABDCGAB BHCA FGD ?C FGD ?DD P?M J? OAHCGHC CA ALGE FGD ?HN JGHC CA BKKGD CA FGD JFGDG FG >ABHN BOF K? H B@KCBAB >?DG CF?C HA CAH BG O?H G KDG C I

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,' CF HCAH B CFGDG J? ?' AACF ?EGD AD ? CDAHA@GD A> ! EKC CF?C OABMN O? C ?' >BDG ?HN SBN G A> @GH8 H?CPCG CA CGMM CFG@ JF?C FABMN F?KKGH CA CFG@ G GCFGD CA KMG? G MGAK?CD?' AD GM G >AD CF?C FG >ABHN C A' LE F ?DC CAMN HCAH B KM?HME CF?C F >ADCBHG VJFOF A> C GM> J? G OGMMGHC AAN ?HN PGDE DG?C U J? ?MCA-GCFGD LMG@ FGN ?HN AL OBDGN LE ?G ?D8 >ADCBHG ?HN CFGDG>ADG FG OABH GMMGN F@ BCCGDME CA MG?PG F OA@K?HE ?HN CA GC F@ ? >?D >DA@ F@ ? FG OABMN AD CFE NG@AH ?N FG VCF?C CA ?E CFG AAN ?H GM ?HN K DC CF?C (GGKGCF CFGG ? >D?N A> F ?HN LG H OABD? GAB ?HN F F JFGH FG ?MAHG LGOA@GCF >G?D>BM ?HN C@ADAB JFGH FG OA@GCF HG?D BHCA CFG ACFGD AJ AGPGD C J? CFG GPGHC GK B H KDAPGN CFG ! EKC?H8 JADN CDBG >AD C ?N CF?C ? A>CGH ? CFGE CJA NDGJ OBC >AD K? C@G JFA FABMN F?PG ?HECF H AD JFGCFGD CFGE KM?EGN ?C N OG HCAH B ?MJ?E MA C >CGHC@G JFGH CFGE JGDG N KA GN CA GG OAO(> FC AD QB?M CF?C JGDG C?B FC CA > FC AHG J CF ?HACFGD ?G ?D8 OAO(AD QB?M N GPGD APGDOA@G I

C 0 g R =:%0 :0$ /Y0

= H ?' C@G FG JGHC CA ?H MG >AD > F ?HN JFGH FG OABMN C?(G HAHG FG J? ? ?H DE ? OABMN LG LGO?B G MGAK?CD?' CAAN LE FGDG>ADG FG GODGCME OA@@?HNGN CFG > FGD@GH CF?C JFGH FG O? C H F MH G DAN ?HN LDAB FC BK ?' > F CJOG AD CFDOG MGAK?CD?' >ABHN C CD?O FC EGC FG GG@GN HAC CA GG C LBC JAHNGDGN ?C F G OGMMGHC > FH S LBC JFGH FG J? ?MAHG LE FGD GM>?@AH FGD AJH KGAKMG FG CAMN CFG@ FAJ C J? ?HN L?NG CFG@ CFG HG C @ADH H CA LG AH CFG J?CGD CA GG CFG > FH HB@LGD A> KGAKMG O?@G CA CFG F?PGH ?HN AC HCA CFG > FGD LA?C CA GG CF > FH HCAH B CFGH CFDGJ H F MHG ?HN MGAK?CD?' CD?O FC OA@@?HNGN AHG A> FGD @GH CA N PG BHNGD J?CGD LG>ADG HCAH B @GH ?HN CA KBC A@G AMN ?MC > F BKAH F L? C MG(G BHCA CFA G CF?C ?DG LDAB FC ABC A> CFG OABHCDE A> AHC FGH FG F?N FBH CFG > F AH F FAA(HCAH B CF H(H FG F?N C?(GH ?' > F HNGGN H?COFGN BK F MHG KDG GHCME #FGH CFGE ?MM >GMM ? M?B F H I

R =' C $ $ 3 $ 3 Y0

= G CB A@KG B ?C CF?C C@G (GKC H O M?' ?HN A @?NG @?HE ?H HDA?N HCA C?ME J CF ?' DG?C HB@LGD A> KHH?OG ?HN ACFGD KD?CG F K A> CFG JFOF JGDG O?KC?H CJA HAC?LMG KD?CG & GH? ?HN & GHGOD?CG JFA A OABDGN ?MM CFG G?' CFGDG?LABC CF?C HAHG NBD C KGGK ABC J CF ?' ?M BDCFGD@ADG G CB A@KG B F?N NG?MC PGDE >D GHNME J CF HCAH B >AD FG F?N OABDCGAB ME DGOG PGN F @ACFGD JFGH FG >MGN ABC A> C?ME J CF BMP?' ?HN CFGDG>ADG CFGE CFAB FC AAN CA @?(G KG?OG J CF F@ A CFGE @GC ?MM CFDGG CA GCFGD LE CFG & ABHC A> & GH?' BKAH ?' FMM CF?C DBHHGCF >?D HCA CFG G?' A@KGE F?P H F K D N H F?DN LE ?C ?HOFAD ?HN HCAH B ?HN ?G ?D CFG D ?D@G BKAH CFG FADG NG N DGOCME APGD ? ?H C F@ AJ ?>CGD CFGE F?N ? DGGN CF?C G CB A@KG B FABMN F?PG OME ?HN ?DN H?' J CF CF AOHN C AH CF?C FG FABMN D N CFG G?' A> ?MM CF GPG ?HN K D?CG ?HN @?(G C ?>G >AD K? GH GD ?HN J CF?M CF?C FG FABMN GHN ?' OGDC?H QB?HC CE A> JFG?C CA "A@G AHG A> CFG@ N N >G? C ?HACFGD ?HN NDGJ OBC JFA FABMN LG H C J? A@KG 8 OF?HOG CA HP CG CFG@ >D C FGDGBKAH HCAH B ? (GN F@ HN JFGDG F?MM JG BKW #FGDG ?N A@KGE ?HN FAJGN F@ F ?N@D?M ?MMGE JFOF F?N L?H(A> A?D #F?C V ?N FG @E >?CFGD FAB G CFGE F?PG MG>C @G G K?(G C CA C?BHC HCAH B LGO?B G FG F?N F >?CFGD8 FAB G CF?C J? A@KGE CFG +DG?C A FG O? C ?HOFAD GHAJ HCA CFG G?' CA @?(G F ?MMGE >? C ?HN CFGH LB MC ?' LD N G A> JAAN CA OAHPGE CFG@ CA F ?MMGE >DA@ CFG FG?N A> &ABHC & GH??HN CFGDG FG JGMOA@GN CFG@ ?HN @?NG CFG@ DG?C OFGGD AUJ H CFG @N C A> CFG >G? C JFGH CFGE >GMM CA LG @GDDE JCF HCAH B MAPG BHCA MGAK?CD?' &GH? CFG K D?CG O?@G CA A@KGE ?HN JF GD H H F ?' G?D ?N BHCA F@ F?MM OBC CFG O?LMG A> CFG ?HOFAD ?HN @?(G CFGG MADN HAC AHME A> OME ?HN ?DN H?' LBC A> CFG JFAMG G@K DG A> "A@G LG NG W A@KGE F?P H K?B GN ?JF MG BKAH C ?C MGH CF ?H JGDGN F@ #FAB FABMN C F?PG NAHG C ?HN HGPGD F?PG CAMN C @G LBC HAJ JG @B C OAHCGHC B JCF CF?C JG F?PG ? > AD @E GM> J? HGPGD C?B FC CA LDG?(@E >?CF HAD CA LG OABHCGN ?' CD?CAD #FG ACFGD CJA ?M A N N MC(GJ G >G? C F@ H CFGD O?@K ?HN CFGH FG DGCBDHGN HCA OME I

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F?(KGDG @ FC F?PG >ABHN ?' NG OD KC AH A> CFG D G A> CFG MG ?HN CFG G C@?CG A> KMGHCE AD O?DO CE CFGDGAH NGKGHN H H AMM?HN8 CD?H M?C AH A> MHE #FG MA@GCGD ' NG OD LGN H $GA8 =' CADE A> >D O? I CD?H M?CGN LE 0AFH ADE . ACF JAD(JGDG KBLM FGN ?C CFG LG HH H A> CFG GPGHCGGHCF OGHCBDE

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,' H CFG @G?H C@G) GHC N B AHOG ? ?H APGDO?@G ?OADB V DANG 8 AH (H A> ?DCF? H ?' L?CCMG >AB FC H CFG OABHCDE A> EDDG CO?' FG LG H OA@G ? ?H J CF ?' DG?C ?D@E CA HP?NG ED?' ?C JFOF L?CCMG J?' M?H ?' DG?C HB@LGD A> CFG ?DCF?H ?HN ?@AH CFG@ ?OADB CFG (H 8 AJH AH #F HALMG G KMA C ? >?@AB ? GPGD ?HE J? J? ?' >BMM DGPGH G CA CFG "A@?H A> CFG F?@G ?HN MA CFGE F?N DGOG PGN LG>ADG LE CFG NG?CF A> &?DOB D? B ?HN FG @?NG CFG ?DCF?H >ME ?HN M?N CA (GGK CFG@ GMPG J CF H CFG OAH>HG ?HN CGDD CAD G A> &G AKAC?@?' ?HN &GN?' ?>CGD CFGE F?N CFD OG CA GCFGD LGGH APGDOA@G H GPGD?M L?CCMG AJLG C) GH-C N B NBD C HAC BHNGDC?(G CA >AMMAJ CFG@ ?HE >?DCFGD >G?D H MG C FG FABMN F?PG ACCGH HCAH B 8 N KMG? BDG LE C ?P H PGH) GHC N B BOF FAHABD ? FG NG GDPGN FG GHC F@ CA "A@G CA CD B@KF >AD CFG ?DCF?H) GHC N B J? CFG AHME @?H CF?C GPGD CD B@KFGN A> CFG ?DCF?H BHC CF MG KDG GHC N?E ?' @G?H @?H LA@ ?HN A> HA HALMG FAB G AD >?@ME JFA AHME O?@G CA CF?C FG ?CC?HGN BHCA CFDAB F HCAH B 8 >D GHN F K CFG JFOF NGM PGDGN F@ F?KKE AOO? AH CA ?OF GPG DG?C @?CCGD HN EGC CA ?E CDBME FG N N A JGMM QB C F@ GM> H ?MM F GHCGDKD G CF?C FG OAH>D@GN CF?C JFOF J? KA(GH A> HCAH B ?HN ?G ?D CA J C CF?C CFGE JGDG ?MJ?E @ADG >ADCBH?CG JFGH CFGE @?NG J?D LE CFG D MGBCGH?HC CF?H LE CFG@ GMPG I

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=. BC HCAH B HACJCF C?HN H DGJ CA LG @?DPGMMAB ME A>>GHNGN J CF ?G ?D BKAH OGDC?H DGKADC CF?C F?N LGGH LDAB FC BHCA F@ ?HN A CAA(G?' CA A CAJ?DN C?ME J CF CFDGG FBHNDGN ?M @. ?HN LGO?B G CFA G A> !DBHNB B@ JABMN HAC DGOG PG F ?D@E HCA CFG D 1/ "

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F?PGH' FG JGHC >BDCFGD BHCA' #?DGHCBH' #FGDG FC' JI>G OC?P?' CF?C 0?@G ABC A>' +DGGOG JICF FC@'LG AB FC F@' CA' GHN FGD BHCA' FGD LDACFGD' CFG JFIOF' FG N:N' FG KBC FGD G?N' LG>ADG IPGH' IC FGD LDACFGD' OC?PB' SG ?D' LE' I JG J?E' JFA' LDAB FC F:' CJA' OF=G>' >DIGHN ' &.GOGH?' ?HN' DIKK?' JICF FC@' FG CAA(' CFG@ ? ING' ?HN' JICF ?MM CFG H C?HOG' FG OABMN KA ILMG' GHCDG?GGN CFG@ CFGE JABMN HAC' B>=GD'FGD' CF?C J?' CFG FJKKG C JA@?H A>' CFG FJADMN' CA' LGOA@G HAJ' CFG @A C JDGCOFGN ?HN' BH>ADCBH?CG ODG?GBDG A>' ?MM ACFGD' AD' HAJ' ?IN' FG' GPGDE @?H8' EGG ' NA' ?TG AH' @G ' CF?C ?@' CFG I CGD' A>' AHG' A>' CFG@ JG>G A>' CFG ACFGD'$?HN' IJ>' CFG' JAD C OABH GM' EABD GMPG ' IC I ' BHOGDC2'H' CA' JFIOF' A>' CFG@' CJA' CFG AN ' >ADLIN ' ?HN' CF?C' CFGE ' DA?' CA' J?D ' >AD C?(G KM?OF VJFIOF CFG AN ' >ADLIN ' ?HN' CF?C' CFGE ' DA?' CA' J?D ' >AD ? I HGN' CFG P:OCADE' >?MM' @E' C?CG O?H' LG' LBC @A C @I GD?LMG' CIMM I

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=' HN' CA' OAH>G ' ?' CDBCF' IC J?' ,CAA' ?DDA ?HC ?HN' IH AMGHC' ?' K?DC' ?HN' NAHG V?' ?' @?H' JABMN' ?E' ,H' NGD' IAH' ?HN' OAHCG@KC A>' CFG "A@?H ' >AD FG ?' G@LMGN' ?MM' CFG' KGAKMG' IH' CFG FAJ KM?OG' JFGDG EABH ' @GH' NA' G GDOI G CFG@ GMPG ' ?HN' CFGDG BKAH' ?' FI F' CDILBH?M IMPGDGN' FG' GC CJA' OF?ID ' A>' AMN' CFG' AHG' >AD' F@ GM>' ?HN' CFG ACFGD >AD' MGAK?CD?' ?HN' MAJGD' OF?ID ' >AD F' ' OFIMNDGH ' CFGH FG' AKGHME' KBLIM FGN' LG>ADG CFG ? G@LME' CF?C >D C A>' ?MM FG NIN' G C?LMI F MGAK?CD?' QBGGH' A>' I EKC ' A>' EKDB ' A>' $ENI?' ?HN' A>' CFG $AJGD' EDI?' ?HN' ?C CF?C CI@G ?M A ' CG ?DIAH (IH ' A>' CFG ?@G D@?MI@ ' #FI ' G ?DIAH J?' BKKA GN' CA' LG CFG AH' A>' 0BMIB ' ?G ?D' GOAHNME' FG O?MMGN' CFG AH ' FG F?N' LE' FGD CFG (IH ' A>' (IH ' ?HN' ?PG MG ?HNGD ' >AD FI ' KADCAH' D@GH?' &.GNI?' ?HN' ?DCF=?' JFGH FG F?N' OAHQBGDGN' CFG 0ABH<DE' ?HN' BHCA' CAMG@E'>AD FI ' KADCAH' FGHIO?' DI?' ?HN' MOI?' HN' CFGDGJICF?M FG LDAB FC ABC' MG ?HNGD' IH ?' MAH ' AJH' ?>CGD' CFG >? FIAH A>' CFG &.GNG ' JICF ?' FI F' 0AK C?H(G F?C AH FI ' F2N' H?IDAJ' IH CFG CAK' ?' ,CFG (IH ' A>' CFG &.GNG ' ?HN' D@GH?H ' NA' B G' CA' J G?ID CFG@ ' ?HN' ?@ADAB ' KAI AH ' ?HN' CF?C CFGE' CF?C &?OGNAH?H' @?HHGD' JICF' MIKKGD ' AH' FI ' >GGC' ?HN' ?' LDA?N' FC?C' JICF ?' DAE?M L?HN' AD' NI?NG@' BOF' J?' ,CFG ?KK?DG M ?HN' AMN' ?CCIDG' A>' CFG CFG POCADE' >?MM' @E' C?CG O?H' LG' LBC @A C @I GD?LMG' CIMM I

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' A.J' >AD' F=@ GM>' FG' NGCGD@=HGN' CA' ODA ' APGD' IHCA' >DI0 ' ?HN' CAA(' AHG' A>' FI ' 0?DBOC ' AD' FBM(' M?NGH' J=CF' AMN' ?HN' IMPGD' ?HN' ACFGD' DIOF' 0?DDI? G' ?HN' ?PG'=C' BHCA' FI ' >DIGHN ' OA@@?HN=H ' CFG@' CA' NGK?DC' ?HN' GG(' CA' ?PG' CFG@ GMPG ' #FGE' ?H JGDGN' F=@' JGGK=H ' CF?C' CFGE' JABMN' HG=CFGD' NA' =C' HAD' EGC >AD ?(G F=@' #FGH

HCAH□B 'PGDE□OABDCGAB ME'?HN' MAP□H ME N□N' 0A@>AD□ CFG@'?HN' KD?EGN' CFG@' CA' NGK?DC' ?HN' JDACG BHCA' #FGAKF□MB ' APGDHAD' A>' AD□HCF' CF?□ FG' JABM□' GG CFG@' ?>G' ?HN' FGMK CA' F□NG' CFG@' □H' A@G' GODGC' KM?OG' BHC□M' CFGE F?N' @?NG' CFG□D' KG?OG' J□CF' ?D I

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= #FGH' HCAH□B ' GG□H ' CFGGD□ J ?' HA' J?E' @ADG' FAHABD?LMG' >AD' F□@' CA' NGC□ CF?H' >□ F□CH 'P?M□?HCME' FG' NGCGD@□HGN' CA' GC' BK' F□ ' DG C LAC□F' LE' G?' ?HN' M?HN' A'' LG□H ' ?□' BKKGD V?' □C □ ' DGKADCGN ' FG 0A@@?HNGN' F□ ' A>>□OGD ' ?HN' FAB GFAMN' GDP?HC ' CF?□ J?□CGN' AH' F□@' ?□' LA?DN' CF?□ FG' @?NG F□@' ?H DE' J□CF F□@ ' LGO?B G' FG ¡?□CGN' AH' F□@' CF?H' ?HE' @?H' GM G' J? ' ?HN' CFG' QBGGH' FGD GM>' ?M A' □H C?M(' J□CF' FGD' CF?H' ?HE' @?H' GM G' J? ' ?HN' CFG' QBGGH' FGD GM>' ?M A' N□N' F□@' DG?□ FAHABD' □H? □FBOF ? ' FG @?NG HCAH□B ' SG?MAB ' A>' F□@' FGDGBKAH' HCAH□B ' 0?B GN' F□@' CA' LG C?(GH' ?HN' JGMM >?PABDGNME' J F□KKGN ' ?HN' A' GHC' F□@' BHCA' m□ ?D' ?HN' L?NG' F□@' CGMM' ?F□@' CF?C' FG' @?NG' F□@' ?H DE' J□CF' F□@ ' LGO?B G' FG FA J□GN' F□@ GM>' KDABN' ?HN' N□ N?H>BM' CAJ?DN ' F□@' ' ?HN' HA J ' KGO□?MME' J FGH' FG' J? ' G? E' CA' LG' ?H GDGN' LE' DG? AH' A>' F□ ' KDG GHC' @□ GDE' #A' LG' FADC' □>' CF□ ' @□ M□(G' CFGG' V ?□N' FG ' CFAB' F? C' □KK?DOFB ' AHG' A>' @E GH>D?HOF□ GN' LAHN@@GH ' J□CF' CFGG ' F?H ' F□@' □>' CFAB' J□MC' AD' J FH□K F□@' ?C CFE' KMG? BDG ' CF?C JG' @?E' ODE' QB□CC?HOG' DA@' FGHOG>ADCF' MGAK?CD?' CA' OMG?D' FGD GM>' A>'CFG' B K□O□AH' FG'F?N' A>' FGD' @?NG' @ADG A>' F□@' CF?H' GPGD' FG' N□N' AD ' >D C A>'?M' J FGDG' FG' N□N' AMG@H□TG CFG' N?E' A>' FGD' L□DCF' PGDE' @G?HME' ?HN' K?DH' ME ' >□' AD' FGD' KDG' GHC' M' ' ; R , ' 3: ' $ ./' Y0

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@AHB@GHC ‘ ‹CD GN HCAH B ‘ BK ‘ #FGE CF?C JGDG KDG GHC CA LGFAMN C ?N CFGE HGPGD ?J’ A K C>BM ?’ F C ‘ >AD CFGE KMBO(GN BK KAAD HCAH B ‘ ?MM LMAANE ? ‘ FG J? ‘ ?HN ND? J H ‘ AH J CF K?H ‘ A>’ NG?CF ‘ JFA ‘ FAMN H ‘ BK F ‘ F?HN ‘ CA MGAK?CD? ‘ D? GN BK F@ GM>’ ? ‘ JGMM ? ‘ FG OABMN ‘ C J? ‘ ?’ F?DN CF H ‘ >AD CFG G JA@GH CA NA CA M>C F@ BK ‘ LBC MGAK?CD?’ CAAK H ‘ NAJK J CF FGD FG?N ‘ KBCC H ‘ CA ?MM FGD CDGH CF CA FGD BCCGD@A C KAJGD ‘ N N M>C F@ BK J CF @BOF ?NA ‘ ?HN HGPGD MGC A FGD FAMN ‘ J CF CFG FGMK A>’ CFG JA@GH LGHG?CF CF?C L?NG FGD LG A>’ AAN OABD? G ‘ ?HN JGDG ? ‘ ADDE CA GG FGD M?LABD A’ ? ‘ FG ‘FGD GM>’ A JFGH FG F?N ACCGH F@ H ?>CGD CF?C ADC ‘ ?HN M?N F@ AH ?’ LGN ‘ FG DGHC FGD ?D@GHC ‘ BKAH F@ ‘ OM?KK H ‘ FGD LDG? C ‘ ?HN OD?COF H ‘ FGD >?OG ?HN CA@?OF ‘ #FGH FG ND GN BK F ‘ LMAAN CF?C F?N LGD?EGN F ‘ >?OG ‘ ?HN O?MMGN F@ FGD MADN ‘ FGD FB L?HN ‘ ?HN G@KGDAD ‘ >AC GCC H ‘ FGD AJH @ GDE ?HN O?M?@CE >AD CFG K CE ?HN OA@K? AH FG CAA(‘ A>’ F@ ‘ HCAH B ‘ @?NG FGD OG? G FGD M?@GHC-H ‘ ?HN O?MMGN >AD J HG ‘ G CFGD LGO?B G FG J? ‘ ?CF D C ‘ AD GM G >AD CF?C FG CFAB FC CFGDGLE CA F? CGH F ‘ NG?CF ‘ FGH FG F?N NDBH(‘ FG G?DHG CME KD?EGN FGD ?HN KGD B?NGN FGD CF?C FG JABMN GG(‘ CA ?PG FGD M>G ‘ >’ FG OABMN KA LMG ‘ J CFABC DGKDA?OF ?HN N FAHABD ‘ ?HN CF?C OF G>ME FG FABMN CDB C DAOBMG B ‘ ?LAPG ?HE @?H GM G ?LABC ?G ?D ‘ ?HN ‘ ? ‘ >AD F@ GM>’ CF?C FG FABMN HAC M?@GHC HAD ADDAJ ‘ >AD CFG @ GD?LMG OF?H G A>’ F ‘ >ADCBHG ?C CFG GHN A>’ F ‘ N?E ‘ LBC D?CFGD CF?C FG FABMN CF H(‘ F@ CFG @ADG >ADCBH?CG >AD CFG >AD@GD CD B@KF ‘ ?HN FAHABD ‘ FG F?N DGOG PGN ‘ OAH NGD H ‘ CF?C JF MG FG M PGN FG J? ‘ CFG HALMG C ?HN DG?CG C KD HOG A>’ CFG JADMN ‘ ?HN CF?C HAJ’ FG J? ‘ APGDOA@G ‘ HAC OAJ?DNME ‘ LBC P?M?HCME ‘ ?’ "A@?H LE ?HACFGD "A@?H I

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= >CGD HCAH B ‘ F?N CFDB C F ‘ JADN HCA F@ GM>’ ? ‘CFGE O?DD GN F@ HCA CFG CA@L ‘ ?HN @AHB@GHC ‘ A>’ MGAK?CD? ‘ AHG A>’ F ‘ B?DN ‘ O?MMGN %GDOGCCGB ‘ CAA(‘ F ‘ JADN J CF JF0F FG F?N CD O(GH F@ GM>’ ?HN F N C ‘ CFGH FG GODGCME CAMG ? J?E ‘ ?HN L>AB FC OC?P B ‘ CG ?D CFG >D C HGJ ‘ A>’ F ‘ NG?CF ‘ ?HN FAJGN F@ F ‘ JADN CF?C J? ‘ LMAAN GN ‘ ?D ‘ FG?D H ‘ CFG G HGJ ‘ CD? FC J CFNDGJ’ F@ GM>’ HCA ?’ GODGC KM?OG A>’ F ‘ CGHC ‘ ?HN CFGDG LBD C ABC J CF CG?D ‘ M?@GHC H ‘ F ‘ F?DN ?HN @ GD?LMG >ADCBHG ‘ CF?C F?N LGGH F ‘ >D GHN ?HN LDACFGD ‘ H M? J ‘ F ‘ GQB?M H CFG G@K DG ‘ ?HN OA@K?H AH J CF F@ H BHNDE DG?C G KMA C ‘ ?HN L?CCMG ‘ #FGH FG O?MMGN >AD ?MM F ‘ >D GHN ‘ ?HN FAJGN CFG@ CFG MGCCGD ‘ HCAH B ‘ F?N JD CCGH CA F@ ‘ ?HN F ‘ ?H JGD ‘ ?M A GHC F@ ? ?H ‘ NBD H ‘ CFG D QB?DDGM ?HN CD>G ‘ ?HN FAJ’ >GDOGME ?HN KDABNME CFG ACFGD ?H JGDGN F@ CA ?MM S* C ?HN DG? AH?LMG @?CCGD ‘ FG JDACG BHCA F@ ‘ >CGD CF ‘ FG GHC DAOBMG B ‘ ?HN OA K ‘ @?HNGN F@ CA NA JF?C FG OABMN KA LMG CA GC MGAK?CD?’ ?M PG ‘ >G?D H ‘ MG C ACFGDJ G ?MM CFG CDG? BDG JABMN LG MA C ‘ ?HN >BDCFGD@ADG ‘ FG CFAB FC CF?C ‘ >’ FG OABMN C?(G MGAK?CD? ‘ ?HN LD H ‘ FGD ?M PG CA "A@G ‘ FG JABMN @?DPGMMAB ME LG?BC>E ?HN GC ABC F ‘ CD B@KF I

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,’ . BC MGAK?CD?’ JABMN HGPGD KBC FGD GM>’ HCA DAOBMG B ’ F?HN ‘ ?MCFAB F CFGE KA(G CA GCFGD ‘ AD DAOBMG B ’ O?@G CA CFG ?CG ‘ CF?C JGDG PGDE CF O(‘ ?HN CDAH ‘ ?HN BDGME L?DDGN ‘ LBC EGC CFGDG JGDG A@G OD?HH G ‘ CFDAB F CFG JF OF FGD PA OG @ FC LG FG?DN ‘ ?HN A CFGE J CFABC BHNGD CAAN CF?C MGAK?CD?’ NG@?HNGN CFG (H NA@ A>’ ! EKC >AD FGD AH ‘ ?HN CF?C DAOBMG B ‘ ?H JGDGN FGD CF?C FG FABMN LG A>’ AAN OFGGD ‘ ?HN HAC LG ?>D?N CA DG>GD ?MM BHCA @ ?D ‘ >CGD FG F?N P GJGN CFG KM?OG PGDE JGMM ‘ FG O?@G ?HN DGKADCGN FGD ?H JGD BHCA ?G ?D ‘ JFA @@GN ?CGME GHC ?MMB ‘ CA KG?(‘ AHOG ? ?H J CF FGD ‘ ?HN L?NG F@ KBDKA GME FAMN FGD J CF C?M(‘ JF M C DAOBMG B ‘ N N GC BK ?’ M?NNGD ? ?H C CF?C F F J HNAJ’ LE CFG JF OF HCAH B ‘ J? ‘ ‹CD GN BK ‘ ?HN O?@G NAJH HCA CFG @AHB@GHC J CF CJA A>’ F ‘ @GH ‘ F?DN LE CFG ?CG JFGDG MGAK?CD?’ CAAN CA FG?D JF?C +?MMB ‘ ?N BHCA FGD HG A>’ FGD J@@GH JF OF J? ‘ FBC H CFG @AHB@GHC J CF FGD ?J’ DAOBMG B ‘ LE OF?HOG ? ‘ FG O?@G NAJH ‘ ?HN FD G(GN ABC ‘ KAAD MGAK?CD? ‘ CFAB ?DC C?(GH ‘ #FGH JFGH FG ?J’ DAOBMG B ‘ LGF HN FGD ? ‘ FG O?@G >DA@ CFG ?CG ‘ FG CFAB FC CA F?PG C?LLGN FGD GM>’ J CF ?’ FADC N? GD FG JADG A>’ KBDKA G LE FGD NG ‘ . BC DA-OBMG B ‘ O?@G BNNGHME BKAH FGD ‘ ?HN ‘ >?(H ‘ FGD LE LACF CFG F?HN ‘ ?N BHCA FGD ‘ MGAK?CD? ‘ >D C CFAB F?MC NA CFE GM>’ DG?C J#AH ‘ ?HN ‘ ‘ $

GOAHNME BHCA ?D ‘ CA NGKD PG F@ A>’ CFG AOO? AH ?HN AKKADCBH CE AKGHME CA FAJ’ F ‘ LABHCE ?HN @GDOE ‘ ?HN CA PG F ‘ GHG@G ‘ O?B G CA ?OOB G CFG @A C OABDCGAB ‘ ?HN HALMG KD HOG CF?C GPGD J? ‘ ?HN CA ‹?KKG?OFG F@ ? ‘ CFAB F FG JGDG ?’ ODBGM ?HN @GDO MG ‘ @?H CF?C JGDG HAC CA LG CDB CGN ‘ A ‘ GPGH ? ‘ FG K?(G CFG JADN ‘ FG CAA(‘ FGD N? GD >DA@ FGD ‘ ?HN FAA(‘ FGD OMACFG ‘ >AD >G?D A>’ ?HE KA AH F NNGH ?LABC FGD I

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,’ FADCME ?>CGD ?G ?D O?@G F@ GM>’ H KGD AH CA GG FGD ‘ ?HN CA OA@>ADC FGD FGH CG ?D F?N @?NG FGD MG NAJH ? ?H ‘ ?HN ?C LE FGD LGN NG ‘ MGAK?CD?’ LG ?H CA OMG?D ?HN G 0B G FGD GM>’ >AD CF?C FG F?N NAHG ‘ M?E H ‘ ?MM CA CFG >G?D FG F?N A>’ HCAH B ‘ ?G ?D OAHCD?DE @?HHGD ‘ DGKDAPGN FGD H GPGDE KA HC ‘ #FGH FG BNNGHME ?MCGDGN FGD KGGOF ‘ ?HN KD?EGN F@ CA K?DNAH FGD ‘ ? ‘ CFAB F FG JGDG ?>D?N CA N G ‘ ?HN NG DAB ‘ CA M PG ‘ C MGH CF FG ?PG F@ ?’ LD G>’ ?HN @G@AD?M A>’ ?MM CFG DG?NE @AHGE ?HN CDG? BDG FG F?N . BC LE OF?HOG CFGDG CAAN GMGB0B ‘ LE ‘ AHG A>’ FGD CDG? BDGD ‘ JFA ‘ CA GG@ ?’ AAN GDP?HC ‘ O?@G CD?D FC CA ?G ?D CA N KDAPG MGAK?CD? ‘ CF?C FG F?N HAC GC H ?MM ‘ LBC (GKC @?HE CF H ‘ L?O (‘ A>’ KBDKA G ‘ MGAK?CD?’ J? ‘ H BOF ?’ D? G J CF F@ ‘ CF?C FG >MG J’ BKAH F@ ‘ ?HN CAA(‘ F@ LE CFG F?D A>’ CFG FG?N ‘ ?HN LA GN F@ JGMM >?PABDGNME ‘ ?G ?D >GMM ? M?B F H ‘ ?HN K?DCGN CFG >D?E ‘ M? ‘ ‘ ?N FG ‘ ‘ @ ?D ‘ HAC CF ‘ ?’ ZG?C F?@G ?HN DGKDA?OF ‘ CF?C CFAB F?P H ‘ PABOF ?>GN CA C?(G CFG K?H ‘ CA OA@G BHCA @G ‘?HN F? C NAHG @G CF ‘ FAHABD ‘ KAAD JDGCOF ?HN O?C>>’ ODG?CBDG ‘ LDAB FC BHCA CF ‘ K C>BM ?HN @ GD?LMG G C?CG ‘ ?HN CF?C @HG AJH GDP?HC ‘ FABMN OA@G HAJ’ CA ?OOB G @G ‘ CFAB F C @?E LG ‘ F?PG DG GDPGN A@G SGJGM ‘ ?HN CD>MG ‘ @GGC >AD JA@GH ‘ LBC HAC >AD @ ‘ VKAAD ABM ‘ CA GC ABC @E GM>’ J CF?M ‘ LBC @G?H H ‘ CA PG A@G KDGCCE KDG GHC ‘ ?HN >C ‘ BHCA OC?P?’ ?HN $P? ‘ CF?C ‘ CFGE @F(H ‘ @G?H ‘ ?HN HCGDOG AH >AD @G CA CFGG ‘ CFAB @ FCG C EGC G CGHN CFE @GDOE ?HN >?PABD BKAH @G W g ?D J? ‘ M?N CA FG?D FGD ?E A ‘ KGD B?NH ‘ F@ GM>’ CFGDGLE CF?C FG F?N EGC ?’ NG DG CA ?PG FGD M>G ‘ A FG @?NG FGD ?H JGD ‘ CF?C FG N N HAC AHME PG FGD CF?C CA N KA G A>’ ?C FGD MG? BDG JF OF FG F?N (GKC L?O(‘ LBC ‘ >BDCFGD KDA@ GN CA B G FGD @ADG FAHABD?LME ?HN LABHC->BMME CF?H FG JABMN CF H(‘ >AD ?HN A FG CAA(‘ F ‘ MG?PG A>’ FGD ‘ BK-KA H ‘ FG F?N NGOG PGN FGD ‘ LBC HNGGN FG J? ‘ NGOG PGN F@ GM> I

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,’#FGDG J? ‘ ?’ EABH ‘ GHCMG@?H ‘ ADHGM B ‘ %AM?LGMM? ‘ CF?C J? ‘ AHG A>’ ?G ?D8 ‘ PGDE DG?C >?@MM?D ‘ ?HN LG NG ‘ N N LG?D HA GP M JMM BHCA MGAK?CD? ‘ G GHC FGD JADN GODGCME ‘ ? ‘ FG F?N DGQBG CGN F@ ‘ CF?C ?G ?D NGCGD@HGN CA C?(G F ‘ SABDHGE CMHDAB F ED? ‘ HN CF?C J CF H CFDGG N?E ‘ FG JABMN GHN FGD ?J?E LG>ADG J CF FGD OF MNDGH ‘ FGH CF ‘ J? ‘ CAMN MGAK?CD? ‘ FG OA@@?HNGN CFGE FABMN KDGK?DG FGD L?CF ‘ ?HN JFGH FG F?N L?CFGN ?HN J? FGN FGD GM>’ FG >GMM CA FGD @G?C ‘ ?HN J? ‘ B@KCBAB ME GDPGN ‘ AJ ‘ JF M C FG J? ‘ ?C N HHGD ‘ CFGDG O?@G ?’ OABHCDE@?H ‘ ?HN LDAB FC FGD ?’ L? (GC ‘ #FG AMN GD ‘ CF?C J?DNGN ?C CFG ?CG ‘ ? (GN F@ CD? FC JF?C FG F?N H F ‘L? (GC ‘ G AKGHGN CFG L? (GC ‘ ?HN CAA(‘ ABC CFG MG?PG ‘ CF?C OAPGDGN CFG >’ ‘ ?HN FAJGN CFG@ CF?C CFGE JGDG >’ ‘ FG LDAB FC ‘ #FGE ?MM A>’ CFG@ @?DPGMMGN CA GG B F AANME ‘>’ ‘ #FG OABHCDE@?H M?B FGN CA FG?D ‘ CFG@ ‘ ?HN L?NG CFG@ C?(G A@G >’ CFGE JABMN ‘ #FGE LGM GPGN FG CAMN CFG@ CDBME ‘ ?HN A L?NG F@ O?DDE CFG@ H ‘ MCGD MGAK?CD?’ F?N N HGN ‘ FG GHC ?’ OGDC? H C?LMG JD CCGH ?HN G?MGN ‘ BHCA CG ?D ‘ ?HN OA@@?HNGN CFG@ ?MM CA A A?C A>’ CFG CA@L ‘ JFGDG FG J? ‘ LBC CFG CJA JA@GH ‘ CFGH FG FBC CFG NAAD ‘ CA FGD ‘ @ ?D ‘ JFGH FG DGOG PGN CF ‘ C?LMG ‘ ?HN LG ?H CA DG?N FGD M?@GHC?C AH ?HN KGC C AH ‘ DGQBG C H ‘ F@ CF?C FG JABMN MGC FGD LG LBD GN J CF HCAH B ‘ >ABHN CD? FC JF?C FG @G?HC ‘ ?HN CFAB FC CA F?PG AHG CF CFGD F@ GM>’ FAJLG C FG GHC AHG LG>ADG F@ H ?MM F? CG CF?C @ FC LG CA GG JF?C C J? ‘ GD NG?CF J? ‘ PGDE BNNGH ‘ >AD CFA G JFA@ ?G ?D GHC BHCA FGD D?H CF CFGD H ?MM F? CG KA LMG ‘ ?HN >ABHN CFG AMN GD ‘ C?HN H ‘ ?C CFG ?CG ‘ @ CDB C H ‘ HACF H ‘ HAD BHNGD C?HN H ‘ A>’ FGD NG?CF ‘ . BC JFGH CFGE F?N AKGHGN CFG NAAD ‘ CFGE >ABHN MGAK?CD?’ C?D(‘ NG?N M?N BKAH ?’ LGN A>’ AMN ‘ ?CC DGN ?HN ?DD?EGN H FGD DAE?M DALG ‘ ?HN AHG A>’ FGD CJA JA@GH ‘ JF OF J? ‘ O?MMGN D? ‘ NG?N ?C FGD >GGC ‘ ?HN FGD ACFGD JA@?H ‘ O?MMGN F?D@ ?H ‘ F?M>’ NG?N ‘ ?HN CDG@LM H ‘ CD @-@ H ‘ CFG N?NG@’ JF OF MGAK?CD?’ JADG BKAH FGD FG?N ‘ HG A>’ CFG AMN GD ‘ GG H ‘ FGD ‘ ?H D ME ?N BHCA FGD ‘ ‘ CF?C JGMM NAHG ‘ F?D-@ ?HW) GDE JGMM ‘ ?N FG ? ?H ‘ ?HN @GGC >AD ?’ KD HO >G ‘ NG OGHNGN >DA@ CFG D?OG A>’ A @?HE HALMG (H ‘ FG ?N HA @ADG ‘ LBC >GMM NAJH NG?N F?DN LE CFG LGN ‘ A@G DGKADC CF?C CF ‘ ? K O J? ‘ LDAB FC

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BHCA' FGD' □H' CFG' L? (GC' J□CF' >□ ' ?HN' CF?C' FG' F?N' OA@@?HNGN' CFG@' CA' F□NG' □C' BHNGD' CFG' >□ MG?PG ' CF?C' JFGH' FG' FABMN' CF□H (' CA' C?(G' ABC' CFG' >□ ' CFG' ? K□O' FABMN' L□CG' FGD' LG>ADG' FG' FABMN' GG' □C' AJLG□C' CF?C' JFGH' FG' JABMN' F?PG' C?(GH' ?J?E' CFG' MG?PG ' >DA@' CFG' >□ ' FG' KGDOG□PGN' □C' ?HN' ?□N' DC' CFAB' FGDG' CFGH' W' ' HN' A' FGD' ?D@' LG□H ' H?(GN' FG' KBC' □C' CA' CFG' ? K□O' CA' LG' L□CCGH' CFGD' ?E' ? ?□H' FG' (GKC' □C' □H' ?' LA ' ?HN' CF?C' FG' N□N' KD□O (' ?HN' CFDB C' □C' J□CF' ?' K□HNMG' A>' AMN' A' CF?C' CFG' ? K□O' LG□H ' ?H GDGN' J□CF?M' MG?KC' ABC' J□CF' ZDG?C' >BDE' ?HN' L□C' FGD' □H' CFG' ?D@' AJLG□C' >GJ' O?H' CGM' CFG' CDBCF' ' >AD' CFGE' DGKADC' ?M A' CF?C' FG' F?N' F□NNGH' KA□ AH' □H' ?' FAMMAJ' D?TAD' JF□OF' FG' O?DD□GN' □H' CFG' F?□D' A>' FGD' FG?N ' ?HN' EGC' J? ' CFGDG' HA' @?D (' GGH' A>' FGD' LANE ' AD' ?HE' □ H' N□ OGDHGN' CF?C' FG' J? ' KA□ AHGN HG□CFGD' ?M A' N□N' CFGE' >□HN' CF□ ' GDKGHC' □H' FGD' CA@L' . BC' □C' J? ' DGKADCGN' AHME' CF?C' CFGDG' JGDG' GGH' OGDC?□H' >DG F' CGK ' AD' CD?O (' JFGDG' □C' F?N' AHG' AH' CFG' CA@L' □NG' CAJ?DN' CFG' G?' ?HN' KGO□?MME' LE' CFG' NAAD8 ' □NG ' A@G' ?E' ?M A' CF?C' CFGE' >ABHN' CJA' KDGCCE' L□C□H ' □H' FGD' ?D@' O?HC' CA' LG' N□ OGDHGN ' CFG' JF□OF' □C' GG@GCF' G ?D' F□@ GM>' ?PG' ODGN□C' BHCA ' LGO?B G' □H' F□ ' CD□B@KF' FG' O?DD□GN' MGAK?CD?8 ' □@? G' J□CF' ?H' ? K□O' L□C□H ' A>' FGD' ?D@' HN' CFB ' AGCF' CFG' DGKADC' A>FGD' NG?CF' AJ' ?G ?D' CFAB F' FG' J? ' @?DPGMMAB ' ADDE' >AD' CFG' NG?CF' A>' MGAK?CD? ' EGC' FG' JAHNGDGN' ?C' FGD' HALMG' @□HN' ?HN' OABD? G' ?HN' CFGDG>ADG' OA@@?HNGN' FG' FABMN' LG' HALME' LBD□GN ' ?HN' M?□N' LE' HCA ' H□B ' ?HN' J□MMGN' ?M A' CF?C' FGD' CJA' JA@GH' FABMN' F?PG' FAHABD?LMG' LBD□?M I

! ' ' ' ' ! '

) ' +GD@?H' OD□C□O ' ADH ' OAHOMBNG ' A@G' DG@?D (' BKAH' F?(' KGDG8 ' □H ' 0AFH' J□CF' ?' K? ? G' CF?C' @?E' C?DCMG' CFA G' JFA' LGM□GPG' CF?C' CFG' CDBCF' A>' □ CADE ' ?HN' CFG' CDBCF' A>' ABD' DG?C' ND?@?C□O' CG?OFGD' K>' F□ CADE ' ?DG' ?MCA GCFGD' N□>>GDGHC' CF□H R

6' HP' HP ' 7' NH G' L PKP' GNM!OG' ! N' !' NHP' 9 GN' 7' LP G !MQPG' M!O' K J9O' ! N' GNM!O' X NH NHP I' 8 7 ' NHP' OPM' GH J9O' AP' K9PM' NH JN' LP G ! 7 KMN !-' HP' HP ' G' 3!Q9M!O+

6' X HMN' NHP' L PN' KH GP' N ' PWL PGG' 7' H G' P ' 7' NHP' O Q! NT' M!O' NH' 7' H G' $!MN P' 9M!O' HP' HMG' K !7 OPO' N ' NHP' MGNM O' N ' P I A OT' !' OG' 8 S

Y H G' 3!Q9M!O' !P P' O O' ! ' !P P' GHM89+
/ P' MN' NHP' L JO' 7 N 7' M' K !]JP
JN' HP!' N' 7 GN' O O' HP9L' N ' J!O' NGP97+%

JN' HMUGLP P' G' I I PMGJ MA9T' I P' NHM!' OM9K !A OQP' M!O' HP' J9O' HM P' NHP' PMOP' M!O' NHP' GLPKMN ' I P' M8G ≠ HPGP' 9 !PG' M P' ! ' N' !NP!OPO' N ' AP' 7 WPO' JL !' 3!Q9M 9O' MN' NHP' APQ !! !Q' 7' NHP' 7 J NPP!NH' KP!NJ T' M9 !P8 NHPT' M P' ! N' P P!' K !7 !PO' N ' 3!Q9M!O' QP!P M89T≠ HPT' M P' 7 ' NHP' P9P MN !' 7' NHP' P G' 7' M' GNMNP S* ' -' LP L9P≠ "MLLT' 7 ' 3!Q9M!O' NHMN' GHP' L GGPGGPG' M' L PN' H ' ' IM!T' TPM G' G !KP' HMG' GL UP!' N ' HP ' LP L9P' MG' NHP' H QHPGN' M!O' I GN' GL9P!O O' NPMKHP ' [HP' 7J99 K !GP]JP!KPG' 7' H G' NPMKH !Q' HM P' ! N' TPN' APP!' GJ77 K P!N9T' P PM9PO8 NHPT' I MT' LP HMLG' !P P ' H 99T' AP' PWH A NPO≠ XP ' H P P ' U! $NHMN' !' 3!Q9M!O' M' L M GP NHT' CPM9' 7 ' NHP ' K J!N TMG' H GN T' L P M 9G' M I !QGN' NHP' LP L9P≠ JN' H ' 7 GN' QM P' N JP' 9 7P' N ' NHMN' H GN T' \' R

H' CFG' CFDGG' DG?C' ND?@? ' CF?C' ?DG' LG>ADG' B ' CFG' □NG? ' HAC' KGD AH□->□GN ' LBC' >BMM' A>' ?' M□>G' CF?C' ?H□@?CG ' ?HN' □H>AD@ ' GPGDE' OGHG ' □ ' # ' A@G' AHG' ?□N' CF?C' F?HCDGE8 ' LB C' A>' ?' DG?C' KAGC' J? ' @ADG' M□(G' CF?H' CFG' KAGC' F□@ GM>' F?(KGDG8 ' "A@G ' JG' PGHCBDG' CA' CF□H (' □ ' @ADG' M□(G' CF?H' CFG' "A@G' A>' CFG' "A@?H ' C' □ ' CFG' □NG?M□TGN' "A@G ' CDBG' □HNGGN' CA' FGD' GPGDE N?E' >G?CBDG ' LBC' G@LANE-□H ' CF?C' G KDG □AH' A>' OF?D?OCGD' JF□OF' LGMAH ' CA' CFG' BH□PGD ?M' D?CFGD' CF?H' CFG' ?OO□NGHC?M ' HN' EGC' FAJ' P?D□GN' □ ' CFG' □NG?' A>' "A@G' JF□OF' CFG' KAGC' KDG GHC ' CA' B ' □H' CFG G' CFDGG' DG?C' @□DDAD ' A>' FGD' F□ CADE ' H' CFG' EABH ' "A@G' A>' AD□AM?HB ' JG' GG' CFG' CGDD□LMG' GHGD E' A>' FGD' D□ □H ' ?@L□C□AH' OFGO (GN' ?HN' APGDKAJGDGN' LE' CFG' >?OC□AB ' P□AMGHOG' A>' FGD' OAHCGHN□H ' ' G' (HAJ' CF?C' CFG' KD?EGD' A>' AD□AM?HB ' □ ' ?' P?□H' KD?EGD R

6' HP' H ! J %O' Q OG
PPL' & IP' !' GM7PNT' M!O' NHP' KHM G' 7' EJGN KP'
JLL9 PO' NH' NHT' IP!' [L9M!N' 9 P' M I !Q' JG[
H !Q' J ' 9M QP' NP I L9PG' NH' NHP' GH G' 7' LPMKP
#!O' ! N' J ' GN PPNG' NH' XM [R

H' CFG' @?CBDGN' "A@G' A>' 0BM□B ' DH ?D' JG' GG' FGD' D□OFG ' ?HN' FGD' MAD□G ' ?LABC' CA' LG' J?MMAJGN' BK' □H' ?' NA@G C□O' OAH>M□OC' A>' R

6' & IP' NH J' HMGN' 9 GN' NHP' A PPO' 7' ! A9P' A9 OG[
XHP!' P!N' NHP P' AT' M!' MQP' G !KP' NHP' Q PMN' 79 O+
JN' N' MG' 7M I %O' NH' I P' NHM!' NH' !P' IM!' \
XHP!' K J9O' NHPT' GMT' N 99' ! ' NHMN' NM9U%O' 7' & IP
HMN' HP ' OP' M9UG' P!K ILMGG%O' AJN' !P' IM!' O' R

H' CFG' M□ FCME' AMNGD' "A@G' A>' HCAHE ' FGD' KAJGD ' FGD' @? H□>□OGHOG ' ?DG' DG?NE' CA' KGD□ F' □H' CFG' GM>□ FHG ' A>' 3 R

/PN' & IP' !' AP' I P9N[M!O' NHP' OP' M KH'
17' NHP' M!Q%O' P IL P' 7M99[%

"A@G' J? ' ?PGN' >DA@' ?H?DOFE' LE' CFG' BKDG@?OE' A>' AHG ' F?(KGDG' N□N' HAC' M□PG' CA' @?(G' CFG' G ?D ' @ADG' □@@ADC?M

OFMG GM' F? ' AL GDPGN' CF?C' =' CFG G' KM?E ' ?DG' CFG' PGDE' CF□H ' □C GM>' ?HN' BHNGD' CFG' ?KK?DGHC' ?DCMG HG ' A>' ?NFGD□H ' OMA GME' CA' F□ CADE' ? ' FG' a F?(KGDG[>ABHN' □C ' ?H' BHOA@@AH' NG DGG' A>' ?DC' □ ' OAHOG?MGN I' H' ABD' GN□C□AH' A>' CFG G' KM?E ' JG' F?PG' □PGH ' J□CF' DG?C' >BMHG ' CFG' K? ? G ' >DA@' MBC?DOF ' ? ' CD?H M?CGN' LE' ADCF ' JF□OF' CFG' KAGC' >AMMAJGN R A@GC□@G ' GPGH' CA' CFG' M□CGD?M' ?NAKC□AH' A>' CFG' L□A D?KFGD8 ' JADN ' #F□ ' □ ' CFG' =' ?KK?DGHC' ?DCMG HG I' . BC' OFMG GM' F? ' ?M A' FAJH' B ' CFG' KD□HO□KMG ' A>' CFG' =' BHOA@@AH' ?DC' I R =' >' GPGDE' F□ - CAD□O?M' CD?H ?OC□AH' F?(KGDG' (HAJ ' FAJ' CA' G□TG' CFG' CDBG' KAGC□O?M' KA□HC' A>' P□GJ ' ?HN' CA' □PG' BH□CE' ?HN' DABHN□H ' CA' ?' GD□G ' A>' GPGHC ' NGC?OFGN' >DA@' CFG' □@@G? BD?LMG' G CGHC' A>' F□ CADE' J□CFABC' □H' ?HE' NG DGG' OF?H □H ' CFG@ I' . BC' FG' ?NAKC ' CFG' M□CGD?M' AHME' JFGH' □C' GHCGD ' □HCA' ,' CFG' CDBG' KAGC□O?M' KA□HC' A>' P□GJ I' ?HN' □ ' CFGDG>ADG' □H' F?D@AHE' J□CF' CFG' GHGD?M' KAGC□O?M' CDBCF ' JF□OF' □H' @?HE' BLADN□H?CG' K?DC□OBM?D ' HGOG ?D□ME' N□ O?DN ' ?MM' KDGCGH □AH' A>' = ?NFGD□H ' OMA GME' CA' F□ CADE I' 0AH AH' F? ' MG>C' B ' CJA' "A@?H' KM?E ' KDANBOGN' G GHC□?MME' BKAH' ?' N□>>GDGHC' KD□HO□KMG ' H' F□ ' =' GS?HB ' I' CFGDG' □ ' O?DOGME' ?' KGGOF' AD' ?H' □HO□NGHC' CF?C' □ ' HAC' NGD□PGN' >DA@' CFG' ?HO□GHC' ?BCFAD□C□G ' □ ' OF?D?OCGD ' ?DG ' CFGDG>ADG ' KBKKGC ' O?DPGN' ?HN' CB>>GN' ?OOADN□H ' CA' CFG' NG OD□KC□AH ' ?HN' @?NG' CA' KG?(' ?OOADN□H ' CA' CFG' PGDE' JADN ' A>' #?O□CB ' ?HN' BGCAH□B ' LBC' CFGE' ?DG' HAC' M□P□H ' @G□□' C' □ ' CFG' ?@G' □H' F□ ' ,' ?C□M□HG I' □OGDA' □ ' CFG' DG?C' ?OCAD' □H' CF?C' KM?E ' ?HN' FG' @APG ' ? ' ?MMB C' OADDGOCGN' LE' ACFGD' ?BCFAD□C□G ' @?NG' F□@' @APG ' ?HN' KG?(' ? ' FG' KA(G' F□@ GM>' □H' F□ ' AJH' AD?C□AH ' +□>>ADN ' KG?(□H ' A>' 0AH AH8 ' CJA' "A@?H' CD? GN□G ' ?E R =' ?N' FG' ND?JH' @GH' □H CG?N' A>' "A@?H ' F□ ' BOOG ' @□ FC' F?PG' LGGH' @ADG' ? BDGN I' U' G' KDG B@G' CA' CF□H (' CF?C' CFGDG' □ ' FGDG' ?' M□ FC' OAH>B □AH' A>' CGD@ ' >' 0AH AH' F?N' ND?JH' ' ? ' CFGE' JGDG' FG' JABMN' F?PG' ND?JH' ' ? ' CFGE' JGDG ' #FGE' JGDG' HAC' CFG' MG ' @GH' LGO?B G' CFGE' JGDG' "A@?H ' G' >?□MGN' CA' ND?J' CFG' @GH ' KD□HO□K?MME' AH' ?OOABHC' A>' CFG' M□@□CGN' D?H G' A>' F□ ' □@? □H?C□PG' KAJGD ' FG' OAK□GN' □H CG?N' A>' ODG?CGN ' G' DGKG?CGN ' ?E ' +□>>ADN ' =' CFG' □NG? ' CFG' M?H B? G ' CFG' ?MMB □AH I' JF□OF' = OABMN' AHME' LG' DG?N□ME' O?B FC' LE' CFG' OAHCG@-KAD?D□G ' A>' B B CB ' ?HN' #□LGD□B I' G' ?PG' B ' K?DCME' AH' CF□ ' ?OOABHC' ?M A' F?NAJ ' A>' M□>G ' □H CG?N' A>' CFG' =' M□P□H ' >G?CBDG ' A>' ?H' ? G' A' N□ C?HC' >DA@' ABD' AJH I' ? ' F□ ' L□A D?KFGD' EGC' CF□H (' FG' ?PG ' F?(KGDG' JAD(GN' BKAH' N□>>GDGHC' KD□HO□KMG ' ?HN' OGDC?□HME' J□CF' ?' N□->>GDGHC' BOOG

#FG' MG?N□H ' □NG?' A>' AD□AM?HB R CFG' K□PAC' BKAH' JF□OF' ?MM' CFG' ?OC□AH' CBDH R CFG' (GE' CA' CFG' L□CCGDHG ' A>' >?OC□AB ' F?CDGN' JF□OF' DBH ' CFDAB F' CFG' JFAMG' ND?@?R □ ' CFG' OAHCG C' >AD' KAJGD' LGCJGGH' CFG' K?CD□O□?H ' ?HN' KMGLG□?H ' #F□ ' □ ' ?' LDA?N' KD□HO□KMG ' ? B@□H

' PI G' 7' ? !G ! ' L≠ KKWW≠ X UG ' ' 9G≠
1 / ≠ 22+ *' - J

7 ? E ’

P?D□AB ’ @AN□>□O?C□AH ’ □D“ P?D□AB ’ C?CG ’ A>’ AO□GCE’ LBC‘ PGDE’ M□ FCME’ P?D□GN‘ □H‘ □C ’ >ABHN?C□AH ’ ?HN‘ □C ’ DG BMC ’ G‘ CF?C‘ CDBME’ JAD(’ ABC‘ CFG‘ G F□L□C□AH‘ A>’ CF□ ’ KD□HO□KMG‘ @B C‘ K?□HC‘ .’ MGC‘ CFG‘ OGHG‘ LG‘ CFG‘ "A@G‘ A>’ CFG‘ >□D C‘ #D□LBHG ’ AD‘ CFG‘) GH□OG‘ A>’ CFG‘ M? C‘ %A G ’ □CF’ CFG‘ PGDE’ M□ FCG C‘ OF?H G ’ A>’ ?OOG AD□G ’ CFG‘ KD□HO□KMG‘ C?HN ’ >AD‘ CFG‘ OAHCG C ’ LGCJGGH‘ ?D□ CAOD?OE’ ?HN‘ NG@AOD?OE’ □H‘ ?HE’ OABHCDE’ AD’ □H‘ ?HE’ ? GR BHNGD’ ?’ DGKBLM□O’ AD’ ?’ @AH?DOFER □H‘ ! H M?HN’ BHNGD’ BGGH‘) □OCAD□?’ □H‘ CFG‘ *H□CGN‘ C?CG ’BHNGD’ DG □NGHC‘ #EMGD U‘ #FG’ F□ CAD□O?M‘ CDBCF’ ?HN‘ CFG‘ KF□A AKF□O?M‘ KD□HO□KMG‘ JF□OF’ F?(KGDG’ F? ’ G@LAN□GN‘ □H‘ AD□AW?H* ’ ?DG’ BH□PGD ?M‘ . BC‘ BKKA G‘ FG’ F?N‘ KA G GN‘ CFG‘ @G?H ’ A>’ CDG?C□H ’ CFG‘ BLSGOC‘ J□CF’ JF?C‘ A@G’ JABMN‘ O?MM‘ F□ CAD□O?M‘ ?OOBD?OE ’ F?N‘ MG?DHC‘ CF?C‘ MBC?DOF ’ □H‘ CFG‘ CADE’ A>’ AD□AM?HB ’ J? ’ KDAL?LME’ NG?M□H ’ AHME’ J□CF’ ?’ MG GHN ’ CF?C ’ □>’ CFG‘ CADE’ □ ’ CA’ LG‘ DGOG□PGN‘ ? ’ CDBG ’ □C‘ LGWAH ’ CA’ ?’ M?CGD’ KGD□AN ’ CF?C‘ □H‘ CF□ ’ M?CGD’ KGD□AN‘ CFGDG‘ JGDG‘ PGDE’ H□OG‘ F?NG ’ A>’ N□>>GDGHOG‘ LGCJGGH‘ CFG‘ OM? G ’ OA@-KA □H ’ CFG‘ KAKBM?C□AH‘ A>’ "A@G ’ CF?C‘ CFG‘ L?M?HOG‘ A>’ KAJGD’ J? ’ ?’ @BOF’ @ADG‘ OA@KMG ’ CF□H ’ CF?H‘ FG’ >ABHN‘ □H‘ CFG‘ H?DD?C□PG‘ A>’ MBC?DOF ’ >BDCFGD’ BKKA G‘ CF?C ’ KDABN‘ A>’ CF□ ’ MG?DH□H ’ FG‘ F?N‘ @?NG‘ CFG‘ BH□-PGD ?M‘ KD□HO□KMG‘ A>’ CFG‘ KMGLG□?H‘ ?HN‘ K?CD□O□?H‘ FA C□M□CE’ BL □N□?DE’ CA’ ?H‘ G ?OC‘ N□ KM?E’ A>’ □C ’ ?OOADN□H ’ CA’ CFG‘ OAHSGOCBDG ’ JF□OF’ @ANG@’ □HNB CDE’ ?HN‘ ?OBCGHG ’ F?PG’ LDAB FC‘ CA’ LG?D’ AH‘ CFG‘ BLSGOC ’ C‘ □ ’ GP□NGHC ’ JG’ CF□H(’ CF?C‘ FG’ JABMN‘ F?PG’ LGGH‘ LGCD?EGN‘ □HCA’ ?’ >?M G’ KD□HO□KMG‘ A>’ ?DC ’ ?HN‘ JABMN‘ HGOG ?D□ME’ F?PG’ ND?JH‘ "A@?H‘ F?NAJ ’ □H CG?N‘ A>’ P□C?M‘ ?HN‘ GHNBD□H ’ @GH ’ Ż ’ □C ’ □ ’ FG’ F? ’ ND?JH‘ @GH‘ A’ P□P□NME R BHNGD’ BOF’ KGD@?HGHC‘ DGM?C□AH ’ CA’ G?OF’ ACFGD R ZJ□CF’ BOF’ BH□PGD ?M‘ @?H□>G C?C□AH ’ A>’ OF?D?OCGD’ CF?C‘ A@G’ KGD AH ’ A>’ CDAH ’ KAM□C□O?M‘ >GG□H ’ F?PG’ LGGH‘ DG?NE’ CA’ 0A@KM?□H ’ ?OOADN□H ’ CA’ CFG□D’ GPGD?M‘ ODGGN ’ G□CFGD’ CF?C‘ F□ ’ KMGLG□?H ’ ?DG’ CAA’ LDBC?M’ AD’ F□ ’ K?CD□O□?H ’ CAA’ F?B FCE’ ’ KAM□CG’ NG@AOD?OE’ ?’ FB@?HG’ AM□ ?DOFE’ JABMN‘ LG’ LGCCGD’ 0AFH AH‘ A@GJF?C‘ DGSA□OG ’ □H‘ CFG‘ ?@B □H ’ G F□-L□C□AH‘ A>’ =’ KMGLG□?H‘ @?M□ H□CE’ ?HN‘ CD□LBH□C□?C’ □H AMGHOG I’ ?TM□CC’ JFA’ □ ’ @ADG’ CF?H‘ F?M>’ ?H DE’ AH‘ CFG‘ ACFGD’ □NG’ A>’ CFG‘ QBG C□AH ’ ?E R ’ =’ #FG’ 0$ ’ ND?@?C□O’ @AD?M‘ A>’ AD□AM?HB ’ □ ’ CF?C‘ CFA G‘ JFA’ F?PG’ M□CCMG’ F?MM‘ F?PG’ MG ’ ?HN‘ CF?C‘ CFA G‘ JFA’ F?PG’ HBOF’ F?MM‘ C?(G’ ?MM‘ CF?C‘ ACFGD ’ F?PG’ MG>C I’ $GC‘ B ’ GG

□CF’ F□ ’ ?OOB CA@GN‘ OAH B@@?CG’ SBN @GHC‘ □H‘ F□ ’ AKGH□H ’ OGHG ’ F?(KGDG’ CFDAJ ’ B ’ ?C‘ AHOG’ □HCA’ CFG‘ OGHCDG’ A>’ CFG‘ OAHCGHN□H ’ OM? G ’ A>’ G?DME’ "A@G ’ G‘ F?PG’ HA’ NG OD□KC□AH‘ A>’ CFG‘ H?CBDG’ A>’ CFG‘ >?OC□AH ’ JG’ LGFAWN‘ CFG@ R

6’ Z‘ ’ 4 J‘ M P 9g‘ PG 9 PO‘ MNHP ’N ’O P‘NHM!’N ’7M I GH‘ \‘
’ &PG 9 PO’ PG 9 PO
2’ ’ O GN’ T J‘U! ’ M JG‘ M K JG‘ G‘ KH P7‘P!P I T‘N ’NHP‘ LP L9P≠
’ X P‘U! %N’ P‘U! %N+
D‘ ’ / PN‘ JG‘U 99‘H I ’M!O‘ P%9‘HM P‘K I ’MN‘ J ’ !’L KP≠ 2G‘ N‘? P O KN‘ \‘
’ ’ I P‘NM9U !Q‘ !%N ’ 9PN‘ N‘AP‘O !P+R

#FG’ >ABHN?C□AH‘ A>’ CFG‘ P□AMGHOG‘ □ ’ @□ GDE’ □C ’ DG?C‘ C□@BM?HC‘ □ ’ □ HAD?HOG ’ #FG’ KGAKMG’ ?DG’ >?@□ F□H ’ >AD‘ J?HC‘ A>’ OA@ ’ CFGE’ J□MM‘ (□MM‘ AHG’ @?H ’ ?HN‘ CF?C‘ J□MM‘ □PG’ CFG@‘ OADH‘ ?C‘ CFG□D‘ AJH‘ KD□OG ’ CFG‘ @BDNGD’ J□MM‘ CBDH‘ O?DO□CE’ □HCA’ KMGHCE’ ?TM□CC‘ ?E ’ CF?C‘ F?(KGDG’ =’ K?DGN‘ HA’ AOO? □AH‘ A>’ L?□C□H ’ CFG‘ D?LLMG I’ >’ CA’ FAJ’ CF?C‘ @□ GDE’ ?OC□H ’ BKAH‘ □ HAD?HOG’ KDANBOG ’ CFG‘ ?@G’ G>>GOC ’ □H‘ ?MM‘ ? G ’ LG‘ =’ L?□C□H ’ CFG‘ D?LLMG I’ FG’ F? ’ L?□CGN‘ CFG@‘ . BC‘ FG’ F? ’ HAC‘ K?□HCGN‘ CFG‘ =’ @BC□HAB ’ O□C□TGH ’ I’ J□CF’ BHN□ OD□@□H?C□H ’ OAHCG@KC ’ HG‘ CF?C‘ N□ KM?E ’ ?’ F□ FGD’ KAJGD’ CF?H‘ F□ ’ >GMMAJ ’ A>’ DG? AH□H ’ AD’ DG@AH-CD?HOG ’ ?HN‘ EGC‘ □ ’ TG?MAB ’ GHAB F‘ CA’ DG □ C‘ JF?C‘ FG’ CF□H(’ □HSB C□OG’ ?E ’ A>’ ?□B ’ &?DO□B R

6’ !G OP ’T J‘ HMN‘ GP KPG‘ HP‘ HMG‘ O !P‘7 ’H G‘K J!N T‘ \‘R

#FG’ KGAKMG’ ?DG’ A@GC□@G ’ BH D?CG>BM ’ LBC‘ F?(KGDG’ OFA G‘ CA’ FAJ’ CF?C‘ A@G’ ?@AH C‘ CFG@’ OABMN‘ LG’ SB C ’ #FG’ KGAKMG’ F?PG’ CFGD□D’ >?PABD□CG ’ = ADCFE’ &GHGH□B ’ D□KK?I’ F? ’ CFG‘ AAN‘ JADN‘ A>’ CFG‘ @BC□HAB ’ O□C□TGH ’ F?(KGDG’ ?PG’ CFG@’ HA’ BHJADCFE’ >?PABD□CG ’ □ ’ DAB F‘ FB@ABD ’ F□ ’ CDBG’ F□BN□□HG ’ F□ ’ HALMG’ OAH C?HOE ’ >AD@’ ?’ OF?D?OCGD’ CF?C‘ CFG’ KGAKMG’ F?PG’ ?MJ?E ’ MAPGN ’ GPGH‘ JF□M C‘ CFGE’ ?DG’ DGLB(GN‘ ?HN‘ OF? CGHGN ’ . BC‘ □>’ CFG’ KAGC‘ F? ’ G F□L□CGN‘ CFG’ NG@A-OD?C□O’ □ HAD?HOG’ □H‘ KDGCCE’ CDAH ’ OAWABD ’ F? ’ FG’ FDBH(’ >DA@’ KDG

’ H G‘L N !’ 7‘ J ’ - KN M9‘ 3O N !’ MG‘ Q !M99T‘ LJA9 GHPO‘ OJ !Q‘ NHP‘ L PG OP!KT‘ 7‘? H!’ T9P +

h

GHC□H ’ B ’ ?’ >BMM MGH CF‘ KADCD?□C‘ A>’ K?CD□O□?H‘ F?B FC□HG W’ ?□B ’ &?DO□B ’ □H‘ CFG’ >□D C‘ OGHG’ OM?□@ ’ HA’ E@K?CF□G ’ R

6’ X J9O’ NHP‘ ! A 9 NT‘ 9MT‘ MG OP‘ NHP ’ JNH
’ #!O‘ 9PN‘ I P‘ JGP‘ I T‘ G O’ 2%O‘ I MUP‘ M‘]JM T
X NH‘ NH JGM!OG‘ 7‘ NHPGP‘]JM NP %O‘ G9M PG’ MG‘ H QH‘
#G‘ 2’ K J9O‘ L KU‘ I T‘ 9M!KP+R

#□MM‘ ?□B ’ &?DO□B ’ F? ’ LGOA@G‘ AD□AM?HB ’ ?HN‘ JG‘ GG‘ CF?C‘ CFG‘ KAKBM?D‘ P□AMGHOG‘ □ ’ BHNGD’ CFG‘ N□DGOC□AH‘ A>’ NG@? A BG R CFG‘ ?@G‘ HGPGD P?DE□H ’ DG BMC‘ A>’ CFG‘ ?@G’ O□DOB@ C?HOG R JG’ >GGM‘ HA’ MAPG’ >AD‘ F□@’ C‘ □ ’ BHNGD’ AKKDG □AH‘ ?HN‘ □H D?C□CBNG‘ CF?C‘ L□ ’ KD□NG’ LGOA@G ’ BLM□@G ’ . BC‘ FG’ F? ’ KDGP□AB ME’ NG GDPGN‘ ABD’ FA@? G ’ ?HN‘ □H‘ A@G‘ ADC‘ ABD’ ?>>GOC□AH ’ #FG’ KAGC‘ D?NB?WME’ J□H ’ B ’ CA’ ?H‘ ?N@□D?C□AH‘ A>’ CFG‘ FGDA‘ LE’ CFG‘ @A C‘ (□M>BM‘ @?H? G@GHC ’ □D C ’ CFDAB F‘ F□ ’ @ACFGD ’ F?C‘ ?’ MAD□AB ’ K□OCBDG‘ A>’ ?H‘ ?HC□QBG‘ @?CDAH ’ >DA@’ JFA@’ FGD’ AH‘ GQB?WME’ NGD□PGN‘ F□ ’ KD□NG‘ ?HN‘ F□ ’ FGDA□ @’ □ ’ KDG GHCGN‘ □H‘ CFG‘ G QB□-□CG‘ OGHG’ JFGDG’) AMB@H□?’ ?HN‘) ?MGD□?’ C?M(’ A>’ F□@’ CFGE’ MAPGN‘ ?OOADN□H ’ CA’ CFG□D’ GPGD?M‘ H?CBDG ’ ’ FA’ LBC‘ F?(KGDG’ OABMN‘ F?PG’ G□TGN‘ BKAH‘ CFG‘ K□D□C‘ A>’ ?’ "A@?H‘ JA@?H‘ A>’ CFG‘ F□ FG C‘ OABD? G’ ?HN‘ @GHC?M‘ KA JGD’ LBD C□H ’ ABC‘ □H‘ JADN ’ BOF’ ? ’ CFG G‘ WR

6’ ’ ‘ " G‘ A9 OT‘ A
X NH‘ H G‘ I M 9%O‘ HM!O‘ NHP!’ L !Q‘ 7 NH‘ HP‘ Q PG8
/ UP’ N ’M‘ HM PGN I M!’ NHMN%G‘ NMGU%O‘ N ’ I ’
1 ’M99’ ’9 GP‘ H G‘ H P+
’ " G‘ A9 OT‘ A [1 ’?JL NP ’ ! ’ A9 O[
’ ’ # MT ’ T J‘ 7 9[N‘ I P‘ APK I PG‘ M‘ I M!’
HM!’ Q 9N‘ H G‘ N LHT ’ HP‘ A PMGNG‘ 7‘ " PKJAM
X HP!’ GHP‘ O O‘ GJKU9P‘ " PKN ’9 U%O‘ ! N‘ 9 P9 P ’
HM!’ " PKN %G‘ 7 PHPMO ’ HP!’ N‘ L N‘ 7 NH‘ A9 O‘
#N‘ : PK M!’ G OG%K !NP!O !Q+R

#F□ ’ □ ’ ?’ HALMG’ KDGK?D?C□AH‘ >AD’ CFG‘ OGH□O‘ G F□L□C□AH‘ A>’ CFG‘ NGGN ’ A>’ ?□B ’ &?DO□B ’ @□N C‘ CFG‘ KFE □O?M‘ CDGH CF‘ ?HN‘ CFG‘ @GHC?M‘ GHGD E‘ CF?C‘ @?(G‘ CFG‘ CD□B@KF?HC‘ J?DD□AD’ CFG‘ KAGC ’ LE’ ?’ >G J’ A>’ F□ ’ @? □O?M‘ CABOFG ’ F? ’ FAJH‘ B ’ CFG‘ GPGD KDG GHC‘ MA>C□HG ’ A>’ @□HN‘ CF?C‘ NGHACG ’ QB?M□C□G ’ >?D’ LGEAHN‘ CFA G‘ JF□OF’ LGWAH ’ CA’ @GDG’ ?H□@?M‘ OABD? G ’ □ ’ OAHCG@KC‘ A>’ CFG‘ "A@?H ’ JFA’ ?DG’ =’ LG?CGH‘ L?O(I’ ?HN‘ CFG‘ =’ "A@?H ’ J□CF‘ KA□M I’ □ ’ GQB?WME’ J□CFGD□H ’ C‘ □ ’ HAC‘ B>>□O□GHC‘ >AD’ F□@’ CA’ J□H‘ AHG’ L?CCMG ’ #FG’ >ADOG’ A>’ OF?D?OCGD’ CFDAB F‘ JF□OF’ FG’ CF□H(’ CF?C‘ HACF□H ’ □ ’ NAHG’ JF□M C‘ ?HECF□H ’ DG@?□H ’ CA’ NA ’ FAJ ’ CF?C‘ F?(KGDG’ BHNGD CAAN‘ CFG’ CB>>’ A>’ JF□OF’ ?’ DG?C‘ GHGD?M‘ □ ’ @?NG ’ □ ’ DG@AH CD?HOG’ CA’ A@□H□B R

6’ X HP P‘ G‘ NHP‘ P!P I T‘ \‘ # P‘ T J‘ 9 OG‘ %NHP‘ 7 P9O‘ \
27’! N’ HT‘ KPMGP‘ T J‘ N 99‘ T J‘ M P‘ G ’ \‘ R S

□ ’ HAC‘ □H‘ MBC?DOF ’ C‘ □ ’ BKKM□GN‘ CA’ B ’ LE’ ?’ F□ FGD’ ?BCFAD□CE R LE’ CFG‘ □H C□HOC‘ LE’ JF□OF‘ F?(KGDG’ (HGJ’ CFG‘ DG?C‘ GODGC‘ A>’ BOOG ’ □H‘ GPGDE’ GHCGDKD□ G CFG‘ NGCGD@□H?C□AH‘ CA’ LG‘ BOOG >BM’ HG‘ G ?@KMG‘ @ADG‘ A>’ CFG‘ (□MM‘ J□CF’ JF□OF’ F?(KGDG’ @?(G ’ ?□B ’ &?DO□B ’ D?-NB?WME’ ALC?□H‘ CFG‘ BHOAHCDAMMGN‘ FA@? G‘ A>’ ABD’ FG?DC ’ #FG’ KDABN‘ OAHQBGDAD’ JFA’ DGSGOC ’ ?MM‘ □>C ’ ?HN‘ FAHABD ’ JFA’ F? ’ ?□N R

6’ 2’ HM P‘ G I P‘ J!OG‘ JL !’ I P ’ M!O‘ NHPT‘ G I M N‘
’ HPM ’ NHP I GP9 PG‘ P I P I AP %O R S

? (’?’ □>C‘ A>’ F□ ’ BKGD□AD’ A>>□OGD R

6’ 2’ G I PN I P‘ 9MT ’ HP P‘ !’ 9
N‘ M‘ L ’ I M!%G‘ H JGP8 HP‘ JGPO‘ I P‘ U !O9T
" P‘ K PO‘ N ’ I P‘ 8 2’ GM ’H I ’ L G !P 8
JN‘ NHP!’ #J7 O JG‘ MG‘ NH !’ I T‘ P +
#!O‘ MNH‘ %P HPH!%O‘ I T‘ L NT ’ 2’ P]JPGN‘ T J‘
’ Q P‘ I T‘ L ’H GN‘ 7 PPO M+R

G‘ HAJ’ GG‘ AHME’ CFG‘ CH□G‘ FGDA ’ G‘ DG?M□ G ’ CFG‘ HALMG‘ NG OD□KC□AH‘ A>’ CFG‘ =’ ?KKE’ ?DD□AD’ I’ JF□OF’ ?’ DG?C‘ KAGC‘ A>’ ABD’ AJH‘ N?E ’ F? ’ ND?JH‘ J□CF’ A’ @? CGDME’ ?’ F?HN‘ R

6’ X H ’O I %O‘ N ’Q ’ !’K I LM!T‘ NH‘ -M !
#!O‘ OPM ’M!O‘ 3’ %$ *’ % "’ ’ ’#’
J !G‘ H G‘ (%% 2’ ’ ’ %‘ ;
2!’ 7MKP‘ 7‘ NHPGP‘ $’ J (% ’ ’- 8 ’
X H KH‘ G‘ J ’HJ I M!’ !MNJ P%G‘ $ $ % ’ 8 ’8
!N 9G‘ NHP I ’M!O‘ GJAOJPG ’ N M!G I JNPG ’ AP PM PG‘
17‘ NHP ’AMO‘ !79JP!KP ’ M!O‘ NHP ’Q O‘ PKP PG
T‘ AEPKNG ’ H KH‘ I QHN‘ 7 KP‘ NHP‘ G J9‘ N ’MAMNP‘
"P ’ 7PP9 !Q‘ P!OP %O‘ I P‘ K I LMGG !MNP+R

CFG "A@?H KAKBM?OG'

G F?PG >AD ACCGH CFG >DGOOG K?CDJO□?H J FA' JABMN' @?(G ?QB?DDE A?'

HN' CF□ 'JG' BKKA G'□'JF?C ?TMCC' ALSGOC'CA'□H' F?(KGDG8'

OAHNBOC' A?' CF□'KM?E' #FG' OF?D?OCGO' A?' AD□AM?HB'D□ G'BKAH' B'

#FG' B>>GD□H' ?HN' OA@M?□HC'A?'F□'GH□@□G'?DG @GD GN'□H'CFGJO'

?OC□AB'F?CDGN' =' AGCDE I' ?E'CFG' OD□C□O'=';□'D□ FC DAE?M' C'KBC'

CFG□HNJP□NB?M'>AO'CFG' KGJG' CFG' AHG'?LAPG'CFG□H>□HJCG @?HE'@□ FC

LG>ADG'D□ FC I' AJ'JG'?KKDGFGHN'CF?C' F?(KGDG' F?' HAC'CDG?GGN'

CFG' BLSGOC'A?' AD□AM?HB'?>CGO'CF□'D□ FC'DAE?M'>? F□AH'A?'KAGCDE' G'

F?' NG?MC'>?□ME'J□CF'CFG P□OG'?'JGMM'?'CFG P□CDBG'A?'F□'FGDA' #FG'

OGHG'□H'CFG' GOAHN'?OC'□H'J FJO□' AD□AM?HB' C?HN'>AO'CFG' OAH BM-

F□K'□'?@AH C'CFG @A C'DG@?D(?LMG' G?@KMG'A?' F?(KGDG8'

□H□ FC'□HCA'OF?D?OCGD' H' MBC?DO□' FG>ABHN'?' □@KMG>?OC'DGM?CGN'

J□CFABC'?HE'OA@@GHC R='A J'&?DO□B'>AMMAJ□H'CF□'0B CA@'

FAJGN'@?HE'JABHN'?HN'0BC'BKAH'F□'LANE'JFJO□'FG'F?N'DGOG□PGN'

□H'GPGHCGGH'EG?D'GDPJOG'?C'CFG'J?D'?HN'□H'@?HE'BHNDE'L?CCMG'

LG□H'GPGO'CFG>ADG@A C'@?H'CF?C'N□N'GC'ABC>GGC'CA'>□ FCA'A'CF?C

CFGDG'J?'HAC'?'@?H'?@AH'CFG'KGAKMG'LBC'J?'?'F?@GN'A?'F□@'GM?

CA'DG>B G'A'P?M□?HC'?'@?H'?HN'AHG'A?'CFG@'?□N'CA'?HACFGD'G'

@B C'HGGN'0FAA G'F□@'OAH BM'CFGDG□'HA'DG@GNE I'.BC□H'F□'

DGKDG GHC?C□AH'A?'CF□'>?OC'F?(KGDG'F?N'CA'ODG?CG'?'OF?D?OCGD'?HN'

CA'@?(G CF?C OF?D?OCGD'?OC'?HN'DG?OC'BKAH'CFG OF?D?OCGD'A?'CFG

KGAKMG' AD□AM?HB'J?'G GHC□?MME'?HN'HGOG ?D□ME'KDABN' □'

GNBO?C□AH'F□'AO□?M'KA□CAH'F□'□HN□P□NB?M'BKDG@?OE'@?NG'F□@'

A' G'M□PG'□H'?'O□CE'A?'>?OC□AH'?HN'FG'N□M□(G'A?'OABD G'CFG

>?OC□AH'AKKA GN'CA'F□'ADNGD' #FG'KGAKMG'DGKDG GHC'CFG'AK□H□AH'

CF?C FG'N□M□(G'?HN'FGG'CFGDG>ADG'N□M□(G'CFG'KGAKMG' #F?C'FG'F?'

K□CE'?HN'MAPG'>AD'FB@?H□CE'FAJGPGD'FB@LMG'JG'F?PG'?MDG?NE'GGH'

□H'@?HE'JABHN'?HN'0BC'BKAH'F□'LANE'JFJO□'FG'F?N'DGOG□PGN'

FA□GN'@?HE'JABHN'?HN'0BC'BKAH'F□'LANE'JFJO□'FG'F?N'DGOG□PGN'

"M P'O I?'IMI'T'NH IQ6'G I?'9PGE'G I?'F I P'T J' KPG

2iOPPO'?' J9O'AP'K iGJ9+R

6'4 J' KPG'7'T J' 7PG?'HM P'7 JQHN8

X MNKH%O'7'T J' KPG8 7'T J' KPG'APM

1T' J1OG□N'□O CPI' OO8 AMN9PG□NH KP'G W

?'HM P'GPPI'MIO'HPM O'78 7'T J' KPG

6' 4 J' KPG'7'T J' 7PG?'HM P'7 JQHN8

X MNKH%O'7'T J' KPG8 7'T J' KPG'APM

1T' J1OG□N'□O CPI' OO8 AMN9PG□NH KP'G W

?'HM P'GPPI'MIO'HPM O'78 7'T J' KPG

"M P'O I?'IMI'T'NH IQ6'G I?'9PGE'G I?'F I P'T J' KPG

2iOPPO'?' J9O'AP'K iGJ9+R

#FG'KGAKMG'F?PG'SB C□OG'GHAB F'CA'GM□OC'CFG'@?H'>AD'F□'NGGN'□'LBC'

CFGE'F?PG'HAC'CDGH CF'GHAB F'CA'?L□NG'LE'CFG□D'AJH'GM□OC□AH'

0ADH>BMME'CFGE'?DG'CAMN'LE'CFG'CD□LBHG'CF?C CFGE F?PG'LGGH'CDG?CGN'

F?PG'CFG□D'=';□ HAD?HC'GM□OC□AHI'DGPA(GN R'CA'B>>GD'>?M GFAAN'CA'LG'

KBC'□H'CFG□D'@ABCF R'CA'LG'CFG'@GD'CAAM'A?'CFG□D'JG?('CFAB F'OD?>CE'

MG?NGD'C□'F?(KGDG8'KD?□G'□H'F□'DGKDG GHC?C□AH'A?'CF□'KMGLG□?H'

?HN'K?CD□O□?H'0AH>M□OC'CF?C'FG'>AD'CFG'@A C'K?DC'FAJ'CFG'KGAKMG?'

CFGE'?MJ?E'?DG R ZB C'GHGDAB'BK'CA'?'DGDC?□H'KA□HC'.BC'KBC'CF?C

CF□H'0?MMGN'?'NG@?A BG'?@AH C'CFG@R CF?C'OAMN'DAPGM□H'

GM>□F'CF□H'J□CFAB C'E@K?CF□G'KGAKMG'CFG'KGAKMG'NG K□GD'A?'

CFG'KGAKMG'LGO?B G'FG B G'CFG@'?'CAAM R?HN'CFGH'CFGDG□'HA'

M□@□C'CA'CFG□D'BHSB C'PAMGHOG8'H'CFG'BL GQBGHC'OGHG'JG'GG'HAC'

CFG'KGAKMG'?C'?MN'□H'CFG G GDO□G A'A?'CFG□D'A JH J□MM' G'GG'AHME

.DBCB'?HN'□O□H□B'KG?(□H'CFG'PA□OG'HAC'A?'CFG'KGAKMG'LBC'A?'

CFG□D'□HN□P□NB?M'GM>□FHG'H'CFG'>□D C'OGHG'A?'CFG'CF□DN'?OC'CFG

CD□LBHG'□H BMC'AD□AM?HB'?HN'>DA@'CF?C'@A@GHC'CFG'M□AH'M?'FG'

F□@GM?BK'□HCA'?'>BDE'J F□OF J□MM'LG'NG?NME'#FG'0?C?'CDAKFG□'AHME

()

NG>GDDGN'JFGH'CFG'KAKBM?D'OM?@ABD'>AC'CFG #?DKG□?H'"A0(' BL□NG'

□HCA'CFG'NG@?HN'CF?C FG FABMN'?H J GD'CA'CFG@'AHOG'?'?H'□H'CFG

@?D(GC'KM?OG'#FG'@ACFGD'A?'AD□AM?HB'?L?CG'A@GCF□H'A?'FGD

F□F H?CBDG'JFGH'FG'OABH GM'FGD'AH'CA'?'N□ G@L□OH'BL@□-

□AH R

6' PKMJGP'HMM'I'N'9 PG'T J' I'N'GLPM9K

'NHP'LP L9P8 I N'ATT J' I'IGN JK□ I+

'AT'NHP'I MMP'H KH'T J'HPM N'L I L□G'T J

JN' NH'GJKH' OG'NHM'M P'AJN' NP□' I'

4 J'N iQJP'NH JQH AJN'AMGM□OG'MI□'GT99MA9PG

1T'I'M99 MIKP'N'T J'A G I%G N JNH+R

#F□'□'CFG'KDBNGH□OG'GPGH'A?'?H'FGDA□D'JA@?H4'LB□ FG>G?D'>AD'

FGD'AH' FG□'A@GJF?C'MAJGDGN'LE'CFG'□H CDBOC□AH'.BC'CFG'KAG□

(HGJ'CF?C?'DG?JM'OAHCG@K□>AD'CFG KGAKMG'?MD□GN'CA'?' CDAH'NG□DG'

>AD'CFG'FAHABD'JF□OF'CFG KGAKMG'F?PG'CA'LG CAJ'@B C'KDANBOG'CF□'

M□K GDP□OG' AD□AM?HB'NAG'HAC'FGGN'CFG□H CDBOC□AH'A?'F□'@AC□FGD'

G'?KKDA?OFG'CG@KGD?CGME'CA'F□'QBG'□AHGD'FG'KBC'BK'PAJ'>AD'

CFG'?>GCE'A?'"A@G'>DA@'CFG'NGKCF'A?'F□'>BM'FG?DC'FG□'□H G?DHG C'

CA'@AC□FGD'F□'KD□NG'?HN'F□'DG GHC@GHC'LBC'CFG'OA?D G'CD□LBHG'O?MM'

F□@'=';CD?□CAD I'#FGDC'O?H'LG'LBC'AHG□'BG'FG□'L?H□'FGN

A@G'A?'CFG'F□'CAD□?H'?E'CF?C'?MCFAB F'AD□AM?HB'SA□HGN'CFG

GHG@G□'A?'F□'OABHCDE'FG'KDAPA(GN'HA'SG?MAB□G'?@AH C'CFG'H?C□PG'

MG?NGD'A?'CFA G'GHG@□G '□CF?C FG'N□GN'FAHABDGN'?HN'DG J?DNGN'CF?C

F□'@G@ADE'J?'GPGH'DGPGDGHOGN'?C"A@G'F?(KGDG'KDAL?LME'(HGPP

HAC'CF□'PGD□AH'A?'CFG'MG GHN'A?'AD□AM?HB'>'FG F?N'(HAJH□C FG

JABMN'HAC'F?PG'?NAKCGN'□C'G'F?N'CA'FAJ'CFG>?M G'CGK'JF□OF

AD□AM?HB'CAA(' G'F?N'CA'CG?OF'CF?C F□'KDABN'DG GHC@GHC'FBDD□GN

F□@'BKAH'?'OABD G'JF□OF'LDAB FC'GP□M'JAD G'CF?H'CFG'#?DKG□?H

"AO(' HN'EGC'J G'?DG'OA@KGMMGN'CA'?N@□DG'F□@'JG'O?H'GE@LMG'□H

LM?@G'F□@' C'J?'HGPGD'ABD'AAN'>ADCBHG'CA'GG'0AFH'G@LMG'□H

CF□'F□'DG?CG C'OF?D?OCGD'□>'C F?N'LGGH'JG'KDAL?LME'FABMN'F?PG

DGOG□PGN'□HCA'ABD'@□HN'?H'G@LAN□GN'□@?G'>CFG'@AD?M'D?HNGBD'A>'

OGHG'JFGH'AD□AM?HB'C?HN'BKAH'CFG'FG?DCF'A>'#BMMB'B>□N□B'

?HN'?E R

DGKADC'CFB'A>'F□'BH BOOG>BM'@□'□AH'CA'FGD'L?H□'FGN'AH'R

7 ? E ,

6'?' 77P %O'N 'M M9KPI'H G PQM O'
O 'H G'L MMP'7 pIOGP " G'MIG p'N 'I P' MG+
"P'K J9O'I N'GMMT'N 'LKTK NHPI' I'M L 9P'
1 7'I G IP'I JGNT'KHM778 "P'GM O'%N MG'7 99T'
O ' IP'L 'Q M I' 'NT 'N '9PM P'JIAJ1N+
#IO'GN 99'N 'I GP'NHP' 77PIKP+R

□ ' AMN' GHDG?%' ?HN' OA@K?HA%H' □H ?D@ ' CABOFGN' HACF□H ' LB□' F□ ' KD□NG' &GHGH□B ' F□ ' ='LGMAP8N' □H "A@G I' BHNGDC?(G ' ?' □@□M?□D @□ □AH' #FG' ?H JGD' A>' AD□AM?HB '□ R

/' X ?P'I NHP 'KH 9O'?'UI 'I N+' T'M77M G
P'GP MINPO'N ' NHP G+R

.B□' CFG @A@GH□' CF?□ AD□AM?HB ' F? 'NGOM?DGN' CA' B>□N□B R

6'O PGH'PI AMGG PG'MIO'GJ NG+
'7 I'NHP'GMMP'I 'L MMP'7 pIOG'HP PM7NP'
X 99'?'9piO'PM'N RS

F□ '@ACFGD' F□ ' J□>G'F□ ' OF□MN'?KKG?D' .B□' FG' J□M' C?HN

6'#G '7M' I MI' P P'MJNH ' 7'H I GP97+
#IO'UIP 'I ' NHP'U I+R

F?□'?' OGHG' >AMMA J ' #FG' J?DD□AD□ '□ G CGDH?ME' 0?M@ ' ? '□' FG' JGDG
J□O'F□ FG KG2(GG@ '□H □C ' >BM' F?D@AHE ? '□' □' FGM' CFG @?H8'
□H@A □' ABM'□H' ?' KDA>ABHN' 0AH □ CGH0E' .B□' CFG K? □AH' □ '0A@□H '
=' 'F?PG' ?□' CAA'MAH I'□ 'CFG KDGMBNG' CAR

6' 1' I NHP ' I NHP '[
X HMN' HM P'T J'O IP'\' PH 9O'NHP'HPM PIG'O ' LP+
HP'Q OG 9 U'O i'MIO'N IG'JIIMJ M9' GKPIP'
HPT'9MJQH'MN+' 1'IT' I NHP ' I NHP '[1'[
4 J'HM P i'M HMLLT' KN T'N '&' I P
JN'7 'T J'G i SAP9 P P' N' 1'AP9 P P' N+
; GN'OMIQP J69T'T J'HM P' NH'H I'L P M 9MO+
27'i N' I GN' I NM9'N 'H I+R

)AMB@H□?' KG2('HA' ACFGD' JADN' #FG' @ACFGD' ?HN' CFG' AH' 'CFG' J□>G

#FG' ?D□ CA0D?□D' K?DCE' J? ' ? ?H' LDAB' F□' □HCA' ?' @ADG' CGDD□LMG' OAH>M□OC'
J□CF' CFG' □@KAPGD□' FGN' ?HN' CFG' NG' CCBCG' □PM' J?D' J? ' CFG' H?CBD?M'
DG' BMC' BMN?' G C?LM' FGN' ?' FADC' M□PGN' OAH' CCBC□AH' #FG' N□ AMB□AH'
A>' CFG' "GKBLM□O' J? ' ?' F?HN' 'CFG' CDB MG' J? ' FGHOG>AD□F' CA' LG' HAC'
LGC'J GGH' CFG G' CJA' DG@?D(?LM□ @GH' ? ' ND?JH' LE' F?(KGDG ' ?KKG?D'
CF?H' CFA G A>' .DBCB ' ?HN' ? □B ' CF?C' J G @?E' BHNGD C?HN' CFG DG G@-
LM?HOG ' ?HN' CFG' N□>>GDGHOG ' A>' G?OF' #FG' MG?N□H ' N□ C□HOC□AH '
LGC'J GGH' CFG G' CJA' DG@?D(?LM□ @GH' ? ' ND?JH' LE' F?(KGDG ' ?KKG?D'
CA' B ' CA' LG' CFG G' .DBCB ' ?OC ' JFAMME' BKAH' KD□HO□K MG' ? □B ' K?DCME'
BKAH' □@KBM G' .DBCB ' ?OC ' AHME' JFGH' FG F?' 'DGOAHO□MGN' CFG' OAHCG@-
K?OC□AH' A>' ?OC□AH' J□CF' F□' KGOBM?C□PG' AK□H□AH ' ? □B ' ?MMAJ ' CFG'
HGOG □CE' A>' ' ?OC□AH' CA' DBH' LG>AD□' ?FN' APGDH' F□ ' AK□H□AH '
.DBCB ' □ ' ? KF□MA AKFGD' ? □B ' □ ' ? K?D□ ?H' .DBCB ' CFGDG>AD□'
NGM□LGD?CG ' ?HN' K?DG ' ? □B ' KDGO□K□?CG ' ?HN' NGHABHOG ' .DBCB '
□ ' CFG' HALMGD' H CDBOCAD' ? □B ' CFG' LGCCGD' KAM□C□O□?H' F?(KGDG'□H'
CFG >D C' DG?C' OGHG' LGC'JGGH' CFG@' 'LD□H ' ABC' CFG G N□ C□HOC□AH ' A>'
OF?D?OCGD' BKAH' JF□OF' >BCBDG' GPGHC ' A' @?□HME' NGKGHN' ? □B ' NAG '
HAC' M□(G' ?' @GDGME' OD?>?E' @?H' B G AHME' CFG ?D B@GHC ' CA' OAH K□D?OE
JF□OF' J□M' @A C' CAB0F' .DBCB ' LBC' FG @□ G ' J□CF' CF@' □H F□ ' TG?M'
?HN'PGFG@GHOG'CFA G' J F□OF' F?PG' KDG GHCGN' CF@@ GMPG ' @A C' CDAH ME
CA' F□ ' AJH' @□HN' G' F?N' ?' KGD AH?M' N□ M□(G A>' G ?D'?' G ?D' F?N'
A>'F□@' ? □B ' LG □H ' ?DC>BMME' FG' JABM' >□D C' @APG' .DBCB ' CFDAB F'
F□ ' ?>>GOC□AH' ?HN' HG C' CFDAB F' F□ ' GM> MAPG' G' □ ' AKGH□H ' ?' GC
N□ 0ABD G' AH' F□ ' AJH' □HOGD□CE' JFGH' CFG FABC□H ' A>' CFG KGAKMG' @?(G '
.H□CB ' G KDG ' F□ ' >G?D' CF?C' CFGE = 0FAA G' G ?D' >AD' CFG□D' (□H 88
? □B ' ?C' AHOG' MG?PG ' F□ ' KDGK?DGN' KGGOFG ' ?HN' ? B@G ' CF?C'
LGO?B G' .DBCB ' >G?D ' □C' FG' JABM' HAC' F?PG □C' A' R

‡ 6'?' J9O'I N' MGG JG'8 TPN'?'9 P'H I' P99+R

R'#9MG['K PO'Y : P'I P'G I P'O IU' N I JG+%R

.DBCB ' ?H JGD ' HAC' LBC' @?D('=';?HACFGD' GHGD?M' FABC I' ? □B '
CFGH' CD□(G ' ?' N□>>GDGHC' HACG R

6' JNJG'MIO' MPGM ' X HM'GH J9O'AP' I'NHM' MPGM'\
X HT'GH J9O'NHM'IM I P'AP'G JIOPO'.I P'NHMI'T J G'\R

C' N? C' ? B' FC' BKAH' ?' ;R

', 6' 1 [' T J' MIO' ?' HM P' HPM O' J .7MMHP G GMT
HP P' MG' M' JNJG' IKP' NHMN' J9O' HM P' A U%O'
HP' PN' IMJ' OP J9' 'UPPL' H G' GMMP' P' i' &. I P
#G' PMG 9T' MG' M' U I Q+R

#FG' +* @' (' -+' -(+' @APGN' R

6' JNJG' HMO' MNHP 'AP' M' 99MQP +
HMI'N ' PLJNP'H I GP97M' G i' T& I P'
IOP 'NHPGP' HM O' K IO N IG' MG' NH G' N I P'
2G' 9 UP' N '9MT' JL i' JG+R

H' CFG' HG C' OGHG' JFGH' ?G ?D ' DGCBDH' >?DA@' CFG' ?@G 'CFG
DG?C' NDOC?CAD' NG ODDLG ' ? B R CFG ? B ' JCF='?' MG?H' ?HN' FBH' DE
MAA(I' CFG =' DG?C' AL GDPGD' I R ? ' AHG' JFA@' FG OABMN' >G?D' ;' FG OABMN'
>G?D' ?HECFH ' H' CFG' BL GQBGHC' N□?MA BG' JCF' ? O?' JFGDG' CFG
H?DD?C□PG' A;' JF?C' K? GN' ?C' CFG' ?@G ' □ ' OAHNBOCGN' JCF' ?' CDBCF' CF?C'
KBC ' CFG' PGDE' OGHG' LG>ADG' B ' ? B ' ? ?H' CDC(G 'H' JCF' CFG' CFAB' FC'
CF?C' □ ' BKKGD@A C' H' F□ ' @HN' .DBCB ' ?E ' CF?C' ?D' ='F?CF' CFG'
>?MCH ' □O(HG 'I' CFG' DGKME' A;' ? B ' □ ' @A C' OF?D?OCGD C?O R

6' I GM' HMNH' N' I N8 AJN' T J' MIO'2
#IO'H IPGN' MGKM ;' P' HM P' NHP' 7M99 IQ' G K KIPGG+R

.DBCB ' AG ' FA@G' CA' @GN□C?CG' #FG' GHGD E' A;' ? B ' □ ' HGPGD'
JG?DE' H' CFG' CAD@' FG □ ' CMM' CFG OAH K□D?CAD' #FG='□@K?C□GHOG' A;'
CFG' FG?PGH 'I' >BDH□ FG ' F□@' ?H' ?D B@GHC ? ?H C' CFG @?H

6'- O Q JG D i+
#IO'7PM 7J9' MG' NHPGP' GN MIQP' JLN IG'M P+R

#FG' KMAC□ ' @?CBD□H ' .DBCB ' G KGO□?MEC□ ' CA' LG' JAH
AMGD□N G' JFA' JFGH' FG NABLC ' A;' ?' @G?HO□H ' □H F?(KGDG R AD'
JF?C□ ' D?DGD' B G C ' CF?C' CFGDG □ ' A@G □HOAH □ CGHOE□H' CFG OAHNBOC'
A;' CFG' OGHG' AD' CFG' NGPGMAK@GHC' A;' 0F?D?OCGD R F?' CFG' F□ FG C'
OM?□@' BKAH' ABD' NG>GDGHC□?M DG ?DN' □PG ' CFG' AM□MAQBE' A;' .DBCB ' □H
1/+' 22+' ' >'))

6' JN7 'NHP' ' ' "P' J9O' AP' K M J%O 8S
" ',NHM7 I 'QHM' KHMIQP' H G' IMNJ P' NHP P%G' NHP']JPGN i+R

G' AG ' >DA@' CFG KGD AH?M' 0?B G' CA' CFG' GHGD?M' 0?B G' =' G' JABM'
LG' ODAJH8N1' ' ?' CDB@P□D' ?' NOC?CAD' .DBCB ' F?N' HA' KGD AH?M'
0?B G ? ?H C ?G ?D' LBC' CFG' H?@G A;' (H ' JF□OF' ? B ' KABDGN'
□HCA' F□ ' G?D' DAB G ' ?M' F□ ' KGOBM?C□PG' DGKBLO?H□ @' □ ' G KGD□GHOG'
A;' ?D' 0?M' '>DA@' F□@' CFG' ?O(HAJMGN @GHC' CF?C' ?G ?D□ ' ?>>GOC□AH'
J?E HA□' @ADG' CF?H' F□ ' DG? AH ' LBC' ODAJH' F□@'?N' F□ ' H?CBDG' @□ FC'
LG' 0F?H GN' G' @B C' LG?D□H' @□HN' CF?C' .DBCB ' □ ' HA□' EGC' OA@@□CCGN'
CA' CFG' OAH K□D?OE' #FG' OF?D?OCGD' CF?C' F?(KGDG' @G?HC' F□ ' .DBCB '
CA' LG' □ ' HA□' EGC' >BME' NGPGMAKGN' G' □ ' EGC' □DDG AMBCG' ?HN' F□ ' DG? AH-
□H ' ?DG' CFGDG>ADG' CA' ?' OGDC?□H G CGHC' □HOAH GQBGHC□?M R

IK□' MGG JG'7 GN' O O' HP□' I P' MQM IGN' MPGM'
2'HM P' I N' G9PLN+
PN' PPI' NHP' MKN IQ' 7'M O PMO7J9' NH IQ'
#IO'NHP'7 GN' I N' I'M99 NHP' INP I' G
/ UP' M' LHMINMG I M' ' M' H OP JG' O PM I+R

G' CFGH' ?NN R

6' XHP P' 9M' NH J'7 IO' M' KM P I'OM U' PI JQH'
'I MGU' NHT' I IGN' JG' GMQP'I'.

G' F?' L GGH='J□CF' F□@ GM>' ?C' J ?D I' KGOBM?C□H ' JG' NABL□' HAC' BKAH'
CFG' C□NG' A>' CG ?D' CAJ?DN ' ?L AMBG□' KAJGD' LB□' BHKDGK?DGN' CA'
DG □ □' CFGD□C' = >' ?G ?D' FG' F?' ?N' = ' MAPG' F□@' J GMM I' FG' HAJ'
?E R

6'?'UI 'I 'LP G IM9' KMJGP'N 'GLJ I'MN' H I +R

G' ?DG' LE' HA' @G?H ' BDG' A>' CFG' OADDG□' KBHOCB?C□AH' A>' CF□ ' K? ? G
?'□C□'B B?MME' □PGH' .DBCB 'F?' 'OA@G CA' ?' OAHOMB □AH' □H CFG' J?COFG '
A>'CFG' H□ FC R

6' 2N' I JGN' AP' AT' H G' OPMNH+R

G' N□ ?PAJ ' FAJGPGD' ?HE' KGD AH?M' F?CDGN' CA' ?G ?D R

6' #IO'7 ' I'LM N
2' UI ' - % "KMJGP'N 'GLJ I'MN' H I +R

;' / NP M T' &PIM IG' 9' ;L' =+

DG?NE @G?H ' A? NAH ' A' UH ABD' MMB CD?C□AH ' ', #FG' KAGC' ?NFGDG ' CA' CFG' >?OC ' A? =' FI CADE' J□CF ?' DG@?D(?LMG' >NGNUCE' '>GJ' F?DN' >□ BDG ' HAC□OG A?' GHDE') 'CFG A@GJF?C'LAMN'? GDC□AH','CF?C F?(KG?DG B GN' PGDE' MCCMG' ?DC□>OG' ?HN'□H' CDBCF' F?N' PGDE' MCCMG' NG □ H'□H' CFG ?DG K?□HCGN' BKAH'? 0?HP? ' CFG ABCU□HG ' ?DG NU C□HOC' CFG OAMABD ' ?DG OAH CDBOC□AH' A?' CFG' DG?CGD' HB@LGD' A?' FI' FU CAD□O?M' OF?D?OCGD I' *KAH' CFG OF?D?OCGD' A?' 0BM□B ' G ?D' FG ?E ' CF?C' MBC?DOF' F?P□H ' LGGH' BKKA GN' CA' K? ' APGD' CF□ ' OF?D?OCGD' A@GJF?C' NU FCME □ ' = ?' OADDALAD?C□AH' AZ @E' DG@?D(' BKAH' CFG' FU CADU□O?M OF?D?OCGD ' F?(- KG?DG' K?□N' CA' FI ' FU CADU□O?M OF?D?OCGD ' #FG' OAHPGD ?CA□H' FU CADU□O?M OF?D?OCGD ' #FG' OAHPGD ?CA□H' JUCF HCAHE' ?LABC' >?C @GH' ?HN' JUCF ?MKFBDH?' ?LABC' FGD' NDG?@ ' O?@G OAHPGH□GHCME' □HCA' FU ' K'M?H4' ?HN' A@G' U4>CE G KDG □AH 'OABMN' F?DNME LG' ?PA□NGN' □H' KADCD?E?H ' AHG' JFA' J?' (HAJH' CA' CFG' J□CFABC' NG CDAE□H ' KAJGD' LE' JFUOF' CFG' KAGC' GMGP?CG ' ?MM' FG' CABOFG ' J□CFABC' NG CDAE□H ' □C ' □NGHCUCE' FGH' JG' ?DDUPG ?C' CFG' CUDDUH ' OGHG ' A?' CFG' CFUN' ZOC' CF□ ' KAJGD □ ' CUMM' @ADG @?HU>G C' #FG' ? ? □H?□CAH' OGHG □ ' ? ' NUCGD?M ? ' @?E' L G ' LBC' □C A>>CD ' ?H' G ?@K'MG' ?K□' GHAB F' A?' F?(KGDG8 ' @ANG A?' ND?@?C□TUH ' ?' >?OC' FGH' &'GCGMMB ' □@LGD' @?(G ' BU□ 'AD FU ' LDACFGD' ?HN' CFG' OAH K□D?CAD ' ?KKG?□' ? ' □HCGDOG AD ' CFG' FU CAD□?H ?E R =' ?G ?□' CFG >□D □ □@K'ME' DG>B GN' CFGD' (□HNHG ' ?HN' GHCDG?□G ' LBC' ?>CGD J?DN ' KGDOG□P□H ' CFGE' CUMM' KDG GN' AH' FU@ ' FG' P□AMGHCME' CFDB □ CFG@ >DA@' FU@ I' #FG' KAGC' GHCGD' □HCA' CFG' @UHN' A?' ?G ?D' ?HN' OMACFG ' CF□ ' DGSGOC□AH' A?' CFG' BU□' H' OF?D?OCGD□ C□D' JADN ' ?TMUCC' ?>CGD' HAC□O□H ' CFG' KDA>ABHN' (HAJMGN G A?' OF?D?OCGD' NU K'M?EGN' LE' F?(KGDG' H' CF□ ' KM?E' ?E R = >' CFGDG' □ ' ?HE' G OGKC□AH' CA' CF□ ' DG@?D('□C □ '□H'CFG' FGDA' A?'CFGK□GOG' FU@ GU>' G'NA' HAC' @BOF' ?N@□DG CFG' DGKDG' GHC?C□AH' FGDG' □PGH' A?' 0BM□B ' @ ?D' HAD' NA' JG' CF□H('□C ?H JGD ' CFG' KADCD?□C' □PGH' A?'F□@' □H' FU ' ' A@@GHC?D□G ' G' @?('G ' GPGD?M P?KAB□H ' ?HN' D?CFGD' KGNG?HC□D' KGGOFG ' ?HN' NAG ' HAC□FH ' HNGGN' FG' F?' HAC□F□H ' CA' NA ' A'>?D' CFG' >?BMC' A?' CFG' OF?D?OCGD' □ ' CFG' >?BMC' A?' CF□ ' AK□H□AH' ?DG' @?HE ' ?HN' CFG' @?MM' OD□CC□O ' J? ' LAMN' BKAH' CFG' A00? □AH' . A JGMM' ?E R ' =';#FGDG' O?HHAC' LG' ?' HAD?HOG' ?HN' O?DGMG HG R CF?C FG' J?HCGN' J□CF' DG?NE' >M□KK?HOE' A?' □ HAD?HOG' ?HN' O?DGMG ' NG>□O□GHOE'□H' OM? - OAHOGK□AH' A?' CFG' >?BMC' A?'CFG' KMAC I' ?E ' ?TMUCC' ' C JABMN' F?PG A?'CFG' @A C ?00A@KMU FGN' @?H' A?' ?MM' ?HC□QB□CE' JFA' J?' HAC' @ADG ?NU@□D?LMG' >AD' F□ ' ?O□FGPG@GHC ' CF?H' >AD' CFG' N□ H□>GN' □@KMO□CE' J□CF LGGH' HG?DGD' CFG' CUBCF' F?N' FG' ?□NR CFG' OF?D?OCGD□ ' NGCGD@□HGN' LE' *

CFG' KMAC' FUMG G ?D□ ' BKAH' CFG' OGHG'□C J? ' >AD' CFG' KAGC'M?D GME' □HCGDKDGCH' CFG' FU CAD□?H' CA' FAJ' CFG' □HJ?DN' JAD(□H ' A?' =' CFG' JFGH' %GO□B ' KDGP?□M ' ? ?□H C ?MKFBDH?' ?HN' G ?D' NGO□NG ' CA' A ' H' CFG' FU CAD□?H' JG' F?PG' HAC' ?' FUHC A?' CFG' KMGHNU' OF?D?OCGD□T?C□AH' A?' Z ?D' CDB M□H ' LGCJGH' FU ' >G?D ?HN' FU ' K'DU□NG' FGDGPGD' F?(- KGDG' >ABHN' ?' @□HBCG' CABO□F □H' CFG' FU CAD□?H' CF?C' OABMN' F?D@AH□TG' JUCF' FU ' GHGD?M' KM?H' FG' G@LAN□GN' □C' □H' FU ' OF?D?OCGD' A?' G ?D' FA' NAG ' HAC' DG@G@LGD' CFG' @?' H□>OGHC' M□HG ' JF□OF' CFG' KAGC' KBC ' □HCA' CFG' @ABCF A?' G ?D'W R

6' M OG O?' I M↓T'N I PG AP7 P'NHP 'OPMNHG8 HP' M9 MINIP ?'MNGNP' 7OPMNH'AJN' IKP+ 1?M99'NHP' IOP G'NHMN'2'TPN'HM P'HPM O 2N'GPP9LG'N ' I P' I GN'GN MI?Q?' NHMN' I PI%H J9O'7PM 8 PP IQ'NHMN'OPMNH'N'IPKPGGM T'PIO+ X 99'K I?' HPI' N' 'K I P+R

'PGDE' M□ FC K? ? G □H' MBC?DOF' J□CF' DG>GDGHOG' CA' ACFGD' O□DOB@- C?HOG ' A>' G ?D8 'M□>G' B G CGN'CF□ R FGH' A@G A>' F□ ' >□GHN ' NUN' OABH GM' F□@' CA' F?PD ?' B?DN' >AD' CFG' ?>GCE A>' F□ ' KGD AH' ?HN' A@G ?M A' NUN' A>>GD' CFG@ GMPG ' CA' GDPG' F□@ ' FG' JABMN' HGPGD' OAH GHC' CA' □C' LBC' ?□N' □C J? ' LGCCGD' CA' NUG' AHOG' CF?H' ?M J?E ' CA' LG' ?>D?N' A>' NG?CF I' G' F?PG' ?MDG?NE' HAC□OGN' CFG' (UMM' J□CF' J□OF' F?(KGDG' BKAH' ?' PGDE' L?MN' H?DD?□PG' F? ' ND?@?C□TGN' CFG' M? C' ?N' OGHG' □H' J□FOF' ?G ?D' J? ' ?H' ?OCAD' #FG' CAHG' A>' F□ ' M? C' KGGOF' □ ' □HNGGN' LA? C>BM R

6'?' O 'UI 'AJM' IP' HMN' J1MGGM 9MA9P'H 9OG' I'H G' MIU I□GHMU%C' 7' I N I ' MIO'NHMN'2'M I'HP+ /PN' I P'N'M'9 NN9P'GH ' N+R

. B□' CA' J FA@' NAG ' FG' BCCGD' CF□ ' CFG' =';LA? C>BN' M?H B? G'I' J□OF' A' A>>GHN ' . A J GMM'W #A' CFG' GDP?HC' J FA' F? ' LDAB F□ CFG' @G ? G >DA@ CFG' ?B BDGD ' LG>ADG' $ ' FG' OABMN' FAJ' HA' >G?D' . B□' CFG' PGDE' □H>M?CAH' A>' F□ ' M?H B? G' FAJ ' CF?□' FG' NUN' >G?D ' ?HN' □H C?HC' ?>CGD' C' □ ' CDBG' CA' CFG' H?DD?□PG' BKAH' J□OF' F?(KGDG' >ABHNGN' □C ' LBC' FGH' CFGP?HC' HA' NABL□ '□HCGHNGN' CA' F?PG' MG>C' CFG' OGHG' FG' ?E ' CA' F□ ' J□>GR '

6' M U'#'IN IT'GHM99'GMT?'M I'I' N' P998 #'IO'7 'NHT'HJI J '?' 99'GNMT'MN'H I P+R

G’ F?PG’ GGH’ CFG’ CA□O’ . DBCB R □H’ DG?M□CE’ ?’ @?H’ A>’ CDAH ’K? □AH ’ ?HN’ NGGK’ >GGM□H R Z D?NB?MME’ J?D@’ BK’ CA’ CFG’ DG?C’ GHCGDKD□ G’ A>’ ? GDC□H ’ F□ ’ KD□HO□KMG ’ LE’ AHG’ CGDD□LMG’ LMAJ ’ >AD’ CD□B@KF’ AD’ >AD’ G C□HOC□AH ’ #FG’ LMAJ ’ □ ’ □PGH ’ #FG’ G O□CG@GHC’ JF□OF’ BOOGGN ’ □ ’ JAHNDAB ME’ K?□HCGN’ LE’ CFG’ KAGC ’ J□CFABC’ ?’ F□HC’ >DA@’ CFG’ F□ CAD□?H ’ #FG’ O?M@’ A>’ CFG’ GHCMG’ . DBCB ’ □ ’ M□>CGN’ BK ’ >AD’ CFG’ @A@GHC ’ □HCN’ ?H’ ?CC□CBNG’ A>’ CGDD□LMG’ BLM□@□CE ’ C’ □ ’ FG’ JFA’ ?E R :

6’ N L ’ & I M!G’ GN L+
! O’ 9PN’ JG’ AMNHP’ J ’ HM!OG’ !’ MPGM %G’ A9 O’
L’ N ’ NHP’ P9A G ’ M!O’ APG I PM ’ J ’ G OG
HP !’ M9U’ P’ 7 NH ’ P P!’ N ’ NHP’ I M UPN L9MKP8
! O ’ M !Q’ J ’ PO’ PML !G’ %P ’ J ’ HPMOG+
/ PN%G’ M99’ K T# -PMKP ’ O PPO I ’ M!O’ / AP NT[R

DA@’ CF?C’ @A@GHC’ CFG’ OF?D?OCGD’ >M? ’ CFG’ O?M@HG ’ DGCBDH ’ A@G-CF□H ’ ?M A’ A>’ CFG’ □DDG AMBC□AH’ OA@G ’ L?O (’ . DBCB ’ □ ’ CAA’ F□ F @□HNGN’ >AD’ F□ ’ KA □C□AH ’ HACFGD’ OA@G ’ BKAH’ CFG’ OGHG ’ ?HACFGD’ A>’ N□>>GDGHC’ CG@KGD?@GHC ’ A>’ N□>>GDGHC’ KAJGD ’ G’ □ ’ HAC’ AHG’ CF?C ’ M□(G’ . DBCB ’ J□MM’ OF?H G’ =’ A>>GHOG’ I’ CA’ =’ P□DCBG’ ?HN’ CA’ JADCF□HG ’ I’ LE’ CFG’ >ADOG’ A>’ OF?D?OCGD ’ G’ □ ’ AHG’ CF?C’ =’ DGPGM ’ MAH ’ A8’ H□ FC I’ . BC’ FG’ KA G G ’ OABD? G ’ GMAQBGHOG ’ F□ F’ C?MGHC ’ ?HN ’ JF?C’ DGHNGD ’ F□@’ @A C’ N?H-GDAB ’ FG’ □ ’ B>>□O□GHCME’ BHKD□HO□KMGN ’ ? □B ’ (HGJ’ F□@’ ?HN’ JABMN’ F?PG’ (□MMGN’ F□@’ . DBCB ’ NAG ’ HAC’ (HAJ’ F□@’ ?HN’ FG’ B>>GD ’ F□@’ = CA’ LBDE’ + G ?D I’ #FG’ OAHN□C□AH ’ BKAH’ JF□OF’ . DBCB ’ KGD@□C ’ HCAHE’ CA’ KG?(’ ?DG’ F?(KGDG8 ’ AJH ’ ?HN’ CFGE’ FAJ’ F□ ’ JAHNGD>BM’ KGHGCD?-C□AH’ □HCA’ CFG’ NGKCF ’ A>’ OF?D?OCGD’ R

6’ 4 J’ GHM99’ ! N’ !’ T J ’ 7J!P M9’ GLPPKH’ A9M I P’ JG+
JN’ GLPMU’ M99’ Q O’ T J’ KM!’ OP GP’ 7’ MPGM 8
! O’ GMT’ T J’ O %N’ AT’ J ’ LP I GG !8
39GP’ GHM99’ T J’ ! N’ HM P’ M! T’ HM! O’ MN’ M99’
A JN’ H G’ 7J!P M9 ’ # ! O’ T J’ GHM99’ GLPMU’
2 !’ NHP’ GM I P’ LJ9L N’ HP PN ’ 2’ M I ’ Q !Q+
7NP ’ I T’ GLPPKH’ G’ P! OPO+R

#FG’ AKKADCBH□CE’ □ ’ HAC’ MA C’ LE’ HCAHE ’ ?TM□CC ’ ?OBCG’ GHAB F’ □H’ GHGD?M ’ ?KKG?D ’ CA’ B ’ □H BM?DME’ BKGD>□O□?M’ □H’ F□ ’ DG@?D (’ AH’ CF□ ’ KM?E R = & ?D (’ HCAHE8 ’ KGGOF’ APGD’ CFG’ NG?N’ LANE’ A>’ G ?D’ F? ’ LGGH’ SB CME’ ?N@□DGN’ >AD’ CFG’ @□ CBDG’ A>’ K?CFA ’ ?HN’ ?DC’ □H’ □C ’ CF?C’ A>’ . DBCB ’ OGDC?□HME’ □ ’ HAC’ A’ AAN I’ H’ JF?C’ J?E’ □ ’ □C’ HAC’ A’ AAN’ W’ ’ ?’ KGO□@GH’ A>’ GMAQBGHOG ’ KBC’ LE’ CFG’ □NG’ A>’ HCAHE8 ’ JFA’ O?H’ NABLC’ CF?C’ □C’ □ ’ C?@G ’ K? □AHMG ’ GPGDG ’ ?HN’ CFGDG>ADG’ □HG>>GOC□PGW’ . BC’ ? ’ ?H’ G ?@KMG’ A>’ F?(KGDG8 ’ JAHNGD>BM’ KAJGD’ A>’ OF?D?OCGD□T?C□AH’ □C’ □ ’ LGEAHN’ ?MM’ KD?□ G ’ C’ J? ’ CFG’ OAH B@@?CG’ ?DC□>□OG’ A>’ HCAHE’ CF?C’ @?NG’ F□@’ ?E R

6’ 2’ M I ’ ! ’ MN ’ MG’ JNJG’ G+R

. DBCB ’ J? ’ ’ ?H’ AD?CAD ’ * HNGD’ DG?C’ G O□CG@GHC’ FG’ □ ’ CJ□OG’ LGCD?EGN’ □HCA’ AD?CADE ’ JFGH’ FG’ ?NNDG G ’ CFG’ OAH K□D?CAD D =’ A ’ HAC’ ?H’ A ? C F ? H N ’ ?>CGD’ CFG’ ? ? □H?C□AH R =’ CAAK ’ "A@?H ’ CAAK I’ G’ □ ’ ?’ @?H’ A>’ SB C’ □HCGHC□AH ’ A>’ O?M@’ BHNGD C?HN□H ’ A>’ GCCMGN’ KBDKA G ’ JFGH’ F□ ’ KD□HO□KMG ’ ?DG’ CA’ LGOA@G’ ?OC□AH ’ . BC’ F□ ’ HAC□AH’ A>’ AD?CADE’ □ ’ CF□ ’ R

6’ 2’ 99’ I TGP97’ ! N ’ NHP’ LJ9L N’ 7 GN+
! O’ GH ’ NHP’ PMG ! ’ 7’ LJ ’ MPGM %G’ OPMNH+R

HN’ FG’ NAG ’ FAJ’ CFG’ ’ #FG’ OD□C□O ’ F?PG’ @?NG’ ?@B □H ’ JAD(’ J□CM’ CF□ ’ KGGOF’ ?DLBDCAH’ ?E ’ =’ #F□ ’ KGGOF’ A>’ . DBCB ’ □ ’ JDACG’ □H’ □@□C?C□AH’ A>’ F□ ’ >?@GN’ M?OAH□O’ LDGP□CE ’ ?HN’ □ ’ PGDE’ >□HG’ □H’ □C ’ (□HN ’ LBC’ HA’ @ADG’ M□(G’ CF?C’ LDGP□CE’ CF?H’ F□ ’ C□@G ’ JGDG’ M□(G’ . DBCB 8 I’ #A’ CF□ ’ & D ’ & AHO (’ & ? AH’ DGSA□H H ,’ ’ O?HHAC’ ? DGG’ J□CF’ ?DLBDCAH’ CF?C’ CF□ ’ KGGOF’ □ ’ PGDE’ >□HG’ □H’ □C ’ (□HN ’ ’ O?H’ GG’ HA’ NG DGG’ A>’ G OGMMGHOG’ □H’ □C ’ LBC’ CF□H (’ □C’ ?’ PGDE’ K?MCDE’ KGGOF ’ >AD’ A’ DG?C’ ?’ @?H ’ AH’ A’ DG?C’ ?H’ AOO? □AH I’ #FG’ OA@@GHC?CAD ’ F?PG’ HAC’ ?’ JADN’ A>’ ?KKDAL?C□AH’ >AD’ CFG’ KGGOF’ A>’ HCAHE’ CA’ OABHCGDL?M?HOG’ CF□ ’ #FGDG’ J? ’ ?’ @?H ’ FAJGPGD ’ A>’ CFG□D’ C□@G ’ & ?DC□H’ FGDMAO (’ JFA’ JDACG’ =’ ’ D? @GHC’ AH’ F?(KGDG I’ □H’ ?’ CEMG’ B>>□O□GHCME’ FEKGDLAM□O?M ’ LBC’ JFA’ HGPGDCFGMG ’ J? ’ ?@AH C’ CFG’ >GJ’ JFA’ CFGH’ PGHCBDGN’ CA’ CF□H (’ CF?C’ =’ CFG’ L?DL?D□?H I’ F?(KGDG ’ KA G GN’ ?DC’ ?HN’ SBN @GHC ’ >’ HCAHE8 ’ KGGOF’ FG’ CFB ’ G KDG G ’ F□ ’ AK□H□AH’ =’ ! PGDE’ M□HG’ A>’ CF□ ’ KGGOF’ NG GDPG ’ ?H’ GBMA □B@’ ?HN ’ JFGH’ EAB’ F?PG’ G ?@□HGN’ □C’ ?CCGHC□PGME ’ EAB’ J□MM’ ?MMA J’ □C ’ ?HN’ J□MM’ ?E’ J□CF’ @G’ CF?C’ HG□CFGD’ %G@A CFGHG ’ HAD’ □OGDA ’ HAD’ CFG□D’ MAD□AB ’ D□P?M ’ CFG’ □@@ADC?M’ F?CF?@’ GPGD’ @?NG’ ?’ LGCCGD I’ >FGDG’ @?E’ LG’ G ? GD?C□AH ’ □H’ LACF’ CEMG ’ A>’ OD□C□O□ @ CFG’ KGGOF’ A>’ HCAHE’ @?E’ HAC’ LG’ GQB?M’ 8CA’ %G@A CFGHG ’ ?HN’ CFG’ KGGOF’ A>’ . DBCB ’ @?E’ HAC’ LG’ ?’ PGDE’ K?MCDE’ KGGOF ’ ’ . BC ’ G?OF’ LG□H ’ JD□CCGH’ LE’ CFG’ ?@G’ @?H ’ JG’ F?PG’ ?’ D□ FC’ CA’ ?OOGKC’ G?OF’ J□CF’ ?’ OAH-P□OC□AH’ CF?C’ CFG’ JD□CGD’ J? ’ O?K?LMG’ A>’ @?(□H ’ ?’ AAN’ SZGOF’ >AD’ . DBCB ’ ? ’ JGMM’ ? ’ >AD’ HCAHE ’ ?HN’ CF?C’ □>’ FG’ N□N’ HAC’ NA’ A’ FG’ F?N’ PGDE’ ?LBHN?HC’ DG? AH ’ C’ DGQB□DG ’ HA’ DG?C’ DG>□HG@GHC’ CA’ BHNGD-C?HN’ F□ ’ DG? AH ’ #FG’ G O□CG@GHC’ A>’ CFG’ DG?C’ ? GDC□AH’ A>’ DGKBLM□-O?H’ KD□HO□KMG ’ JF□OF’ J? ’ CA’ LG’ ?OCGN’ APGD

6’ 2 ! ’ GNMNPG’ J!A ! ’ M!O’ MKKP!NG’ TPN’ J!U! ! R

F?N’ LGGH’ BOOGGNGN’ LE’ ?’ @A@GHC?DE’ O?M@’ H’ CFG’ PGDE’ FABD’ A>’ CFG’ :? ? □H?C□AH’ . DBCB ’ F?N’ LGOA@G’ □C ’ ?KAMA □ C’ CA’ HCAHE R ’

6’ 1J ’ PMG !G’ M P’ G ’ 7J99’ 7’ Q O’ PQM O
HMN’ P P’ T J’ # !N !T ’ NHP’ G !’ 7’ MPGM
4 J’ GH J9O’ AP’ GMN G7 PO+R

G’ □ ’ ?MDG?NE’ KDGK?D□H ’ □H’ @□HN’ >AD’ =’ CFG’ KBMK□C I’ G’ J□MM’ KDG GHC’ O?M@ME’ ?HN’ N□ K? □AH?CGME’ CFG’ =’ DG? AH’ A>’ ABD’ ?G ?D8 ’ NG?CF I’ G’ G KGOC ’ CF?C’ HCAHE’ J□MM’ KG?(’ J□CF’ GQB?M’ @ANGD?C□AH R ?MM’ AAN’ A>’ ?G ?D R HA’ LM?@G’ A>’ ?G ?D8 ’ @BDNGDGD ’ ?HN’ FG’ CF□H (’ □C’ ?H’ ?NP?HC? G’ CA’ KG?(’ HCAHE ’ G’ (HGJ’ HAC’ JF?C’ DG?MME’ □ ’ . BC KF?(KGDG’ (HGJ ’ ?HN’ FG’ K?□HCGN’ HCKHE ’ HACFGD’ DG?C’ KAGC’ @?NG’ CFG’ KADCD?□C’ ?’ NG OD□KC□AH R

6’ " P’ GPP I %O
¥ O ’ O Q ! NT’ K I L G%O’ M ! O’ H QH’ PWL9 N8
JN’ M ’ MG’ 7M9GP’ M ! O’ H 99 8’ NH JQH’ H G’ N !QJP’
5 LL%O’ I M ! ! M ’ M ! O’ K J9O’ I MUP’ NHP’ $ GP’ MLLPM ’
HP’ APNNP ’ PMG ! ’ N ’ LP L9PW$ M ! O’ OMGH’
MNJ PGN’ K J!GP9G ’ 7 ’ H G’ NH JQHNG’ P P’ 9 8
’ KP’ !OJGN JG ’ AJN’ N ’ ! A9P ’ OPPOG’
I JG’ M ! O’ G9 NH7J9 ’ TPN’ HP’ L9PMG%O’ NHP’ PM +R

#FG’ GHN’ A>’ HCAHE8 ’ AD?CADE’ □ ’ KGD>GOC’ BOOG R

6’ ’ 9PN’ N’ U’ [GK9 P7 ’ NH J’ M N’ M7 N+
MUP’ HMN’ K J GP’ NH J’ 9N[R

#FG’ DFGCAD□O’ F? ’ NAHG’ □C ’ JAD (’ CFG’ OAH>M□OC’ A>’ KD□HO□KMG ’ □ ’ OA@□H ’ CA’ ?’ OMA G ’ CFG’ OAH>M□OC’ A>’ □HN□P□NB?M ’ □ ’ ?LABC’ CA’ LG □H ’ □C’ □ ’ HA’ MAH GD’ ?’ QBG C□AH’ A>’ DGKBLM□O?H’ "A@G’ AD’ @AH?DOF□O?M’ "A@G ’ #FG’ QBG C□AH’ □ ’ JFGCFGD’ □C’ F?MM’ LG’ CFG’ "A@G’ A>’ HCAHE ’ AD’ CFG’ "A@G’ A>’ OC?P□B ’ >AD’ $GK□NB ’ CFGDG’ □ ’ HA’ OF?HOG R

6’ H G’ G’ M’ G9 QHN’ J! I P NMA9P’ I M ! +R

. BC’ GPGH’ FG’ □ ’ DG?NE’ CA’ NA’ F□ ’ JAD (’ G’ O?H’ KDA OD□LG ’ FG’ O?H’ GPGH’ OAH GHC’ CA’ CFG’ NG?CF’ A>’ F□ ’ LDACFGD’ =’ BKAH’ OAHN□C□AH I’ G’ DGQB□DG ’ CF?C’ =’ BLM□B ’ F?MM’ HAC’ M□PG I’ HCAHE’ F? ’ HA’ ODBKMG ’ CA’ ?PG’ F□ ’ = □ CGD8 ’ A H R

6’ " P’ GHM99’ ! N’ 9 P ’ 9 U’ NH’ M’ GL N’ 2’ OM I ! ’ H I +R

BOF’ ?H’ □HCGH G’ DGKDG GHC?C□AH’ A>’ GM>□ FHG ’ J? ’ HGPGD’ LG>ADG’ □PGH’ □H’ ?’ NATGH’ M□HG ’ F?C’ KAJGD’ F?PG’ . DBCB ’ ?HN’ ? □B ’ CA’ AKKA G’ CA’ CF□ ’ JADMNME’ J□ NA@’ W’ ’ □C’ CFG’ P□DCBG’ A>’ . DBCB ’ W’ >’ F□@’ JFA

6’ K !OP I ! %O’ M ! O’ ! NPO’ / JK JG’ - P99M
O ’ NMU !Q’ A APG’ HP P’ 7’ NHP’ M O M ! G’ \’ R

>’ F□@’ JFA

6’ " MO’ MNHP ’ AP’ M’ O Q ’ M ! O’ AMT’ NHP’ I ! R

CF?H

6’ K !NM I ! MNP’ H G’ 7 !QP G’ 1.

>’ F□@’ JFA’ ?E R

/ ’ 2’ HMO’ MNHP ’ K !’ I T’ HPM N+
! O’ O L’ I T’ A9 O’ 7 ’ O MKH I MG ’ NHM ! ’ N ’ !Q’
O I ’ NHP’ HM O’ HM ! OG’ 7’ LPMGM ! NG’ NHP ’ 9P’ N MGH’
T’ M ! T’ !O PKN !’ \’ R

A ’ CFG’ @?H’ A>’ KD□HO□KMG ’ @B C’ >?MM’ LG>ADG’ CFG’ @GH’ A>’ G KGN□GHOE ’ G’ O?H’ OAHQBGD’ ? □B ’ LE’ F□ ’ F□ F @□HNGNHG ’ >AD’ ? □B ’ CFAB F’ A@GJF?C’ KAM□C□O ’ F? ’ HAL□M□CE’ GHAB F’ □H’ F□@’ CA’ LAJ’ LG>ADG’ CFG’ @?SG CE’ A>’ P□DCBG ’ AMGD□N G’ ?E R =’ ’ (HAJ’ HA’ K?DC’ A>’ F?(KG?DG’ CF?C’ @ADG’ □@KDG G ’ AH’ @G’ CFG’ LGM□G>’ A>’ F□ ’ GH□B ’ LG□H ’ BKGDFB@?H’ CF?H’ CF□ ’ OGHG’ LGCJGGH’ . DBCB ’ ?HN’ ? □B I8 #F□ ’ M?H B? G’ F? LGGH’ O?MMGN’ □NAM?CDE ’ A@G’ OD□C□O’ JG’ LGM□GPG’ ?E ’ ,’ LM? KFG@AB ’ ’ 8U □+(

7 ? E ‘

EGC‘ MGC‘ ?HE‘ AHG‘ J□CF‘ OA@@AH‘ FB@?H‘ KAJGD ‘ CDE‘ CA‘ KDANBOG‘ BOF‘ ?‘ OGHG ‘ #FG‘ JAHNGD>BM‘ CF□H ‘ □H‘ □C‘ ‘?HN‘ CF?C‘ JF□OFR □H‘ ?‘ BL GQBGHC‘ GHCGHOG ‘ JF□OF‘ JG‘ O?DOGME‘ N?DG‘ QBACG R AMGD□N G‘ KA□HC ‘ ABC‘ ‘ □ ‘ CFG‘ OA@KMGCG‘ KDG GDP?C□AH‘ A>‘ OF?D?OCGD ‘ MM‘ ND?@?C□O‘ KAGC ‘ F?PG‘ CD□GN‘ CA‘ □@□C?CG‘ CF□ ‘ OGHG ‘ %DENGH‘ KDG>GDDGN‘ F□ ‘ □@□C?C□AH ‘ □H‘ CFG‘ >?@AB ‘ N□?MA BG‘ LGCJGGH‘ HCAHE‘ ?HN‘)GHC□N□B ‘ CA‘ ?HECF□H ‘ JF□OF‘ FG‘ F?N‘ JD□CCGH‘ =‘ □H‘ CF□ ‘ (□HN I‘ C‘ □ Z>BMM A>‘ F□ F‘ DFGCAD□O‘ HA‘ NABLC‘ LBC‘ □C ‘ DFGCAD□O‘ □‘ CF?C‘ A>‘ GHGD?M□ ?C□AH ‘ #FG‘ KM?□H‘ DAB F‘ AMN□GD‘ CFG‘ MB BD□AB ‘ OF□G>‘ DGKDA?OF‘ ?HN‘ JGGK‘ ?DG‘ ?H DE‘ ?HN‘ OAAM ? ?□H‘ F?(G‘ F?HN ‘ ?HN‘ GHN‘ □H‘ =‘ FB □H I‘ ? ‘ CFG‘ C? G‘ N□DGOC□AH‘ F? ‘ □C ‘ #FGE‘ ?E‘ ?MM‘ CF?C‘ KGAKMG‘ JABMN‘ ?E‘ BHNGD‘ BOF‘ O□DOB@ C?HOG ‘ ?HN‘ CFGE‘ ?E‘ □C‘ JGMM‘ . BC‘ CFG‘ @?COFMG ‘ ?DC‘ A>‘ F?(KGDG‘ OAH □ C ‘ ? ‘ @BOF‘ □H‘ JF?C‘ FG‘ FAMN ‘ L?O (‘ ? ‘ □H‘ JF?C‘ FG‘ KBC ‘ >ADJ?DN ‘ . DBCB ‘ BLNBG ‘ ? □B ‘ LE‘ CFG‘ >ADOG‘ A>‘ F□ ‘ @AD?M‘ CDGH CF‘ J□CFABC‘ CFG‘ M□ FCG C‘ ?CCG@KC‘ CA‘ OA@@?HN‘ CFG‘ >GGM□H ‘ A>‘ ?‘ GH □C□PG‘ @?H‘ FGH‘ ? □B ‘ ‘ BLNBGN‘ FG‘ AJH ‘ CF?C‘ FG‘ F? ‘ LGGH‘ F? CE‘ #FGE‘ ?DG‘ >D□GHN ‘ ? ?□H‘ F?HN‘ ?HN‘ FG?DC‘ ‘ HAC‘ CFG‘ (HAJMGN G‘ A>‘ OF?D?OCGD‘ A@GCF□H ‘ ?LAPG‘ CFG‘ ADN□H?DE‘ DG?OF‘ A>‘ FB@?H‘ ? ?O□CE‘ JFGH‘ CFG‘ >AMMAJ□H ‘ JADN ‘ OA@G‘ □H‘ ? ‘ □>‘ LE‘ ?OO□NGHC‘ W R

6‘ 3 ‘ / JK JG ‘ M‘ A g‘ 7‘ !P+
%‘ 2‘ O O‘ ! N‘ NH !U‘ T J‘ K J9O‘ HM P‘ APP !‘ ‘ M ! Q T+
3 ‘ 1‘ MGG JG ‘ 2‘ M I ‘ G KU‘ 7‘ I M ! T‘ Q P7G+
%‘ 17‘ T J ‘ LH 9 G LHT‘ T J‘ I MUP‘ ! ‘ JGP+
27‘ T J‘ Q P‘ L9MKP‘ N ‘ MKK OP ! NM9‘ P 9G+
3 ‘ ‘ I M ! ‘ APM G‘ G ‘ APNNP S - N M‘ G‘ OPMO+
%‘ '' M[‘ - N M \
3 ‘ HP‘ G‘ OPMO+
%‘ '' ‘ %GKML%O‘ 2‘ U 99 !Q‘ HP ! ‘ 2‘ K GGMO‘ T J‘ G ‘ \‘ R

%$ ‘ □ ‘ HAC‘ □H‘ MBC?DOF

‘ #FG‘ F?NG‘ A>‘ G ?D‘ F? ‘ B@@AHGN‘ . DBCB ‘ CA‘ @GC‘ F□@‘ ?C‘ F□M□KK□‘ #FG‘ OAHPGD ?C□AH‘ A>‘ CFG‘ DGKBLM□O?H‘ OF□G> ‘ LG>ADG‘ CFG‘ L?CCMG‘ □ ‘ JGMM‘ CA‘ LG‘ HACGN

6‘ %‘ ‘ I GN‘ ! A9P‘ JNJG
HP‘ Q OG‘ N OMT‘ GNM ! O‘ 7 P ! O9T8‘ NHMN‘ P‘ I MT+
/ P G‘ !‘ LPMKP ‘ 9PMO‘ !‘ J ‘ OMTG‘ N ‘ MQP [
JN‘ G ! KP‘ NHP‘ M77M G‘ 7‘ I P !‘ PGN‘ GN g‘ ! KP NM !+
/ PN%G‘ PMG !‘ NH‘ NHP‘ GN‘ NHMN‘ I MT‘ AP7M99+
27‘ P‘ O ‘ 9 GP‘ NH G‘ AMNN9P ‘ NHP ! ‘ G‘ NH G‘
HP‘ P T‘ 9MGN‘ N I P‘ P‘ GHM99‘ GLPMU‘ N QPNHP
X HMN‘ M P‘ T J‘ NHP !‘ OPNP I ! PO‘ N ‘ O ‘ \
3 ‘ 3 P ! ‘ AT‘ NHP‘ J9P‘ 7‘ NHMN‘ LH 9 G LHT‘
T‘ H KH‘ 2‘ O O‘ A9M I P‘ MN ‘ 7 ‘ NHP‘ OPMNH‘
X H KH‘ HP‘ O O‘ Q P‘ H I GP97 S2‘ U !‘ ! N‘ H +
JN‘ 2 O ‘ 7 ! O‘ N‘ K M O9T‘ M ! O‘ 9P+
O ‘ 7PM ‘ 7‘ HMN‘ I QH N‘ 7M99 ‘ G ‘ N ‘ L P P ! N‘
HP‘ N I P‘ 7‘ 9 7P SM I ! Q‘ I TGP97‘ NH‘ LMN P ! KP+
‘ GNMT‘ NHP‘ L OP ! KP‘ 7‘ G I P‘ H QH‘ L 7P G+
HMN‘ Q P !‘ JG‘ AP9 +
A‘ %‘ HP ! ‘ 7‘ P‘ 9 GP‘ NH G‘ AMNN9P
4 !‘ M P‘ K ! NP ! NPO‘ N ‘ AP‘ 9PO‘ !‘ N J I LH‘
H JQH‘ NHP‘ GN PPNG‘ 7‘ & I P‘ \
3 ‘ ‘ MGG JG ‘ ! ‘ ‘ NH ! U‘ ! N‘ NH J‘ ! A9P‘ & I M !
HMN‘ P P ‘ JNJG‘ 99 Q ‘ A J ! O‘ N ‘ & I P8
'' P‘ APM G‘ N ‘ Q PMN‘ M‘ I ! O+R

#FG‘ K?D?MMGM‘ K? ? G‘ □H‘ MBC?DOF‘ □ ‘ ? ‘ >AMMAJ R

6‘ HP ! ‘ MGG JG‘ APQM ! ‘ N ‘ GLPMU‘ 7 GN‘ M ! O‘ GM O S HP‘ Q OG‘ Q M ! N‘ JG ‘ 1‘ JNJG‘ NHMN‘ NH G‘ OMT‘ XP‘ I MT‘ !‘ NHP‘ 7 P9O‘ M ! O‘ P P ‘ M7NP ‘ N ‘ 9 P‘ M99‘ NHP‘ PGN‘ 7‘ J ‘ 9 7P‘] J PN9T ‘ 9MP‘ NH‘ M ! NHP + JN‘ G NH‘ NHP‘ Q OG‘ HM P‘ G ‘ OM ! PO‘ N‘ NHMN‘ NHP‘ Q PMNPGN‘ M ! O‘ KH P7PGN‘ NH ! QG‘ M I ! QGN‘ I P ! ‘ M P‘ I GN‘ J ! KP NM ! ‘ M ! O‘ NHMN ‘ 7‘ NHP‘ AMNN9P‘ 7M99‘ JN‘ NHP GP‘ N OMT NHM ! ‘ P‘ GH‘ ‘ 9 U‘ 7 ‘ P‘ GHM99‘ HM O9T‘ I PPN‘ MQM ! ‘ HMN‘ M N‘ NH J‘ NHP ! ‘ OPNP I ! PO‘ N ‘ O SN ‘ 79T‘ ‘ O P ‘ \‘ JNJG‘ M ! G P PO‘ H I ‘ P ! Q‘ TPN‘ AJN‘ M‘ T J ! Q‘ I M ! ‘ M ! O‘ ! N‘ P Q PMN9T‘ PWLP P ! KPO‘ !‘ NHP‘ 9O‘ 2‘ % ‘ @Z‘ U ! ‘ ! N‘ H ‘ M‘ KP NM !‘ J9P‘ 7‘ LH 9 G LHT‘ AT‘ NHP‘ H KH‘ 2‘ O O‘ Q PMN9T‘ A9M I P‘ M ! O‘ PL P‘ MN ‘ 7 ‘ U 99 ! Q‘ 7‘ H I GP97 ‘ MG‘ AP ! Q‘ ! ‘ 9M 7J9‘ ! ‘ Q O9T‘ MK N‘ N JKH ! Q‘ NHP‘ Q OG ‘ ! ‘ K ! KP ! ! Q‘ I P ! ‘ M9 M ! N ‘ ! N‘ N ‘ Q P‘ L9MKP‘ M ! O‘ T P9O‘ N ‘ 5 !P‘ - OP ! KP ‘ M ! O‘ ! N‘ K ! GNM ! N9T‘ M ! O‘ LMN P ! N9T‘ N ‘ NMUP‘ HMNG P P ‘ N‘ L9PMGPNH‘ H I ‘ N ‘ GP ! O‘ JG ‘ AJN‘ N ‘ O M ‘ AMKU‘ M ! O‘ 79T8‘ AJN‘ AP ! Q‘ ! ‘ ! ‘ NHP‘ I OGN‘ 7‘ OM ! QP ‘ 2‘ M I ‘ 7‘ M‘ K ! N M T‘ I ! O8 7 ‘ 7‘ N‘ AP‘ ! N‘ NHP‘ 99 7‘ : O‘ NHMN‘ NH G‘ AMNN9P‘ 7M99‘ JN‘ 7 NJ ! MNP‘ 7 ‘ JG ‘ 2‘ 99 9 U‘ ! ‘ I P‘ 7 ‘ H LP ‘ ! P NHP ‘ GPPU‘ N ‘ I MUP‘ M ! T‘ ! P ‘ GJLL9T‘ 7‘ M ‘ MQM ! ‘ AJN‘ 99‘ O‘ I P‘ 7‘ NH G‘ I GP MA9P‘ 9O ‘ M ! O‘ K ! NP ! N‘ I P‘ NH I T‘ 7 NJ ! P+R

#FG‘ OD□C□O ‘ ?E‘ CF?C‘ F?(KGDG‘ @?(G ‘ . DBCB ‘ G KDG ‘ F□@ GM>‘ □HOAH-□CGHCME‘ G‘ J□MM‘ ?J?□C‘ CFG‘ NGCGD@□H?C□AH‘ A>‘ DKP□NGHOG ‘ LBC‘ FG‘ J□MM‘ HAC‘ A‘ LABHN‘ CA‘ "A@G ‘ &D ‘ ABDCGH?E‘ G KM?□H ‘ FAJ‘ = CFG‘ □HOAH □CGHOE‘ ?D□ G ‘ >DA@‘ F?(KG?DG8 ‘ @□ DG?N□H ‘ A>‘ CFG‘ >□D C‘ KGGOF‘ ‘ >AD‘ . DBCB ‘ ?OOADN□H ‘ CA‘ ADCF ‘ DG>GDDGN‘ CA‘ F□ ‘ AK□H□AH‘ ? ?□H C‘ B□O□NG

‘ I I P ! NM PG‘ !‘ NHP‘ " GN KM9‘ - 9MTG ‘ 9≠ ≠ L≠))+

? ‘ AHG‘ CF?C‘ FG‘ F?N‘ GHCGDC?□HGN‘ □H‘ F□ ‘ EABCF ‘ LBC‘ F?N‘ HA J ‘ ?L?HNAHGN I‘ #F□ ‘ JD□CGD‘ □H‘ ?‘ M□ACG‘ ?M A‘ G KM?□H ‘ CF?C‘ CFG‘ KGDKMG □CE‘ OAH □ C ‘ □H‘ ADCF‘ ?E□H ‘ ‘ .‘ □H CG?N‘ A>‘ B □H ‘ CFG‘ K? C‘ CGH G‘ G‘ CFGH‘ ?NN ‘ R =‘ F?(KG?DG8 ‘ ?NAKC□AH‘ A>‘ ?‘ PGD □AH‘ OAHCD?N□OCGN‘ HAC‘ AHME‘ LE‘ ?‘ K? ? G‘ □@@GN□?CGME‘ >AMMAJ□H ‘ LBC‘ LE‘ CFG‘ GPGHC‘ JF□OF‘ FG‘ KDG GHCME‘ KADCD?E ‘ □ ‘ ?‘ CD□(□H ‘ □H C?HOG‘ A>‘ F□ ‘ O?DGMG ‘ B G‘ A>‘ F□ ‘ ?BCFAD□C□G I‘ U‘) GDE‘ CD□B@KF?HC ‘ HA‘ NABLC ‘ & A C‘ M□CGD?M‘ OD□C□O ‘ JFE‘ F?PG‘ EAB‘ HAC‘ D?CFGD‘ OAH>□NGN‘ □H‘ F?(KGDG‘ CF?H‘ □H‘ EABD GMPG ‘ W Z) FGH‘ FG‘ NG GDC ‘ MBC?DOF‘ FG‘ □ ‘ CDBG‘ CA‘ A@GCF□H ‘ F□ FGD‘ CF?H‘ MBC?DOF ‘ H‘ . DBCB ‘ FG‘ F? ‘ ND?JH‘ ?‘ @?H‘ A>‘ KGOBM?C□AH‘ g. AHG‘ JFA‘ □ ‘ @APGN‘ CA‘ (□MM‘ CFG‘ @?H‘ FG‘ MAPG ‘ BKAH‘ HA‘ KGD AH?M‘ @AC□PG ‘ LBC‘ BKAH‘ ?‘ CFGADE ‘ AHG‘ JFA‘ >□ FC ‘ F□ ‘ M? C‘ L?CCMG‘ BKAH‘ A@GJF?C‘ KGOBM?C□PG‘ KD□HO□KMG ‘ AHG‘ FAJGPGD‘ JFA ‘ >DA@‘ F□ ‘ GHCMGHG ‘ F□ ‘ OAH C?HOE‘ F□ ‘ >ADC□CBNG ‘ F? ‘ BLNBGN‘ @GH‘ A>‘ @ADG‘ ?OC□PG‘ @□HN ‘ CA‘ CFG‘ ?N@□D?C□AH‘ A>‘ F□ ‘ CG@KGD‘ ?HN‘ CA‘ CFG‘ ?NAKC□AH‘ A>‘ F□ ‘ AK□H□AH ‘ ? □B ‘ HGPGD‘ DG? AH ‘ ?LABC‘ B□O□NG ‘ □C‘ □ ‘ F□ ‘ □H C?HC‘ DG@GNE R ?‘ DG@GNE‘ JF□OF‘ FG‘ D? FME‘ ?NAKC ‘ ?HN‘ DB□H ‘ CFGDG>ADG ‘ F□ ‘ AJH‘ O?B G‘ . DBCB ‘ DG? AH ‘ ? ?□H C‘ □C ‘ ?HN‘ FG‘ NAG ‘ HAC‘ DGPA (G‘ F□ ‘ KGOBM?C□PG‘ AK□H□AH ‘ GPGH‘ JFGH‘ CFG‘ OAH G-QBGHOG ‘ CA‘ JF□OF‘ CFGE‘ MG?N‘ ?DG‘ KA□HCGN‘ ABC‘ CA‘ F□@‘ ‘ HAC‘ CF□ ‘ H?CBDGW‘ ?HN‘ @B C‘ JG‘ LG‘ CAMN‘ CF?C‘ CF□ ‘ H□OGCE‘ A>‘ OF?D?OCGD□T?C□AH‘ DG BMCGN‘ >DA@‘ F?(KGDG‘ O?DGMG ME‘ B □H ‘ F□ ‘ ?BCFAD□C□G ‘ CDB C□H ‘ CA‘ CFG‘ >?M G‘ CGH G‘ A>‘ ?‘ PGDL ‘ DG ?DNMG ‘ A>‘ CFG‘ OAHCG CW = . BC‘ FG‘ OAH-CD?N□OC ‘ F□@ GM> I‘ ?E ‘ CFG‘ OD□C□O ‘ =‘ LE‘ CFG‘ GPGHC‘ JF□OF‘ FG‘ KDG GHCME‘ KADCD?E I‘ & A C‘ JAHNGD>BMME‘ F? ‘ F?(KGDG‘ DGNGG@GN‘ F□ ‘ AJH‘ OAH ‘ □ CGHOE‘ C‘ □ ‘ JFGH‘ CFG‘ @□HN‘ A>‘ CFG‘ KGOBM?C□PG‘ @?H‘ □ ‘ HAC‘ AHME‘ BCCGDME‘ BLNBGN‘ LE‘ ?NPGD G‘ O□DOB@ C?HOG ‘ LBC‘ LAJGN‘ NAJH‘ LG>ADG‘ CFG‘ KDG BDG‘ A>‘ BKGDH?CBD?M‘ J?DH□H ‘ CF?C‘ FG‘ NGM□LGD?CGME‘ ?KKDA?OFG ‘ F□ ‘ M? C‘ >?C?M‘ DG AMPG ‘ F?C‘ □ ‘ CFG‘ JAD (‘ A>‘ ?H‘ □H C?HC‘ J□CF‘ ? □B ‘ □ ‘ J□CF‘ . DBCB ‘ ?‘ CGHC?C□PG‘ KDAOG ‘ M□CB ‘ %?DN?H□B ‘) AMB@H□B ‘ CD?CA ‘ ?DG‘ G?OF‘ CD□GN ‘ #FG‘ □DDG □ C□LMG‘ KDG BDG‘ BKAH‘ F□ ‘ @□HN ‘ JF□OF‘ MG?N ‘ F□@‘ HAC‘ CA‘ >ME‘ J□CF‘ F□ ‘ >D□GHN ‘ □ ‘ CFG‘ ‘ JF□OF‘ FAPGD ‘ APGD‘ F□@ R

B3 ‘ I P‘ H NHP ‘ Q O‘ 9J I ! JG ‘ 9 GN‘ M‘ O+
‘ ‘ X HMN‘ GMTG‘ I T‘ 9 O‘ \
3 ‘ X HT ‘ NH G ‘ 9J I ! JG
HP‘ QH GN‘ 7‘ GPGM ‘ HMNH‘ MLLPM %O‘ N ‘ I P‘
‘ GP P M9‘ N I PG‘ AT‘ ! QHN ‘ MN‘ M O G ‘ ! KP8
! O ‘ NH G‘ 9MGN‘ ! QHN ‘ HP P‘ !‘ - H 9 LL ‘ 7 P9OG+
‘) 8‘ 2‘ $ ‘ %‘ (.

#FG‘ G OM?@?C□AH‘ A>‘ . DBCB ‘ APGD‘ CFG‘ LANE‘ A>‘ ? □B ‘ □ R

6‘ HP‘ 9MGN‘ 7‘ M99‘ NHP‘ & I M ! G ‘ 7M P‘ NHPP‘ P99[R

. DBCB ‘ F□@ GM>‘ □ ‘ CFG‘ M? C‘ ? GDCAD‘ A>‘ CFG‘ AMN‘ " A@?H‘ R

6‘ H G‘ MG‘ NHP‘ ! A9PGN‘ & I M !‘ 7‘ NHP I ‘ M99
99‘ NHP‘ K ! GL MN G ‘ GM P‘ ! 9T‘ HP+
5 O‘ NHMN‘ NHPT‘ O O‘ ! ‘ P ! T‘ 7‘ Q PMN‘ MPGM 8
" P‘ ! 9T ‘ ! ‘ M‘ QP ! P MG‘ H ! PGN‘ NH JQHN+
! O‘ K I I ! ‘ Q O‘ N ‘ M99 ‘ I MOP‘ ! P‘ 7‘ NHP I +R

#FG‘ OGHG‘ □ ‘ 0F?H GN ‘ #FG‘ LAMNG C ‘ KGDF?K ‘ CFG‘ HALMG C ‘ A>‘ CFG‘ "A@?H‘ CD□B@P□D ‘ F? ‘ ?M@A C‘ >AD ACCGH‘ "A@G ‘ ?HN‘ APGDH ‘ CFG‘ □?C□O‘ JADMN‘ J□CF‘ ?‘ @? H□>□OGHOG‘ GQB?MMGN‘ AHME‘ LE‘ CFG‘ PAMBKCBAB HG ‘ □HCA‘ JF□OF‘ FG‘ □ ‘ KMBH GN ‘ H‘ "A@G ‘ OC?P□B ‘ G ?D□ ‘ ?M@A C‘ BKDG@G ‘ >□ ‘ BKAH‘ CFG‘ O?DN ‘ JF□OF‘ F?MM‘ APGDH‘ CFG‘ ‘ JADMN ‘ #FG‘ F□ CADE‘ A>‘ 3 ‘ □ ‘ FGHOG>ADCF‘ CFG‘ F□ CADE‘ A>‘ "A@G = >‘ ?MM‘ F?(KG?DG8 ‘ F□ CAD□O?M‘ KM?E I‘ ?E ‘ AMGD□N G ‘ = HCAHE‘ ?HN‘ MGAK?CD?‘ □ ‘ LE‘ >?D‘ CFG‘ @A C‘ JAHNGD>BM I‘ G‘ ? ?□H‘ ?E ‘ ? □ H□H ‘ □C‘ ?‘ KM?OG‘ GPGH‘ F□ FGD‘ CF?H‘ CF?C‘ A>‘ LG□H ‘ CFG‘ @A C‘ JAHNGD>BM‘ A>‘ CFG‘ $ ‘ KM?E ‘ =‘ #FG‘ F□ FG C‘ KD?□ G ‘ AD‘ D?CFGD‘ >AD@‘ A>‘ KD?□ G ‘ A>‘ CF□ ‘ KM?E ‘ JF□OF‘ ‘ O?H‘ A>>GD‘ □H‘ @E‘ AJH‘ @□HN ‘ □ ‘ CFG‘ NABLC‘ JF□OF‘ CFG‘ KGDB ?M‘ ?MJ?E ‘ AOO? □AH ‘ □H‘ @G ‘ JFGCFGD‘ CFG‘ HCAHE‘ ?HN‘ MGAK?CD?‘ □ ‘ HAC ‘ □H‘ ?MM‘ G F□L□C□AH ‘ A>‘ ?‘ □?HC‘ KAJGD‘ □H‘ □C ‘ CDGH CF‘ ?HN‘ P□ ABD‘ A>‘ @?CBD□CE ‘ ?‘ >AD@□N?LMG‘ D□P?M‘ A>‘ & ?OLGCF ‘ $G?D ‘ ?@MGC ‘ ?HN‘ CFGMMA I‘ ≯ #FG‘ GK□CFGC‘ =‘ JAHNGD>BM I‘ □ ‘ BHQBG C□AH?LME‘ CFG‘ D□ FC‘ AHG‘ CA‘ ?KKME‘ CA‘ CF□ ‘ ND?@?‘ C‘ □ ‘ CAA‘ P? C ‘ CAA‘ AD GAB ‘ CA‘ LG‘ ?KKDA?OFGN‘ J□CFABC‘ A@G‘ KDA CD?C□AH‘ A>‘ CFG‘ BHNGD C?HN□H ‘ C‘ KABD ‘ BOF‘ ?‘ >MAAN‘ A>‘ HAAHN?E‘ KMGHNABD‘ BKAH‘ ABD‘ GH G ‘ CF?C‘ JG‘ O?HHAC

N‘ / NP M T‘ &P I M ! G ‘ 9≠ ≠ L≠ +

6' HP P%G'I N'M' I 1JNF 7' J'9 PG GH J9O'GN PMK'H
X NH JN'G I P'L9PMGJ P'I +R

.BC' = ?' "A@?H' CFAB FC F?CF CDBO(' F'@ I' G' NAG ' FG?O' CFG @G GH GD' $?L'GHB ' F? 'APGDDBH' J?' G' J'HOG ';?C CFG CFAB FC A>'F' ' AJH' HGDCHG 'LBC FG J'M' (HAJ'CFG CDBCF R

6' LPMU'N 'I P'H I P' I IKP'I N'HP'QPIP M9'N IQJP+R

HACFGO' @G GH GD'OA@G ' .DG>'I ' F' 'H G J R

6'OJ9 N'NHT' 7P'G OPMO8'R

?HN' LD'G>'I ' CFG QBG C'AH' J'FOF >AMA'J ' R

6' XHP P'O PO'GHP'\'R

#FG'OA@@GHC' FAJ 'CFG @?H R

6' HP P%G'M'Q PM'GL N'Q IP[$ %' ' ' % ' B

G'M'G?DH' J'FE'FG N'N' NG 'DC' C 'H' CFG OGHG J'CF' MGAK?CD?'H' J'FOF'
FG' ?HHABHOC 'F' 'NGK?DCBDG' >CGH' F?' FG' FG?DN' >DA@' CFG ?@G'
M'K 'CFG L'CCGD'DAHE' A>R

'XHM'GMTG $ ' 'B

G' F? 'LGGH' LABHN' CA' MGAK?CD?' HAC' AHME' LE' FGD'=H>'H'CG P?D'GCE I'
LBC' LE' FGD' O?KO'OG' ?HN' FGD' >ADOG' A>' D'ND'OBMG' ' @AD?M' KAJ G ' ? '
J'G?(' ? 'F' 'KFE 'O?M' OABD? G ' CDAH ' MGAK?CD?' K?'HC 'CFG @? H'-
>'OGHC' AMN'GD' ?HN' CFG 'H>?CB?CGN' MAPGD'H' ?' >G'J' J ADN R'

6' HP'OPI #N9MG '7NH G PM NH'NHP'M I'
#IO'AJ Q IPN' 7'IPI+' "P%G'GLPMU IQ'I +
1 'I J I Q'Y XHP P%G I'T'% - ' 7 9O' 9P'Y'%
F '%'$'('"%' B

G' F?' >MGN'>DA@' MGAK?CD?' LBC' FG GHN ' FGD' F=' '@G GH GD R

6' #9Y'NHP' PMGN+
MT'NH J' GHM9Y KM9Y HP ' I GN PGG+R

H' CF=' 'CG@KGD' FG @GGC' G ?D' ?HN' FG @?DD=G ' OC?P'?
X H I'IP%P'NHP' O' 7'Y '% 'M' HPM O' GLPMU
P IQ' AM ?O' NPI'N I PG %P '9 PG'N 'NHP'7PMGN8
#IO'7 'H G O IM T'LMTG'H G'HPM N+R

%$ '' 'CFG HCAHE'CF?C F?(KGDG'OH' CFG' KM?E'LG>ADG' B 'LD=H 'BKAH'
CFG' OGHG' "A@G' '.CA' F=@' HAC=H ' G' J'MM' FG?D' HAC' =C ' ?@L? -
?NAD ' R

?TG' BKAH'=C' CG?N'ME' G' F?PG' DG?N' =C ? ?'H' ?HN' ?HN' ? ?=H ' ?HN' CFG
=DKDG 'AH' J'FOF' =C' MG?PG ' ? ?'H' ?HN' ? ?'H=' ' CF?C A>' J'AHNGD' G'
0?H' OA@KDGFGHN' =C' DGNBOG' =C ' KAJ GD' CA' A@G' C?HN?'DN' AHME' LE' CFG
?H?ME ' A>' - ' &D '0?@G AH' F?' ?NAKCGN' CF=' 'OABD G' H' AHG' A>'
A>'F=' A'J'H' HGDCHG 'LBC' FG' J'M' (HAJ'CFG' CDBCF R

#FG' DGO(MG ' FADC ' FCGN' PAMBKCB?DE' J ?' 'HGPGD' ND?J'H' @ADG' CDBME'
=' 'GHC=DG' KAM=OE' ' F?KGN' LE' F=' 'K? =AH' #FG' JAHNGD>BM' OGHG' H'
J'FOF' F=' @?DD=? G' J'=CF' OC?P=?' =' @?NG '(HAJ'H' CA' MGAK?CD?'
? BDG 'B 'CF?C' H' CFG G CDG@G C'HCG@KGD?HOG' A>' GM> J'M' FG J'M' F?PG'
F=' 'GQB?M' MGAK?CD?' JABMN' F?PG' HCAHE' BH@?DD=GNR

6' 'HM9T'I T'3QTLN' P P'GJA I P'QO'MI'O' I MOP'
#'K GNP I'7 'GKM9O'G'IMUPG+R

OOADN=H ' CA' IHAL?DLB ' CFG' BH@?DDE=H ' J'M#' O?DOGME'LG' HGOG ?DE'
>AD'FGD' D?C=>O?C=AH R

/ ' 1KMM M' G 7M'H 9T'K 9O'MIO'GN 99'K I P GM I+
' XH ' J9O'I N'HM P'H G' 7P'G '\
' N'HP'NHMN'H I GP97'G I N'G 8 H KH' G M U'# IN I T+R

#FG' NDH(=H ' OGHG' LGCJGGH' CFG' CD=B@PD' ?HN' A@KGE = 'AHG A>'
CFA G ODG?C=AH ' J'FOF' DGHNGD' F?(KGDG' A' GHC=DGME' ?LAPG' ?HN' A'
BCCGDME' BHM=(G'ACFGD'KAG ' IPGDE'MH=G ' ?' CD?'C A>' OF?D?OCGD' G'
FGDG' GG' CFG' AMG@H'='BH@GD=C?LM=G'I'$GK=NB ' CFG O?BC=AB ' G ?D'
CFG' N? F=H ' OMGPGD' GH=?M' HCAHE' = ' GEG' N?HOG ' F=' 'J'FAMG
P= ? G' = NACF' ODG?@' ?HN' @?HC=G I' CFG' OA@GD ' A>' F=' @ABCF ?DG
ND?J'H' NAJ'H' ' ?' FG' FA? G ' $GK=NB ' J=CF' CFG @A C ?N@=D?LMG
>AA=H R

/' -'X'HMN'IMIIP' %NH I'G' GT J'K K O 9P'\
'2N' G GHML'PO'G '9 UP' NGP97'8 MIO' N' G'MG A MO' MG N'HMNH' A PMONH' N' G
=JGN'G 'H'QH'MG' N' G'MIO'I PG NH' NG' i' QMIG'BK+
-' % G'M'GN MIQP'GP LPIN+R

6' HP'OPI #N9MG '7NH G PM NH'NHP'M I'
#IO'AJ Q IPN' 7'IPI+' "P%G'GLPMU IQ'I +
1 'I J I Q'Y XHP P%G I'T'% - ' 7 9O' 9P'Y'%
F '%'$'('"%' B

G' F?' >MGN'>DA@' MGAK?CD?' LBC' FG' GHN ' FGD' F=' '@G GH GD R

6' HP P%G'I N'M' I 1JNF 7' J'9 PG GH J9O'GN PMK'H
X NH JN'G I P'L9PMGJ P'I +R

.BC' = ?' "A@?H' CFAB FC F?CF CDBO(' F'@ I' G' NAG ' FG?O' CFG
@G GH GD' $?L'GHB ' F?' 'APGDDBH' J?' G' J'HOG ';?C CFG CFAB FC
A>'F=' 'AJH' HGDCHG 'LBC' FG' J'M' (HAJ'CFG' CDBCF R

6' LPMU'N 'I P'H I P' I IKP'I N'HP'QPIP M9'N IQJP+R

HACFGO' @G GH GD'OA@G ' .DG>'I ' F=' 'HG J R

6'OJ9 N'NHT' 7P'G OPMO8'R

?HN' LD'G>'I ' CFG QBG C'AH' J'FOF' >AMA'J ' R

6' XHP P'O PO'GHP'\'R

#FG' OA@@GHC' FAJ 'CFG @?H R

6' HP P%G'M'Q PM'GL N'Q IP[$ %' ' ' % ' B

G'M'G?DH' J'FE'FG N'N' NG 'DC' C 'H' CFG OGHG' J'CF' MGAK?CD?' H' J'FOF'
FG' ?HHABHOC 'F' 'NGK?DCBDG' >CGH' F?' FG' FG?DN' >DA@' CFG ?@G'
M'K 'CFG L'CCGD'DAHE' A>R

'XHM'GMTG $ ' 'B

G' F?' 'LGGH' LABHN' CA' MGAK?CD?' HAC' AHME' LE' FGD'=H>'H'CG P?D'GCE I'
LBC' LE' FGD' O?KO'OG' ?HN' FGD' >ADOG' A>' D'ND'OBMG' ' @AD?M' KAJ G ' ? '
J'G?(' ? 'F' 'KFE 'O?M' OABD? G ' CDAH ' MGAK?CD?' K?'HC 'CFG @? H-
>'OGHC' AMN'GD' ?HN' CFG 'H>?CB?CGN' MAPGD'H' ?' >G'J' J ADN R'

7 ? E , , , E ' ? 7

6' H GP'T J' i'K ILMI'T'ML'K I I MiO' HM#'K GN
4 J'HPM N'HMG' I iO'N +R

"?K□N' □ ' F□ '@GGC□H ' J□C#' MGAK?CD?' FG = F?CF HANNGN' F□@' CA'
FGD I' #FG'PAMBKCB?DE F?'KBC'AH'F□'G? CGDH'@? H□>□GHOG R

6'2%NHP'I M UPN L9MKP' i'M'N AJ1M9 G 9 p %O
' 9P LMN M'MiO'H I GP97' i'KHM G 7Q 9O'
X P P'LJA9 K9T'PiNH i%O+R

G'DGSGOC'?MN'OABH GM R =' 8MN>□ FC?C' G?I' HN' A

6' HP'Q PMNP'KMiN9P' 7NHP' 9O' G'9 GN'
□CF' p T'QI MiKP+R

A J'0A@G'CFG GHGDA □CE'A>'F□'0F?D?0CGD R A>'CFG ?@G DAJ1CF' ?'
F□' @? H□>□GHOG'?HN'F□'DGO(MG HG ' G'G FADC'F□'>□GHN'CA'
C?(G F□'CDG9 BDG'?HN'>ME'CA' ?G ?D' □ ' GN> ?L? G@GHC□'@A C'KDA-
>ABHN' R

6'2'HM P' 77PiOPO' PLJNMN i+R

.BC'FG F?'HAC'EGC'MG?DHC'J□ NA@' MGAK?CD?□'KDG GHC'?HN'CFGHR

6'OM99'i N'M'NPM '2'GMT8 iP' 7NHP1' MNPG
#99'NHMN' G' i'MiO'9 GN' : P'IP'M'U GG8
3 pi'NH G' PLMTG' IP+R

G' CFGH' LGOA@G'?' LD? ?DC' FG' J□MN' OF?MMGH G' CG ?D' = JADN'
? ?H C' JADN I' DA>ABHN'□'CFG OA@@GHC'A>'iHAL?DLB

H 6 2'GPP'IPi%G□JOQ I PiNG'M P'
#'LM KP9' 7NHP '7 NJipG8 MiO'NH iQG' JN M O'
5 'O M 'NHP' i M O']JM9 NT'M7NP'NHP I +
'GJ77P'M99'M9 UP+R

CG ?D8' ?@L? ?NAD' 0A@G'CA' MGAK?CD?' G' CG@KC'FGD'?HN'□C
?M@A C'MAA(' ?'□>' FG'EGMNGN' CA'CFG CG@KC?C□AH' G' (□ G'FGD'
F?HN'?C CFG□H C?HC' HCAHE'GHCGD R

6' i'MiO'GNM G[
XHL'H I+R

#F□'□'K?DCME'SG?MAB E'K?DCME CFG M? C ? GDC□AH'A>' @?MM KAJGD'LE'
AHG'?00B CA@GN'CA'BHM□@□CGN'0A@@?HN' #DBME'iHAL?DLB' ?E R

A ;' PGL iOMiKP'/NNO M P' GDIP'-M N P'N I+'+L+' =+

%$ '?DG'HAC'CFG'MADN'A>'CFG'JADMN'A>'CFG DGHOF'CD? GNE' +D□@@'
JFA'BKAH'CFG'JFAMG'F?'?'MG?H□H'CA'F?(KGD6'?E R='G C?G GT
D□N□DBMG'?H'NABC□NG'>?□DG'K?DMGD'MG'P?MGC'0A@@G'MG'FYA'@?□'
□M'G C'LG?BOABK'' ' 'NG>?□DG'K?DMGD'?BF'FGDA'MG'M?H?G'
NB'KGBKMG I'U' #A'@?(G'CFG@'NDBH(□'JAD G'GPGH'CM□?H'CFG JAD C'A>'
CFG'D□N□DBMAB' C'□'□@KA'□LMG'CA'NG>□HG BOF'?'□H' G'CF□H('
J□CF'%A'LGDDE'□C□'=>M?C'LBD M?DE'?'GPGD'J?'0A@@□CCGN I' *KCAH'
F?';?'0BD□AB'CFGADE'JF□OF'JABM'K?DCME'@?(G F?(KGDG'CA'LGMAH'
CA'CFG DGHOF'OFAAM' #FG'FGDA'A>'CF□'KM?E'?OOADN□H'CA'CF□'
CFGADE'NAG'HAC'KG?('='CFG'M?H B?G'A>'CFG'KGAKMG I' *KCAH'?E R;
=';&.?D(' HCAHE'?' MBC?DOF'□H>AD@'B'?>>GCCGN'CFG □?□O'@?HHGD
A>'KG?(□H'J F□OF'@BOF'DG G@LMGN'F□'AJH'CG@KGD'LG□H'?@L□□AB
BHGQB?M'?HN'PGDE'DFANA@AHC?NG #F□'CEMG'ABD'KAGC'F?
PGDE'?DC>BMME'?HN'MG?DHGNME'□HCGD KGD'GN'□H' HCAHE8'KGGOFG I' '
*HQBG C□AH?LME'CFG'M?H B?G'A>' HCAHE□'@ADG'GMGP?CGN'CF?H'CF?C
@GHC R'?'@?H'A>'F□'F' GH□B R?H'AD?CAD'JFA'0AB MN'@APG'CFG
K?'□AH'ND?@?C□O?MME R?'MAPGD'CF?C'(HGJ'HA'M□@□C'CA'F□'NGPAC□AH'
LGO?B G'FG'MAPGN'□@?'□H?C□PGME' FGH'ADDAJ'>?MN'BKAH'F□@'CFG
KAGC□O?M K?DC'A>'F□'OF?D?OCGD'?DG'@ADG'?HN'@ADG'NGPGMAKGN'JG
>AD GC'CFG'GH B?M□C' .BC'GPGH'LG>ADG'CFG'CAB0F'A>'D□G>'F?' A@G-
JF?C G'?MCGN'F□'H?CBDG'FG'C?(G'CFG KAGC□O?M'P□GJ'A>'KAGC□O?M'CF□H '
F?C O?H'LG'@ADG G'QB□□CG'CF?H'F□'@GHC□AH'A>' OC?P□?8'J□GGK□H'?C

CFG K?DC□H'J□CF'FGD'LDACFGDW

6' HP'#L 9%G i'HP'PTPG'2M'G9 P%G'GL iQ+
#iO'NHPGP'NHP'GH P G'N'A iQ'N' i+R

HN'F□ FGD' C□MM R

6'"p'N iQJP' 99 i N' APT'HP'HPM N'i 'KMi'
$ "p'HPM N'i7 I'HP'N iQJP'NHP'G MiN%O i'7PMNHP'
HMN'GNMiOG'JL i'NHP'G P99'MN'NHP'7J99' 7N OP
#iO'ip NHP' MT' iK9 IPG+R

#F□ 'J G'CF□H('□'HAC'=';CFG □?C□O'@?HHGD'A>' KG?(□H I
AMN'□' HCAHE8'K?DC□H'J□CF' OC?P□?'R

6'#99'G9 GN[
H G7 J9'3QTLN Mi'HMNH'APN MTPO' I P+R

MGAK?CD?' ?E'CDBMER

6'"P'G' I P' I MO'
HMi' P9M I i'7 'H G GH P9O+R

#FG' OGHG'JF□OF'CGD@H?CG'J□CF' HCAHE'>?MN□H'AH'F□' JADN'□'H'
#FG'□GHOG'JF□OF'CGD@H?CG'J□CF' HCAHE'>?MN□H'AH'F□' JADN'□'H'

6'% G'APNNP'L9MT iQ' NH'M'9 i%G HP9L+
HMi' NH'Mi' 9O' iP'OT iQ+R

F?(KGD6'@?(G'CF□'@?H'CFG'□HCGDKDGCGD'A>'F□'AJH'J□ NA@ R
??TMCC'F?'GMAQBGHCME ?N'A>'□'@?'H□>□GHG'DKGHCGD'A>'F□'□'
J□CFABC'NABLC'AHG'A>'CFG>□HG C'K□GOG'A>'KAGCDE□H'F?(KGDG'#FG'
KMGHNABD'A>'CFG□@?GDE'CFG'>□HG C'K□GOG'A>'KAGCDE□H'CFG'J□AD G'A>'
K□OCBDG QBG'ALSGOC'F?N□H'APGD'CFG'J□ADMN'CFG□D'GP?HG OGHC'H?CBDG'
CFG'CAC?M'BHOGDC?□HCE'A>'JF?C□'MG>C'LGF□HN'?DG'SB C'M□(G CFG'@ABMNGD-
□H'OFG@G'A>'FB@?H'DG?CHG I' .BC'LG'□C'AL GDPGN'CFG'KAGCDE□'
?MM'□H'(GGK□H'J□CF'CFG'OF?D?OCGD'A>'CFG'@?H' iGC'B'AHOG'@ADG
DGKG?C□C R

6' '3 G'NH J'TPN'APH 9O%GN'IP+
% ' IPN IP' P'GPP'M'K9 JO'NHMNW'O MQ i GH'
' #T'i A9P'9 O+
#' ML J'G IPN IP'9 UP'M'APM ' '9 i
#'N P %O'K MMOP9'M'LPiOMiN' KU
#'7 UPO'I JiNM i' 'A9JP'L I iN T'
X NH'N PPG'JL i%'NHMN i O'JiN'NHP' 9O+
#iO'I KU' J'PTPG' NH'M 'NH J'HMGN'GPPi'NHPGP'G Qi68
HPT'M P'A9MKU' PGLP %G'LMQPMiNG+
% ' #T' I'T9 O+
' HMN' H KH' G i 'N'H GP'p pi' NH'M'NH JQHN'
HP' MKU'O G9 I iG8 MiO'I MUPG' N' iO GN iKN8
#G' MNP'G i' MNP +
% ' 2N'O PG' I'T9 O+
' T'Q O'UiM P'3 G'i 'NHT'KMLNM i'G
'% ($' '" 2;' HP P'2'MI'#iN iT8
4PN'KMii N'H 9O'NH G A9P'GHMLP' I'TUiM P+R

6'% G'APNNP'L9MT iQ' NH'M'9 i%G HP9L+
HMi' NH'Mi' 9O' iP'OT iQ+R

F?(KGD6'@?(G'CF□'@?H'CFG'□HCGDKDGCGD'A>'F□'AJH'J□ NA@ R
??TMCC'F?'GMAQBGHCME ?N'A>'□'@?'H□>□GHG'DKGHCGD'A>'F□'□'
J□CFABC'NABLC'AHG'A>'CFG>□HG C'K□GOG'A>'KAGCDE□H'F?(KGDG'#FG'
KMGHNABD'A>'CFG□@?GDE'CFG'>□HG C'K□GOG'A>'KAGCDE□H'CFG'J□AD G'A>'
K□OCBDG QBG'ALSGOC'F?N□H'APGD'CFG'J□ADMN'CFG□D'GP?HG OGHC'H?CBDG'
CFG'CAC?M'BHOGDC?□HCE'A>'JF?C□'MG>C'LGF□HN'?DG'SB C'M□(G CFG'@ABMNGD-
□H'OFG@G'A>'FB@?H'DG?CHG I' .BC'LG'□C'AL GDPGN'CFG'KAGCDE□'
?MM'□H'(GGK□H'J□CF'CFG'OF?D?OCGD'A>'CFG'@?H' iGC'B'AHOG'@ADG
DGKG?C□C R

6' '3 G'NH J'TPN'APH 9O%GN'IP+
% ' IPN IP' P'GPP'M'K9 JO'NHMNW'O MQ i GH'
' #T'i A9P'9 O+
#' ML J'G IPN IP'9 UP'M'APM ' '9 i
#'N P %O'K MMOP9'M'LPiOMiN' KU
#'7 UPO'I JiNM i' 'A9JP'L I iN T'
X NH'N PPG'JL i%'NHMN i O'JiN'NHP' 9O+
#iO'I KU' J'PTPG' NH'M 'NH J'HMGN'GPPi'NHPGP'G Qi68
HPT'M P'A9MKU' PGLP %G'LMQPMiNG+
% ' #T' I'T9 O+
' HMN' H KH' G i 'N'H GP'p pi' NH'M'NH JQHN'
HP' MKU'O G9 I iG8 MiO'I MUPG' N' iO GN iKN8
#G' MNP'G i' MNP +
% ' 2N'O PG' I'T9 O+
' T'Q O'UiM P'3 G'i 'NHT'KMLNM i'G
'% ($' '" 2;' HP P'2'MI'#iN iT8
4PN'KMii N'H 9O'NH G A9P'GHMLP' I'TUiM P+R

#FG'□GHOG'JF□OF'CGD@H?CG'J□CF' HCAHE'>?MN□H'AH'F□' JADN'□'H'
#FG'□GHOG'JF□OF'CGD@H?CG'J□CF' HCAHE'>?MN□H'AH'F□' JADN'□'H'

6' H GP'T J' i'K ILMI'T'ML'K I I MiO' HM#'K GN
4 J'HPM N'HMG' I iO'N +R

"?K□N' □ ' F□ '@GGC□H ' J□C#' MGAK?CD?' FG = F?CF HANNGN' F□@' CA'
FGD I' #FG'PAMBKCB?DE F?'KBC'AH'F□'G? CGDH'@? H□>□GHOG R

6'2%NHP'I M UPN L9MKP' i'M'N AJ1M9 G 9 p %O
' 9P LMN M'MiO'H I GP97' i'KHM G 7Q 9O'
X P P'LJA9 K9T'PiNH i%O+R

G'DGSGOC'?MN'OABH GM R =' 8MN>□ FC?C' G?I' HN' A

6' HP'Q PMNP'KMiN9P' 7NHP' 9O' G'9 GN'
□CF' P T'QI MiKP+R

A J'0A@G'CFG GHGDA □CE'A>'F□'0F?D?OCGD R A>'CFG ?@G DAJ1CF' ?'
F□' @? H□>□GHOG'?HN'F□'DGO(MG HG ' G'G FADC'F□'>□GHN'CA'
C?(G F□'CDG9 BDG'?HN'>ME'CA' ?G ?D' □ ' GN> ?L? G@GHC□'@A C'KDA-
>ABHN' R

6'2'HM P' 77PiOPO' PLJNMN i+R

.BC'FG F?'HAC'EGC'MG?DHC'J□ NA@' MGAK?CD?'□'KDG GHC'?HN'CFGHR

6'OM99'i N'M'NPM '2'GMT8 iP' 7NHP1' MNPG
#99'NHMN' G' i'MiO'9 GN' : P'IP'M'U GG8
3 pi'NH G' PLMTG' IP+R

G' CFGH' LGOA@G'?' LD? ?DC' FG' J□MN' OF?MMGH G' CG ?D' = JADN'
? ?H C' JADN I' DA>ABHN'□'CFG OA@@GHC'A>'iHAL?DLB

H 6 2'GPP'IPi%G□JOQ I PiNG'M P'
#'LM KP9' 7NHP '7 NJipG8 MiO'NH iQG' JN M O'
5 'O M 'NHP' i M O']JM9 NT'M7NP'NHP I +
'GJ77P'M99'M9 UP+R

CG ?D8' ?@L? ?NAD' 0A@G'CA' MGAK?CD?' G' CG@KC'FGD'?HN' C
?M@A C'MAA(' ?'□>' FG'EGMNGN' CA'CFG CG@KC?C□AH' G' (□ G'FGD'
F?HN'?C CFG□H C?HC' HCAHE'GHCGD R

6' i'MiO'GNM G[
XHL'H I+R

#F□'□'K?DC□H'SG?MAB E'K?DCME CFG M? C ? GDC□AH'A>' @?MM KAJGD'LE'
AHG'?00B CA@GN'CA'BHM□@□CGN'0A@@?HN' #DBME'iHAL?DLB' ?E R

A ;' PGL iOMiKP'/NNO M P' GDIP'-M N P'N I+'+L+' =+

%$ '?DG'HAC'CFG'MADN'A>'CFG'JADMN'A>'CFG DGHOF'CD? GNE' +D□@@'
JFA'BKAH'CFG'JFAMG'F?'?'MG?H□H'CA'F?(KGD6'?E R='G C?G GT
D□N□DBMG'?H'NABC□NG'>?□DG'K?DMGD'MG'P?MGC'0A@@G'MG'FYA'@?□'
□M'G C'LG?BOABK'' ' 'NG>?□DG'K?DMGD'?BF'FGDA'MG'M?H?G'
NB'KGBKMG I'U' #A'@?(G'CFG@'NDBH(□'JAD G'GPGH'CM□?H'CFG JAD C'A>'
CFG'D□N□DBMAB' C'□'□@KA'□LMG'CA'NG>□HG BOF'?'□H' G'CF□H('
J□CF'%A'LGDDE'□C□'=>M?C'LBD M?DE'?'GPGD'J?'0A@@□CCGN I' *KCAH'
F?';?'0BD□AB'CFGADE'JF□OF'JABM'K?DCME'@?(G F?(KGDG'CA'LGMAH'
CA'CFG DGHOF'OFAAM' #FG'FGDA'A>'CF□'KM?E'?OOADN□H'CA'CF□'
CFGADE'NAG'HAC'KG?('='CFG'M?H B?G'A>'CFG'KGAKMG I' *KCAH'?E R;
=';&.?D(' HCAHE'?' MBC?DOF'□H>AD@'B'?>>GCCGN'CFG □?□O'@?HHGD
A>'KG?(□H'J F□OF'@BOF'DG G@LMGN'F□'AJH'CG@KGD'LG□H'?@L□□AB
BHGQB?M'?HN'PGDE'DFANA@AHC?NG #F□'CEMG'ABD'KAGC'F?
PGDE'?DC>BMME'?HN'MG?DHGNME'□HCGD KGD'GN'□H' HCAHE8'KGGOFG I' '
*HQBG C□AH?LME'CFG'M?H B?G'A>' HCAHE□'@ADG'GMGP?CGN'CF?H'CF?C
@GHC R'?'@?H'A>'F□'F' GH□B R?H'AD?CAD'JFA'0AB MN'@APG'CFG
K?'□AH'ND?@?C□O?MME R?'MAPGD'CF?C'(HGJ'HA'M□@□C'CA'F□'NGPAC□AH'
LGO?B G'FG'MAPGN'□@?'□H?C□PGME' FGH'ADDAJ'>?MN'BKAH'F□@'CFG
KAGC□O?M K?DC'A>'F□'OF?D?OCGD'?DG'@ADG'?HN'@ADG'NGPGMAKGN'JG
>AD GC'CFG'GH B?M□C' .BC'GPGH'LG>ADG'CFG'CAB0F'A>'D□G>'F?' A@G-
JF?C G'?MCGN'F□'H?CBDG'FG'C?(G'CFG KAGC□O?M'P□GJ'A>'KAGC□O?M'CF□H '
F?C O?H'LG'@ADG G'QB□□CG'CF?H'F□'@GHC□AH'A>' OC?P□?8'J□GGK□H'?C

CFG K?DC□H'J□CF'FGD'LDACFGDW

6' HP'#L 9%G i'HP'PTPG'2M'G9 P%G'GL iQ+
#iO'NHPGP'NHP'GH P G'N'A iQ'N' i+R

HN'F□ FGD' C□MM R

6'"P'N iQJP' 99 i N' APT'HP'HPM N'i 'KMi'
$ "P'HPM N'i7 I'HP'N iQJP'NHP'G MiN%O i'7PMNHP'
HMN'GNMiOG'JL i'NHP'G P99'MN'NHP'7J99' 7N OP
#iO'IP NHP' MT' iK9 IPG+R

#F□ 'J G'CF□H('□'HAC'=';CFG □?C□O'@?HHGD'A>' KG?(□H I
AMN'□' HCAHE8'K?DC□H'J□CF' OC?P□?'R

6'#99'G9 GN[
H G7 J9'3QTLN Mi'HMNH'APN MTPO' I P+R

MGAK?CD?' ?E'CDBMER

6'"P'G' I P' I MO'
HMi' P9M I i'7 'H G GH P9O+R

#FG' OGHG'JF□OF'CGD@H?CG'J□CF' HCAHE'>?MN□H'AH'F□' JADN'□'H'
#FG'□GHOG'JF□OF'CGD@H?CG'J□CF' HCAHE'>?MN□H'AH'F□' JADN'□'H'

& * '+:%@*,(0%2-+*,A>+:%%S+%2,-,0,+%2,-%70%,@%*+:%-'+:*2(:B**+:('+2-<%O1';%:%2%('BB1+:%-@+(@*,,%@+%O;+:+(B'9@-+*,-,O+:%('BB*(%OB%2*O**+(*2<,-B2*H0'@+*,

#FG?DM G GN C AH A>JF OF?HE OAKE ?C KDG GHC (HAJH A>#CB HNDAH OB ?KKG?DGN H QB?DCA H 477 BHNGD CFG >AMMAJ H C CMG R = #FG @A C M?@GHC?LMG "A@?HG #D? GN G A>#CB HNDAH OB C F?CF BHNDE C@G LGGH KM?ENG LE CFG "F AHABD?LMG CFG !?DMG A> G@LDA(G CFG !?DMG A>.?DL G CFG !?DMG A> B G ?HN CFG $ADNG F?@LGDM? HG CFGED GDP?HC C $AHNAH KD HCGN LE 0 " >AD !NJ?DN F CG 477 I

#FG HG C GN C AH ?KKG?DGN H 4 BHNGD CFG >AMMAJ H C CMG R = #FG @A C M?@GHC?LMG #D? GN G A>#CB HNDAH OB C F?CF BHNDE C@G LGGHG KM? NG LE CFG H & ?G C G GDP?HC $AHNAH KD HCGN >AD !NJ?DN F CG 4 I

H CFG >AM A OAMMGOC AH A> 423 C ?KKG?D BHNGD CFG C CMG A>= #FG M?@GHC?LMG #D? GNE A>#CB HNDAH OB I C>AMMAJ AD AM?HB ?HN KDGOGNG "A@GA ?HN 0BM GC

#FG OAKE A>CFG QB?DCA GN C AH A> 477 LGMAH H CA $ADN D?HO ! GDCAH J? OAMM?CGN LE &D #ANN KDGP AB CA CFG KBLM O?C AH A> CFG P?D ADB@ GN C AH A> 673 ?HN CFG N>>GDGHOG LGCJGGH CFG >D C ?HN GOAHN QB?DCA ?DG H GDCGN LE CGGPGH H CF?C GN C AH #FGE ?DG PGDE CD>M H #FG P?D?C AH AH CFG ACFGD F?HN LGCJGGH LACF CFG QB?DCA ?HN CFG >AM A A> 423 ?DG @ADG @KADC?HC #FG GOAHN OGHG A> CFG CF DN ?OC OAHC? H H ?LABC G FCE M HG AHME >ABHN H CFG >AM A ?HN CFGDG ?DG AHG AD CJA ACFGD OF?H G JF OF ?DG GP NGHCME CFG JAD(A>?H ?BCFAD ?HN HAC A>?H GN CAD AD KD HCGD G F?PG A> OABD G HAC OGN CFG@ H ABD >AAC HACG H CFG QB?DCA ?M A JG F?PG HA N P AH HCA ?OC ? H CFG >AM A #FG C? G N DGOC AH H G?OF OAKE ?DG HG?DME ?M (G ?HN CFG G JG F?PG OAK GN J CF O?DOGME ?HE P?D?C AH .BC JCF CFG G G OGKC AH JG @?E ?E CF?C CFG >AM A A> 423 ? KD HCGN >DA@ CFG QB?DCA A> 4 ?CF?C J? KDAL?LME KD HCGN >DA@ CFG QB?DCA A> 477 #FG ?OOBD?OE A> ?MM CFG OAK G PGDE DG@?D(?LMG

.BC +GD?DN $?H L? HG H F = OOABHC A>CFG !H M F %D?@?C O(AGC I V 41 ?E A>#CB HNDAH OB ='#F KM?E J? >D C KD HCGN /CA ' D51/ ?HN ?OCGN LE CFG !?DM A> %GDLE G@LDA(G ?HN ! G CFG D GDP?HC I' #F O DOB@ C?HC?M CE JABMN FAJ CF?C $?H L? HG F?N GGH BOF ?H GN C AH ?HN F ?OOABHC ' OAH>D@GN LE ?H GHCDE H CFG C?C AHGD ' G CGD BHNGD N?CG A> GL 4CF D 13 R ='0AFH .?HCGD LAA(G GHC CMGN ?' HALMG "A@?H CADEG A>#ECB HNDAH OB I #F GHCDE ?OOA@K?H GN LE CFG >AMMAJ H R ='!HCGDGN ?M A BHCA F@' LE J?DD?HC >DA@ &D AANOAO(' CFG L?MM?N CFGDGA> I #FG L?MM?N FGDG GHCGDGN J?' @A C KDAL?LME CF?C KD HCGN LE GDOE H F ='"GM QBG A> HO GHC !H M F AGCDE I ?HN JF OF JG FGDG H GDC R

6'4 J'! A9P' I !OG'M!O'7M I JG' I M N M99 QHNG#
HMN !'OP7P!KP 7'!MN P'K J!N T'7 QHNG
$: P'PM P'N 'IP'NHMN'NP!'TPP PG'7 JQHN'7 '& IP'
4PN PMLN'O GQ MKP'MN' IT' PNJ ! !Q'H IP+

2!'& IP'2'9 PO' !'7M IP'7J99P'NH PPGK P'TPP PG'
T'!M IP'AP9 PO' MG' 7'M99' IT'LPP PG'8
OJ99'7 P'M!O'N P!NT' M9 M!N'G !!PG'2'HMO
XH GP'7 M OP' P NJPG' IMOP'NHP '7MNHP 'Q9MO+

0 ' HP!'& I P%G'7 PG'NHP ' M 9 UP'7 KPG'AP!N'
#QM !GN'NHP I'GN 99P' IT'G !!PG'M!O'2' P P'GP!N;
#QM !GN'NHP' : NHG'7J99'NP!'TPP PG' PM T' M P'
X P'GLP!N' PKP !Q' IM!T'M'A9 JOT'GKM P+

?JGN'N 'M!O'N P!NT' 7' IT'G !!PG' P P'G9M !P'
P7 P' P'O O' PNJ !'N '& IP'MQM !P8
1 7'7 P'M!O'N P!NT'G !!PG'2'A JQHN'AJN'NH PP'
#9 P'NHP'GNMNP9T'N P G' 7'& IP'N 'GPP+

XHP!' M G' P P'O !P'2'K !]JPGN'H IP'O O'A !Q'
#!O'O O'L PGP!N' IT'L G !P G'N 'NHP'U !Q
HP']JPP!P' 7' : NHG'HP 'G !G'M!O'PUP' M P'
XH KH'O O'GJKH' IJ OP G'9 UP' MG' !P P'AP7 P+

HP' P ILP J'O O' IMUP'NH G']JPP!P'H G' 7P+
XH KH'A PO' !'& IP'OPAMNP'M!O'OPMO9 P'GN 7P8
HP' P' NH'HP 'N 'G !!PG'O O' Q P'G P'L JO'
HMN'! !P'9 UP'NHP I' !'& IP' I QHN'APP'M99 O+

HP' P'G 'L9PMG%O'NH G' !P IMOP' P IL PGG%P P
HMN'GHP'K !GP!NPO'N 'H I'GPK PN9TP'
O 'N 'MAJGP'HP 'HJGAM!O%G' IM! MQP APO+
#!O'G P' !'N IP'M'A9MKUM I P'GHP'A PO+

HP!'GHP' H GP'NH JQHNG'N 'IJ OP' P P' !K9 !OP'
!GP!NPO' NH'NHP' '7'A9 OT' I !OP'
#QM !GN' ITGP97P' IT'U !'M!O'M99' IT'7 P!OPG
2!'K JP99'G N'N 'A !Q'NHP I'N 'NHP 'P!OPG+

P' HP!' !'MQP'2'NH JQHN'N '9 P' !'LPMKP
NH'KM P'M!O'Q P7P'APQM!'NHP!'N ' !K PMGP
#I !QGN' IT'G !!PG'2'HMO' !P'OMJQHNP 'A QHN
XH KH'E T%O'M!O'L9PMGPO'APGN' IT'MQPO'G QHN8

T'OPM P'/M ! M' MG'APN NHPO'NHP!'
' MPGM %G'G !!P'M'T J!Q'M!O'! A9P' IM!8
XH ' !'M'HJ!N !Q'AT'NHP'PILP J %G' 7P'
#!O'HP 'N 'G !!PG'AP PM PO' MG' 7'9 7P8

"P'AP !Q'G9M !' MG'KMGN' !'K! PG' GP'
2!N 'M'OM UG IP'OP!'7 I'9 QHN' 7'GU PG
HP'K JP9' P'O O'K IP'NHMN' MT'MG'NHP!'
X NH' IT'NH PP'G !!PG' H '7P99' !N 'NHP'OP!+

HP' P'NHP!'7PNKHN'NHP'PILP J' NH'GLPPO'
0 'N 'MKKJGP$NHP I' 7'NHP' IJ OP JG'OPPO8
#!O' HP!' IT'G !!PG' NH !'NHP'OP!' P P'7 J!O+
2!'$!Q7J99'L G !'NHPT' P P'KMGN'M!O'A J!O+

JN'! P'APH 9O'[HMN' J!OPO' I GN' IT' I !O
HP'PIL PGGP%G'N 'G !!PG' 7'GM MQP'U !O'
T'OMJQHNP 'M GHPO' NH JN' PI GP+
#!O'N U'M MT'HP 'H ! J ']J NP'LP 7 KP+

XHP!'NHPT'HMO'NMGNPO' 7'G P'G PPN'M'79 P+
OPM !Q'NH G'G PPNP'GH J9O'GH N9T'NJ !'N 'G P+
HPT'KJ9N'HP 'N !QJP' HP PAT'GHP'K J9O' !N'NP99'
" 'NHMN'O GH ! J P'J!N 'HP 'AP7P99' ;

HP!'A NH'HP 'HM!OG'NHPT'AMGP9T'KJNN' 77']J NP'
XHP PAT'NHP ' KUPO!PGGP'GHP'K J9O' !N', NP+
' NH'HP '!PPO9P' !'HP 'GM IL9P 'G P'
HP'A9 JOTP' UP G' 7'HP 'O P7J9[P+

T'A NHP ' M KJG'7 J!O'HP ' !'NHP' O+
NM ! !Q'NHP'Q MGG P'Q J!O' NH'LJ L9P'A9 JO+
HMN'N K9OPO'7 I'HP 'GNJ ILPG'M!O'A9 JO9PGGP'M IPG'
P'N !QJP'MN'M99'GHP'HMO'N 'NP99'HP 'HM IPG+

JN' HP!'2'GM P'HP ' !'NHMN' P7J 'KMGP+
X NH'NPM PG' 7'A9 JO'2' PN' I !P'MQPO'7MKP
0 ' IT'/M ! M'2'9M IP!NPO' I P'
HP!'7 ' IT'N 'M!O'N P!NT'G !!PG'AP7 P+

2' KJN'\HP ' \H MMPG' I T' OMJQHNP ' HP9O'\HP' LM I'
PW WM' HP ' GNJ I LPG' HP P !' \HP' A9 JO' M' M !'
!O' \HP!' 2' Q J1O' HP ' A !PG' N ' L OP ' G I M9+
!O' I MOP' M' LMGNP' 7 ' LTPG' GN M' QHN' \HP P NHM9[+

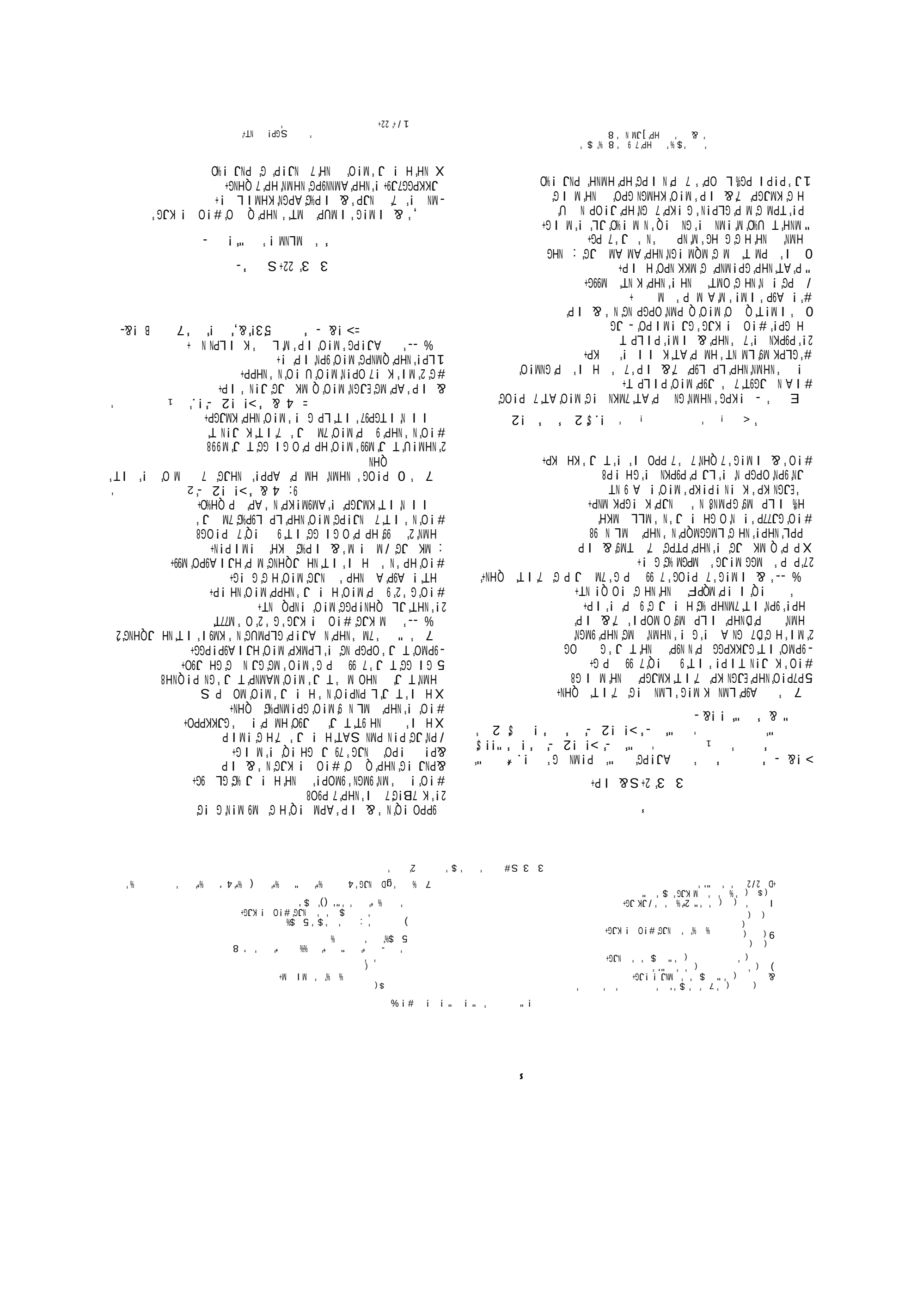
HP !' N<' \HP ' 79PGHP' 2' I MOP' N ' I QHNT' LTPG+
!O' MN' M' AM !] JPN' GP PO' !' GMMP9T' GP+
P7 P' \HP' P I L PGGP' GPN' \H G 9 MMHG I P' I P MN8
' 7' HP ' G ! ! PG' ! ' 79PGH' GHP' P9@ O O' PMN+

TGP97P' AP PM %O' I T' OMJQHNP ' \HP ! ' 7'9 7P+
HP' P I L PGGP' \HP ! ' 2' G9P P' \H' A9 JOT' U1 7P+
!O' GNMAA%O' HNP' P I LP J ' I I PO MMP9 P+
!O' \HP ! ' I TGP97 ' P P ! ' G P' O O' NJG' O P+

HP ! ' \H G' P P ! QP' MQM ! GN' \HP' P' MG' 7 J ! O+
#9 P' NHPT' GPMN' H I ' HM97P' ! N ' \HP' Q J ! O+
X HP PMG' HP' GN O' J ! N 9@ GJK<' N I P' HP' GNM %O+
!O' G P' : O' GP ! O' M9@ I J OP P G' I MT' AP' GP %O+R

-P KT' HMG' L ! NPO' J<' NHP' M MN ! G' APN PP ! ' NH G' AM9MO' M ! O' NHP'
N MQPOT' S M ! O' !K9 ! PG' N ' S NHP' L ! ! ' ! ' NHMN' NHP' AM9MO' L PKPOPO' NHP'
N MQPOT' 7 ' \HP' PMG ! ' \HMN' N' 6' O 77P G 7 I' \HP' L9MT' ! ' GP P M9 LM_
N KJ9M G 8' H KH M' G I L9P' AM9MO NP ' J9O' AP' 9PG3 9 UP3T' N ' M9NP'
NHM ! ' M ! ' ! P ! N P' N MQPO M ! +R HP' NP I G 7 NHP' P ! N T 7 NHP' AM9MO'
! ' \HP' NMN ! P G%' &PQ GNP G S 7 NHP' AM9MO' L ! NPO' AT' -P KT' AP' !P
M ! O' NHP' GM I P S J9O' MLLPM' S ' GH ' NHMN' NHP' AM9MO' HMO' APP ! ' !'
PW GNP ! KP' 9 ! QP' S \HM ! ' NHP' N MQPOT' 7 ' N' G' MGG Q ! PO' AT' M' L P J<'
LJA9 GHP' N ' ? H ! ' M ! NP ' H ' P ! NP G' NHP' 6 A UP ' R ' L9MT' + XP'
HM P' J !] JPGN ! MA9P' MLNH NT' ' H P P ' \HMN' NHP' N MQPOT' MG L LJ9M'
MG M ! ' MKNPO' L9MT' AP7 P' (+&) ' MG' NHP' AM9MO' I MT' M9G ' HM P HMO' M ! '
PM 9 P ' L LJ9M NT + P ! ' ? ! G ! ' ! ' NHP' 2 ! OJK\ ! ' N ' 6' M NH 9 I P '
OM R 7 GN' L OJKPO' ! ' (* (' HMG' M' LMG3MQP' H KH' KM P<' NHP' OMNP' 7'
NJG' # ! O ! KJ<' 7J \HP' ' AMKU' NHM ! ' N P ! NT' TPM G 7 I ' NHMN' LP O'
" P' NHMN' 9@ G PM ' ?P ! ! ' ' # ! O ! KJG' M P' \HP' APGN' L9MTG'
5 $ GHM89 LMGG' J ! PMKPLNPO' MN' HP P' ' ' 2 ! - ' 6&" 3 ' - ! 2 - '
- ' ! - $ " ' - ! ! " - ' - ' . 1 ; "B 2 5 ! ' 5 5 - Z
XP' U ! ' NHMN' TOMG 6' ?P ! ! ' R AP9 ! QG' N ' NHP' PM 9 PGN' LP O' 7
J ' PQJ9M ' O M I M#' 2N' MG' MKNPO' AT' 6 NHP' / O' N M ! QPMG I P ! ' R !'
(+& (- P ! NT 7 P' TPM G' PM 9 P ' NHM ! ' (* (' J9O' Q P JG' NHP' OMNP' 7'
(+ , &' 7 ' A NH' L9MTG' NHP' I PO J ! ' 7N P ! NT 7 P ' NH NT' TPM G' J9O'
Q P JG' NHP' OMNP' 7 (+ , * +

$' %SDHJ I J G+



O I' HP P'HP'K KJ1GK APO' NF'H G'G O+
#iO'A JQHN'N 'T UP'NHP'PIPI PG' 7& IP+

97I& "" I , -$ "" ' 2i'i ' ,1 '
iG‡ . ' 2i' pi' 3 ' i.. ' i1 "
2 '('* ' 2i'i ' iG‡ . ' ' ,1 '
' ,8 "" ' ' ,N& 'i ;: NHG'
"" ' 2i' iG' "" ' 5 1 ' 2 '
' ' "i -$ -' 5 -' ' ' 5
- '"i2' ' i.. $ "" 1 '-, '-

'M 9'& IP' KN JG i'NHT'I J i iQ' ppOG'[
/ 'MG'NHP'AM U'NHMN'HMNH'O GKHM QW'HPD'7 MJQHN+
&PNJ iG NF'L PK JG'9MO iQ'N 'NHP'AMT'
O I' HPIKP'MN'7 GN'GHP' PQH%O'HP'MIKH MQP
1'NH iU'I T G i'N 'AP'MG'OPM'N 'I P+
#iO' 7'NHT'G iG p'P p'OPM'N 'NHPP
'77 KPNF i N'NHMN' P'M P'A JQHN'N '& IP'
'APMJN 77'NHT'N JILHG'MiO'PNJ i'$
ML N P'N 'NHPP'MiO'N 'NHT'& IMi'T UP'8
JN' I JGN' I T G iG AP'G9MJQHNP %O' i'NHP'GN PPNG+
O ' M9 MiN'O iQG' i'NHP 'K JiN T%G KMJGP'\
1 ' 7N '7QHN'7 'U iQ'MiO'K I I i PMJ'
XP P'L PNT' i'NH ip' N' G' i'NHPGP+
#iO i KJG'GNM i'i N'NHT'N IA' NF'A9 O'
X 9N'NH J'O M 'ipM'NHP'iMNJ P' 7NHP'Q OG'
5 M 'ipM'NHPI'NHPi' i'Ap iQ' I P K 7J9
PPN' I P KT' G i A 9 NT%G'N JP'AMOQP+
H KPi A9P'. NJG'GLM P'I'7 GN A I'G i+
-MN piN'FET J GP97' IMOMI'MiO'LM O i' I P+
HPGP'M P'NHP'D A PNH pi' H I'T J' : NHG APHP9O'
#9 P'MiO'OPMO'MiO'7 'NHP 'A PNH pi'G9M i'
&P9 Q JG9T'NHPT'MGU'M'GMK 7 KP8

$2' i'A NF']JM N G8 NHP'7 9 ' $'2*
; $%' i'NHP'7 9 '8'NHP']JM N '$%
' SMG'M P A+
' $ ' i'NHP'7 9 8'NHP']JM N ' $
+%'

'NH G'T J'G i'G I M U%'MiO'O P'HP' I JGN
%MLLPMG'NHP 'Q Mi iQ'GHMO G'NHMN'M P'Q IP+
? ' # MT NF'H I 'MiO' IMUP'M'7 P'GN M QHN8
#iO' NF' J'G OG'JL i'M'L 9P' 7X O
/ PN%G'HP 'H G'9 IAG'N 99'NHPT'AP'K9PMI'K iGJI %O+
= 4 ' 1 ' AH '2 '
'1'ODBGM'□DDGM□'AB'K□GCE
'XMG'P P' KTNH M'HM97'G'AM AM JG'\
'1LL GP'i N'F KTNH M'N'MIA N JG'& IP+
#9M AJG'Q PG'N 'PGN'MiO' P'GJ P'
'N PIA9P'JiOP' NJG%NH PM%i iQ'9 U+
HPi'IMOMI'GNMiO' PG 9 %O 8 AJN'H LP' NHM9
HP'GP97 GMIP'Q OG'NHMN'M I%O'NHP']JPPi' 7 T'
X NF' LL NJI NT' 7GHM L' P PiQP'
L i'NHP' H MK MI'NT MIN' i'H G'NPiN
MT'7M J' M I M'NHP']JPPi' 7': NHG
@XHPi': NHG' P P': NHG'MiO' MI M' MG']JPPi
']J N'NHP'A9 OT' iQG'JL i'HP'7 PG+

' ' iG'LM" ' 3

?& ' PP'9 O'MiO'7MNHP'H ' P'HM P'LP 7 I%O'
1J'& IMI' NPG' #9M AJG%9 IAG'M P'9 LL%O+
#iO'piN M 9G'7PPO'NHP'GMK 7K iQ'7 P+
XH GP'GI UP'9 UP' iKPiGP'O NF'LP 7JIP'NHP'GUT+
&PIM IPNH'IMJQHN'AJN'N ' iNP' J'A PNH pi
#iO' NF'9 JO'%M JIG' P9K IP'NHPI'N '& IP+
/PN'N'AP'G 'MiO'9PN'#iO iKJG'
MUP'NH G'H G'9MNPGN'7M P P99'N 'NHP 'G JGG+
9> i& - ' 7i& "" & , -$ "" ' ' ' i..
' ' i (
2i'LPMKP'MiO'H i J' PGN'T J'HP P' 'T G iG8
& IP%G' PMO PGN'KHMIL iG'EPL GP'T J'HP P' i' PGN'
PKJ P'7 I' 9O9T'KHMiKPG'MiO'I GHMLG
"P P'9J UG'i 'N PMG i'HP P'i 'pi T'G P99G+
"P P'Q 'i 'OMIipO'Q JOQPG8 HP P'M P'i 'GN IG+
'i GP'AJN'G 9piKP'MiO'PNP iM9'G9PPL+
2i'LPMKP'MiO'H i J' PGN'T J'HP P' 'T G iG+

NJG #iO iKJG'NHP'LP L9P' 7& lP
XH GP'7 piO' i'EJGN KP'NH J'HMGN'P p'APpi
piO'NHPP'AT lP'NHP 'N AJlP'MiO'NHP 'N JGN+
2' 99 l GN'NHMIiJ7J9'AP'MiO'NHMIiUG'N 'lPi'
1T'i A9P'l iOG'G'H i J MA9P'lPPO+
'-p L9P' 7& lP'MiO'LP L9P%GD'N AJlPG'HP P
2'MGU'T J' KPG'MiO'T J'GJ77 MQPG'8
X 99'T J'APGN 'NHPl'7 pIO9T' i'#iO iKJG\
(& -' 'Q MN 77'NHP'Q O'#iO iKJG
#iO'Q MNJ9MP'H G'GM7P' pNJ i'N '& lP
HP'LP L9P' 99'MKKPL' H l'HP'MOI NG+
' AJlPG'2'NHMiU'T J' 'MiO'NH G'GJ N'2' lMUP+
HMN'T J'K PMP'T J'PlLP %G'P9OP6N'G i+
/ O' MNJ i lP ' H GP' NJPG' 99'2'H LP+
&P79PK#' i'& lP'MG' NMi%G MTG' i'PM NH+
#iO' LPi'EJGN KP' i'NH G'K ll i PMG'
HPi' 7'T J' 99'P9PK#'AT' lT'MO KP+
'i'H l 'MiO'GMT'6'/ iQ'9 P' J'PlLP [R
E ' X NH' KPG'MiO'ML L9MJGP' 7P P T'G N+
-MN K MiG'MiO'L9PAP MiG' P'K PMNP'
/ O' MNJ i iJG'& lP%G'Q PMN'P lLP 8
#iO'GMT'6'/ iQ'9 P' J'PlLP +' MNJ i lP[R
: ' i 3. i& - $ ' 5 i '"ii
7 ' NJG'#iO iKJG'7 'NHT'7M J G O lP'
'JG' i' J'P9PKN i'NH G'OMT
2'Q P'NHPP'NHMIUG i'LM N' 7'NHT'OPGP NG+
#iO' 99 NH'OPPOG' p]J NP'NHT'QPiN9PiPGG
#iO'7 'MI' iGPN' NJG'N 'MO MiKP'
HT'iMlP'MiO'H i J MA9P'7MI 9T
/M i M' 99'2'lMUP'lT'PlL PGG
& lP%G' TM9'l GN PGG'l GN PGG' 7'lT'HPM N+
#iO' i'NHP'GMK PO'-MiNHP i'EHP'pGL JGP
P99'lP'#iO iKJG'O NH'NH G l N i'L9PMGP'NHPP\
'2'O NH'lT NHT'9 O'8 MiO' i'NH G l MNKH'
2'H 9O'lP'H QH9T'H i J PO' 7T J'Q MKP+

+%$ AP+
' -' 0%' i'NHP']JM N 8 NHP'7 9 ' '"

'O 'lTGP97'NH G' PMG i'MiO'NH G' QHN+
iQ'MiO'K llMiOP' 7 J'K ll i PM9
HP' OP' 9O%G'PlLP 'O'2'K iGPK'MNP'
T G O'lT'KHM N'MiO'lT'L G ip G S
- pGpiNG' p99' NHT'& lP%G' lLP M9'9 O
&PKP P'NHPl'NHPi'NHP'N AJNP'NHMN'2' p
ip'H i J %G'piG QiG'HJlA9PO'MN'NHT'7PPN+
7 ' HMiUG'i A9P' NJG'7MNHP ' 7'lT'9 7P[
" 'L JO'2'Ml' 7'NHPP'MiO' 7'NHT'Q 7NG
& lP'GHM99' pK O8'MiO' HPi'2'O'7 QPN'
HP'9PMGN' 7'NHPG'P'JiGLPMUMA9P'OPGP NG
& lMiG'7 QPN'T J'7PM9NT'N 'lP+
' 'lMOMl'M P'T J'L G ip'N 'Mi'plLP 8
9 i')
'H l'NHMN'7 'T J'H i J'MiO'T J'GNMNP+
X 99'JGP'T J'i A9T'MiO'T J'7 99 p G+
7 '#'Q O9T'9MOT'N JGN'lP' 7'NHP'HJP'
HMN'2' J9O'KH GP' PP'2'N 'KH GP'MiP
9PM'JL'7M ']JPPi'NHMN'K9 JOT'K JiNPiMiKP
H J'QH'KHMiKP'7 M'HMNH' JQHN'NH G'KHMiQP'7KHPP '
H J'K l%GN'i N'N 'AP'lMOP'M'GK i'i'& lP'
- iKP9T'GHM99'AP'NHT'JGMQP'P P T' MT+
&PGN'i'lT' O'MiO'9PN'i N'O GK iNPiN'
5MJiN'M99'T J'H LPG' lMOMl'HP'K l7 NG'T J+
Mi'lMUP'T J'Q PMNP'NHMI'NHP']JPPi' 7 : NHG'8
/M i M'T J'M P'i N'O GL9PMC%O' NH'NH G'\
? 1' N'2'lT'9 O'G NH'N JP'i A 9 NT'
X M MiNG'NHPGP' OG'i'L iKP9T'K J NPGT+
7 ' HMiUG'G PPN'/M i M+' & lMiG'9PN'JG'Q '
&MiG l9PGG'HP P' P'GPN' J'L G ip G'7 PP+
- K9M l' J'H i J'G'9 OG' NH'N J1L'MiO'O J1+
% --' / O' NJG'AT'T J'9PM p'NH G'lM O'G l ip+
=7 l 3'
' " 'G '\M P'T J' i'PM ipGN'NHpi'lT'9 O'\
% --' #T'i A9P' NJG'MiO'PG 9 %O' NHMP'

T7 PG2'O' pLJNF T JP P TF ip+
'N JA9P'IP'I 'I P'AJN'QPN'T J'Q IP+
E '"P'G'I N' NF'H I GP97ƀD9PN'JG' NHO M +
<& ' N'2'N 99' JN JG%'A IPG'AP'AJ PO+
= ' NHP' '"' ' iG' '
E ;' NHP '7 ' i'NHMN'IM I P'O NF'iMNJ P'L9PMO+
<& 'OMNHP 'MIO' i'NHMN'IM I P'O NF'iMNJ P'GLPMU+
' LPMU'NH J'i 'I P' 7M99'NHP' PGN' 99'GLPPO+
E '&PI iPO' NJG'I P'NHMI'HM97'IT'G J9[
? 4' 5PM'7MNHP [G J9'MIO'GJAGNMiKP' 7JG'M99[
E ' J77P'NHT'A NHP' M KJG'N 'iNP'
" G i A9P'ipLHP 'HP P' i' NJP%'G ipGN+
HM'O PO' i'H i J'MIO'/M i M%'KMJGP+
H J'M N'M'& IMI'AP'i N'AM AM JG'
HP' : ppUG'JL i'MO KP'O O'AJ T'#EMW
HMN'G9P 'H I GP97' MIO' GP'/MP NPG%'G i'
5 O'Q MK JG9T'L9PMO'7 'H G'7JiP M9G
/PN'i N'T JiQ' JN JG'NHPi'NHMN' MG'NHT'E T+
P'AM %O'H G'piN MiKP'HP P+
' & GP' M KJG' GP
HP'O G I M9[%N'OMT' G'NH G'NHMN'P%P'2'GM
'AP'O GH i J%O'AT' I T'G iG' i'& I P
XP99'AJ T'H I 'MIO'AJ T' I P'NHP'iPWN+
= 5', ' J ' ' ' i ('
?& ' HP P'9 P'NHT'A ipG'G ppN' JN JG' NF'NHT'7 piOG+
9P P' NF'N LH PG'O 'MO i'NHT'N I A+
= 5' ', ' ' "-5'
'I MI'GHPO'NPM G'7 'i A9P' JN JG8
"P'9 PG' i'7MI P'NHMN'O PO' i' NJP%'GMJGP+
= 4 & ' '(&'< ' "#M;'* '
E ' T'9 O SD\'GNPL' JN' 7NHPGP'GJOOPi'FOJILG S'
" 'K I PG' N'NHMN'NHP'GJAN9P']JPPi' 7': NHG
2G' 7M'GJOOPi'NHJG'MO MiK%O' i'& I P'\
' 'UI 'i N' M KJG8 AJN'2'UI ' N' G8
XHPNHP'AT'OP KP' 'i 'NHP'HPM piG'KMi'NP998

i7POP MNPG'M99'NHJG'N'O GH i J'IP+
XMG'i ip'i'& I P'N'IMUP'M'GNM9P'AJN' MNJ i ip'\'
OJ99' P99'#iO i KJG
#Q PP'NHPGP'OPPOG' NF'NHMN'L JO'A MQ' 7NH ip
HMN'GM OGN'2'APQQ%O'NHP'piL P'MN'NHT'HMiOG+
' 1' i GN JG[HMN' PL MKH7J9 OG M P'NHPGP'
7 ' JN'Q 'NHT' M $G8 Q 'Q P'NHMN'KHMiQ iQ'L PKP'
'H I'NHMN'79 J GH%O'7 'HP' NF'H G G O'
#' M9 MiN'G i i 9M 'NH J'GHM9N'9P 9PGG G iG+
1iP7'N'N 'AMiOT' NF'NHT'9M 9PGG G iG+
' J779P'i'NHP'K I I i PM9NF' 7& I P+
' HPGP' OG M P' MC G'N 'I T' JIOPO'HPM N+
2i'NF'AMO']M9 P9'G9M i'MF NJ JG G i+
' '7 9GF'N AJip'i ' i 'G i' 7 I ip S
'NH J'i 'NHPGP'K i7POP MNPG' i'NHP'OPPO'
HMN'HMNH'O GH i J%'M99' J'7MI 9T8
i NHT'A NHP 'MiO'JI NHT'G i[G
?& ' JN'9PN'JG'Q P'H I'AJ M9'MG'APK I PG
: P' JN JG'AJ M9' NF' J'A PNH pi+
' MN G'M MT'[HP PGNG i N' i'NH G'N IA+
H G I iJIpIN'7 P'HJIO PO'TPM G'HMNH'GN O
.XHKH2'HM P'GJILNJ JG9T' p PO7'PO'
"P'i ip'AJN'G 9O p G'MiO'& I P%G'GP N G+
&PL GP'i'7MIP'i ip'AMGP9T'G9M i'i'A M 9G'
J'TH I' HP P'T J'KM'i8 HP'K IPGi N'HP p+
E ' T9 O'NH G'G IL PNT'i'T J'
T'ipLHP ' JN JG%'OPPOG'O 'L9PMO'7 'H I'
"P'IJGN'AP'AJ PO' NH'H G'A PNH pi+
<& $E ' #iO'GHM99' 'H I' P' 99'MKK ILMIT+
' #iO'GHM99[XHM' 99M i' MG N'GLMUP'NHMN' O'\
<& '"P'MHMN' J9O' JKH'N i'MIT'L9MKP'AJN'HP p+
' XHMN[J9O'T J'AJ T'H I' i' IT'OPGL NP'\
E ' A9P' NJG8 AJN'piN PMN' 7NHPP'
'LMO i' JN JG'MiO'N 'AJ T'H I+
' M KJG'p pi'NH J'HMGN'GN JKU'JL i' IT'K PGN+
#iO' NF'NHPG'A TG I ip'H i J'NH J'HMGN' JiOPO'

' HP'GPK iO7 9 ;HMG S
6'XMG'NHP P'i ip'P9GP i'& IP'N'IMUP'M'GNM9P'
JN' MNJ i ip'\R

#i'% p p' I T' KMJGP '2' GH J9O' Q 'HMI'Q' ITGP97'
' 27'NH J'HMOG'' HMIOG'N 'HP9L'NHPP'UI N'NHP'K O+
= 4 & '5 1 ' '''

' . i ' & 3

7

#i'% p p' I T' KMJGP '2' GH J9O' Q 'HMI'Q' ITGP97'
' 27'NH J'HMOG'' HMIOG'N 'HP9L'NHPP'UI N'NHP'K O+
= 4 & '5 1 ' '''

JN'9 P9T' i pKP'NHMN' IPMI' G KJN' 7 I'NHPP8
#'K M7N P ' p pJG'HMG'' NH 'J' I PN' NHM9 F
#i'O'HP'HMNH'KJN'NH GP'L PNNT'7 iQP G' 77+
HMN'K J9O'HM P'APNNP 'GP %O'NHMI'-H 9 IP9+
1['HMO'NHP' I iGNP 'GPPI'NH GP'9 9T'HMIOG'
pI A9P'9 UP'MGLPI 9PM PG'JL i'M'9JNP+
#i'O' IMUP'NHP'G 9UPI'GN iQG'OP9 QHN'N 'U GG'NHPI+
"P' J9O'i N'NHPI'HM P'N JKH%O'NHPI'7 'H G'9 7P+
1 'HMO'HP'HPM O'NHP'HPM PI9T'HM I i'T'
XH KH'NHMN'G PPN'N iQJP'HMNH'I MOP+
"P' J9O'HM P'O LL%O'H G'UI 7P'MiO'7P99'MG9PPL
#G' P AP JG'MN'NHP' H MK MI'L PN%G'7PPN+
IP'9PN'JG'Q 'MiO' IMUP'NHT'7MNHP'A9 iO'8
O 'GJKH'M'G QHN' 99'A9 iO'M'7MNHP %G'PTP
1IP'H J %G'GN I' 99'O i'NHP'7 MQ MIN' I PMOG8
XHMN' 99' H 9P' I iNHG' 7'NPM G'NHT'7MNHP %G'PTPG'\
5 'i N'O M 'AMKU'7 ' P' 99' I J i' iNH'NHPP8
1'K J9O' J'I J i iQ'PMGP'NHT' I GP TL = 4 &

&3 3 ' 3X'&3#52 :+

K#'22+'L+') +S HP P'M P'7P ' H ' 99'IMUP'M'GNJOT' 7'NH G O GMQ PPMA9P'L9MT8
AJN' N' G'KJ JG'N 'GPP'H ' N'HMG' APPI'NM I LP PO' NH' AT'NHP' PKN ' 7' +'
99 P %G'7 H ' I'NHP'N MI6'7 IMN IG'7 I'A9MIU' P GP'N 'K JL9PNG+' +' 99 P'
NH IUG'NHP' LMGGMQPG' MG' K PKMPO'AP9 IQ' N ' NHP' N I P' HPI'NHP' L9MT' MG' 7 GN'
NMPI+' X P'NH IU'NHPT'AP9 IQ'N 'NHP'LP O'M7NP'NHP'&PGN MN 'I' HPI' HTI IQ'
N MQPO PG' P P' I'7MGH I+' 1IP'PWM I L9P' 99'AP'GJ77'K PIN S

,

HP'HJIN' G'JL'NHP' I I'G'A QHN'MIO' 2*
HP'7P9OG'M P'7 MQ MIN'MIO'NHP' OG'M P' ';
IK JL9P'HP P'MIO'9PN'JG I MUP'M'AMT
#IO' MUP'NHP'PIL P 'MIO'H G'9 P9T'A OP+
#IO' JGP'NHP'L IKP'MIO' 'MHJINP %G' '
HMN'M 'NHP'K J N'I MT'PKH ' NH'NHP' %
IG'9PN'N'AP'T J'KHM QP' %' '%' %
'MMNPIO'NHP'PIL P %G'LP G I'KM P7J99T'
2'HM P'APPI'N JA9PO' I'T'G9PPL'NH G'I QHN+
6'#'K M7N P' P PJG'K JG I'HMGN'NH J'I PN+R
1/'2+ ' * R6

1' J90'NH J' p'MG'NH J'N 7 P'HMG'N'APPI[
J'N'I 'I '/JKJG'I '/M I M'9 PG
J'N' i' A9 i'MIO'HMNP7J9'Q P7G
27'/JKJG'9 P'HP' 99 P]J'NP'T J' iQG+
#IO'IMUP'L JO' MNJ I IP'MIO'H G'PIL PGG'
PQ'MN'NHP'QMNPG'9 UP' M]J I'MIO'H G']JPPI+
' 99?'N 'NHP' : NHG'MIO' M GP'M'L p+
'AP' P PIQ%O' i'& IP'MIO' MNJ I IP+' 9 4 '@

3 3'22+S ' ii ' 'NJG%G' i&-' '% N& '
- 'i& M+

' '% ' * ' "' i& 3 '@'(' 'i5

' 'G 8 i 'G N'MIO'9 U'T J'PM'I 'I P'
HMI' 99'L PG P'EJG N'G 'I JKH'GN PIQNH' i'JG
#G 99 P PIQP'NHPG P'A NNP' PG 7' J G+
M KJG'JIUI N'NHMN'G PMNHPI'UI N8
HT'I PKP'MIO'2'L 'K PMNJ PG' MIN' J'HMIOG8
#IO'KMII N'LMGG IMNP' J'NPI7 9O'Q P7'
X NH'7 9OPO'M I G+ H G'L ' QHN'HMIO' 7'I IP'
2G'9P7N'N 'NT MII CP'JL i'I'A PMGN8
#IO'F HPI'I'HPM N'M99'IMO' NH'I GP T+
PMNG' i'NH G'H 99 'L G i' 7'I'79PGH+
HPI'NJ3G'2'NHJIL'N O i+S
H J'IML' 7' P'NHMN'NJ3'O GN'NM9U' i'G QIG[
9 i' *
X HPI'NHT'L 'HPM N'APMNG' NH' JN MQP JG'APMN IQ+
H J'KMIGN'I N'GN UP' N'NHJG'N 'IMUP' N'GN 99+
X JIO' N' NH'G QH IQ'Q 9'U 99' N' NH'Q MIG8
1 'QPN'G IP'9 NN9P'UI 7P'APN PPI'NHT'NPPNH+
#IO'EJGN'MQM IGN'NHT'HPM N'$IMUP'NH J'M'H 9P8
HMN'M99'NHP'NPM G'NHMN'NHT'L 'PTPG'9PN'7M99'

HPI'Q P'IP'9PM P'7 '9 GP G 99'HM P'9PM P'
'PMGP'NHP 'GN IMKHG' NH'NHP 'A NNP'N IQJPG+

' ' PGGPIQP' 2 '2I' "-' "=' ' "

E --' X NHT'#IO IKJG' 99'M N'NH J' PLM O'
O 'NHMN'Q O'HMIO'NH J'GPIN%GN'NHP'PILP
"P P'M P'NHP'HPMOG' 7'NHT'N 'I A9P'G IG
#IO'HP P%G'NHT'HMIO' I'GK I'N 'NHPP'GPIN'AMKU
HT'Q P7G'NHP 'GL NG' NHT' PG 9JN I'I KU%O
HMN' P'G IP'N 'NH IU'JL I'NHT' PG+
P'NHMI' PIPIA MIKP' 7'IT7MNHP %G'OPMNH+ 9 4
E ' '9PN'H N'+DNIM'K 9' I' K 9T
#IO'AP'IT'HPM N'MI'P P AJ I IQ'HP99
HPGP'I GP PG'M P'I P'NHMI'IMT'AP'A IP+
' PPL' NH'NHPI'NHMN' PPL'O NH'PMGP'G I P'OPM98
JN'G '79 JNPO'MN' G O JA9P'OPMNH+
?& ' #H'NHMN'NH G G QHN'GH J9O'I MUP'G 'OPPL'M' JIO+
#IO'TPN'OPNPGNPO'9 7P' i N'GH iU'NHP PMN[
HMN'P P'OPMNH'GH J9O'9PN'9 7P'APM'H G'IM I P+
XHP P'9 7P'HMNH'I ' I P' iNP PGN'AJN'N 'A PMNHP[
* ' -'
E ' #9MG'L 'HPM N'NHMN'U GG' G K I7 N9PG+
#G'7 CPI' MNP'N 'M'GNM PO'GIMUP+
' XHPI' 99'NH G'7PM 7J9'G9J I AP'HM P'MI'PLO\
E ' '7M P P99'79MNNP T' 5 P'#IO i KJG8
HT' NHP'AMI GH%O'G I' NH'NH G'OPM'G QHN'
N JKU'LM9P'MIO'A9 O9PGG8 MIO'NHT'A NHP '2
3 PI'9 UP'M'GN IT' IMQP'K 9O'MIO'IJ I A+
#H'I 'I'I P' 99?'K IN 9' I T'DQ P7G'8
&PIO' 77'NHT'G 9 P'HM 'NHT' NHP'HMIO'
:IM IQ' NH'NHT'NPPNH8 MIO'AP'NH G'O G I M9'G QHN'

D H G GKPIP'G 'I9T'7 JIO' I'NHP'7 9 '7 ' ? HIG I'GMTG N' 6O PG i N'
K IN AJNP'MITNH IQ'N 'NHP'MKN i+R HP'L PN'I'O JAN'7P9N'NHNN'M7NP'GJKH'NJ I J9_
NJ JG'MKN i'PL GP' MG' MIN IQ+
F " ' HP' Q IN9'HMG'2 i

#iO'NPM G' 99]J KU9T' lP9N'NHT'9 7P'M MT+S
X HM'O GN'NH J'GN UP'MN' MK3G' NH'NHT'Ui 7P'\
E '#'NHMN'NHMN'2'HM P'U 99%O'lT'9 O8 M'79T+
'1JN' i'NHPP'lJ NHP p[NH J'U 99%G'lT'HPM N8
ip'pTPG'M p'DK9 T%O' NH' p ' 7NT Miit
#'OPPO' 7OPMNH'O ip' i'NHP' ii KPiN+
PK lPGi N' NJG%A NHP ' :pN'NHPP'Q ip8
2'GPP'NH J'M'N'i N'7 'lT'K lLMiT+
E '#9MG'lT'9 O'2'HM P'AJN'U 99%O'M'79T+
' JN'H '7N9DN'79T'HMO'M'7MNHP'Mi0'l NHP'\
" ' J9O'HP'HMiQ'H G'G9PiOP'Q 9OPO' iQG+
#iO'AJCC'9MlPiN iQ'O iQG' i'NHP'M [
- 'HM l9PGG'79T[
HMN' NF'H G'L pNNT'AJCC iQ' lp9 OT+
MlP'HP p'N 'lMUP'JG'lp T8 Mi0'NH J'HMGN'U 99%O'H l+
E '-M O i'lp'G 8 %M MG'M'A9MKU' 99 7M J %O'79T#
/ UP'N 'NHP'plL pGG% 8 NHP p7 P'2'U 99%O'H l+
' 1'1'1
HPi'LM O i'lP'7 ' pL pHPiO iQ'NHPP+
O 'NH J'HMGN'O ip'M'KHM NMA9P'OPPO+
: P'lP'NHT'Ui 7P'2' 99^iGJ9N' i'H l 8
O9MNNP iQ'lTGP97'MG 7 N' P P'NHP'
lP'H NHP'LJ L GP9T'N 'L G i'lp+S
HP p%G'7 'NHTGP97'Mi0'NHMN%G'7 ' Ml M+S
#H'G MH[
4PN'2'NH iU' P'M P'i N'A JQHN'G '9 +
JN'NHMN'APN ppi'JG'N P'KMi'U 99'M'79T+
HMN'K lPG' i'9 UPipGG' 7M'K M9 A9MKU' +
E '#9MG'L 'lMi[Q P7'HMG'G ' JQHN' i'H l+
"P'NMUPG'7M9GP'GHMO G'7 'N JP'GJAGNMiKPG+
' lP'NMUP'M MT+S/M i M'Q ' NH' l p
2%99'N 'NHT'K9 GPN8 Mi0'Q ' PMO' NH'NHPP'
MO'GN PG'KHMiKPO' i'NHP'N lPG' 7' 9O+S
lP'A T'Mi0'Q ' NH'l p8 NHT'G QHN' G'T Ji0+

'M i M'XP'N'NH J'NHJG'GJ L G%O'G PPN'Q 9t'
&M GH%O'Mi0' i0%O'MG -H 9 lP9M' MG
O K%O' i'NHP' JNH9PGG' MGN'Mi0'Q9 lT' OG'\
pp'GPP[#T'GJKH'M'L9MKP'NHP P'G HP P' P O O'HJiN
@1'HMO' P'ip p 'ip p'HJiNPO'NHP p[
-MNNP i%O'AT'NHMN'NHP'L PN'HP P'OPGK APG
T'iMNJ P'lMOP'7 'lJ NHP GMi0'7 ' ML PG
E '1' HT'GH J9O'iMNJ P'AJ 9O'G '7 J9'M OPi
i9PGG'NHP'Q OG'OP9 QHN' i'N MQPO PG'\
' : P'G QiG'%G PPN' Q 9 S7 ' HP P' M P' i iP' AJN'
7 piOG S
X HM'&. lMi'9 O'N' MG'OJ GN'O 'NHP'OPPO'\
1 'G9JiU'i N' MNJ i ip'MG' M]J i'P GN+
HMN'9P7N'NHP'KMIL'N 'G i' i'/JK PKP%APO'\
E ' N'O i'G PPN'i PKP8 A NHP 'G N'O i'AT' lP'
#L 99 '-M99MG'? P' ' P KJ T
2iGL P' lP'NHMN'2' lMT'NH G'N PMG i'7 iO+
T'9 O'9 UHP P8 9 UHP P'/M i N'
9 '2 -' -' '2 ' -'- ..$ "'3& " -' '2 ', '
" i&
H G GMiOT'L9 N' G L9M i'8 QJ OP' 7'NH J'KMiGN+
H G'M7NP'lP+ 2'HM P' N'lT'iMlP E
X NH JN'NHP'HP9L' 7MiT'HMiO'MN'M99+
J G%O'AP'NHMN'HPM N'NHMN'7 K%O'JG'N 'NH G GH 7N[
X NP'NH J'Q O'i PKP'MiO'HP P'O GL9MT'MN'9MGN+
X HMN' : O' 99'HM P'O GK P %O'7 ' P PiQP+
"PM pi'GJ OP'NHT'LPi'N 'L iN'NHT'G G L9M i+
HMN' P'lMT'Ui 'NHP'N M N G'MiO'NHP'N JNH'
=7 ' ' -' '- .: ' i& $ "'3& " -' '2 ' '
- & ,-$ "'2 -
' 1'O 'TP'PMO'lT'9 O' HMN'GHP'HMNH' N'\
6' NJL J1' H i'5PlPN JG+R

D'<&i -S AGP PG'GPM KHPG'NH JQH+
F lP'l OPl'PON G PMOS
6' H G'M7NP'lP'2 '2'HM P' N lT'iMlP+R
HP' MlA OQP'PON GL iN'MG'MA P';IGP N iQ'M GNMQP'O PKN i+
1/+'22' 'V R

JL ;8 $ HMN[NHP'9JGN7J9'G iG 7 MI M'
HM99'KM T7 I'IP'N 'NHP'pIL pGC%'G iG'
-pGPiNG'NHMN'2' iNPiO'N 'GPiO'NHPI'A NH
IP'K IP'NH JW%O'NT'IPGMQP' 9N'NH J'i N'A
%i5' #T' NH'IT'OMQQP'i'NHP 'A G IG'Q MiOG p+
' 'A T'i N'G 8 2%9'NPMKH'NHPP'MI NHP'K J GP+'
/M i M'K IPƵ MKJG'9 UN 'IT'H JGP'
/JK JG MiO'2%9'Q 'A M P'N'MN'NHP'K J N
#T'IM T 99 P'G 'MiO' P%9'AP' M NPO' i+
= 4 & ') (' ' T+
E ' 'HPM PiG[KMi'T J'HPM'M'Q O'IMI'Q MI
#iO'i N' P9PiN' 'i N'K ILMGG i'H I'\
M KJG'MUNPiO'H I' i'H G PKGUMGT+
HMN'HMNH'I P'GKM G 7G ' i'H G HPM N
HMI'7 PIPI%G IM UG JL i'H G'AMUNP %O'GH P9O'8
JN'TPN'G 'EJGN'NHMN'HP' 99 i N' P PiQP
&P PiQP'TP'HPM PiG'7 ' 9O'#iO i KJG+' = 4

3 3'22+S ' ii ' ' ,

' (' ' ,i ' "ii # '
i ' "ii' i 3 '@ '(' "'"#NNPiOMiN' 2 ' '
(& " 'i.'2 ,i -$ "'1 -'2 ' .i '

' 5PIPN JG'HP P%G NHP'G i' 7/JK JG
"P'HMNH'G IP'IPGGMQP'N 'OP9 P'JG+
i ' #T'G IP'IMO'IPGGMQP'7 I'H G IMO'Q MiO7MNHP +'
%i5' T9 OG' NH'M99'NHP'HJI A9PiPGG2'IMT
2'Q PPN'T J'H i J G7 I'#iO iKJG'8
#iO'L MT'NHP'& IM'Q OG'K i7 JiO'T J'A NH+' = - " '
' : MIP KT'9 P9T'/JK JG' HMN%G'NHP'ip G\
%i5' HMN'T J'M P'A NH'OPK LHP %O'NHMN%G'NHP'ip G D

'> SM K ILMi i'MiO'HP P'M HJGAMiO+' @ PP'299JGN MN iG 7 "pi T'2 +'
-M N' +'#K{2+' 9+' +L+'))=
' H G 9 ip G I'NNPO'i'NHP'7 9 SM NTL Q MLH KM9 p ' H KH' HMG M GPi'
NH JQH'NHP L PKPO iQ9 ip'PiO iQ' NH'NHP+GM IP' O+

) g

O ' 99M iG I M U%O' NH' ML'P'= - " 9' MT' N'L9PMG'T J+'
T'Q MiOG p' P99'MO G%O'HMNH'GPiN'AT' I P'
< ' #'KHM NMA9P' GH'MiO'7J99' 7'9 P+
i ' "p P'9MKUG'AJN'T J'I NHP'7 'N 'GMT'# IPi+'
' #iO'NHMN' J9O'GHP'7 'N piNT'NH JGMiO'I Pi'
' IP'9PN'JG'Q 'MiO'L MT'N 'M99'NHP'Q OG+
O 'AJ'AP9 PO'I NHP' i'HP'LM iG+
i ' - MT'N 'NHP'OP 9G'8 NHP'Q OG'HM P'Q PI'JG P+
= -" ' & , -'-i& "
' XHT'O 'NHP'PILP %G'N JILPNG'79 J GH'NHJG'\
' P9 UP'7 'E T'NHP'PILP 'HMNH'M'G i+
' 7N8 H 'K IPG'HP P'\

' J GP'I1 ' '(' ii' H 9O+

& - ' O' I ' 9 OG'8
1RNP99'IP'O O'T J'GPP'#M i'NHP' '\
& - ' X P99'I P' '9PGG' 'ipwP'M' H N'MN'M99+
"p P'#M i' G8 MiO' HMN' NH'#M i'i '\
& - '1'QPiN9P'#M i' P'M P'M99'JiO ip[
'HPL' ' P'APN OP'NHP'P P I P'[
i ' XHT' HMN'M'KMNP MJ9 iQ'O GN'NH J'C *[
XHMN'O GN'NH J' ML'MiO'7JIA9P' i'NH IP'M I G\
& - ' 1'NHMN' H KH'?' J9O'H OP'7 I'HPM piG'pTP S'
1J'PIL PG%'GHMIP'MiO'GNMNP9T'& IPwG'O GQ MKP8
HP'G'OP9 P %O'9 OG'GHP'G'OP9 P %O+
i ' ' H I'\
& - ' 2'PMi'GHP'G A JQHN'M APO+
i ' XP99': O'Q P'HP'Q O' PGN9' X HM'HMNH'HP'
GPiN'HP'\
& - ' #'OP 9+
i ' XHT'NHPi'GHPwG'NHP'OP 9wG OM I8'M'E TTJ9' GGJP'
& - ' #'E T9PGG'O G I M9'A9MKU'MiO'G 7J9' GGJP'
"p P'G NHP'AMAP'MG'9 MNHG I P'MG'M'N MO+
I iQGN'NHP'7M PGN'A PPOP G 7 J'K9 IP+

D 5'8&-''1 -'' i SIP P9T'M P GP' i'" MKP+' HP'K I I i'LJiK_
NJMN i'G'G'#T'EJGN[#' P GP R'BK+

M KJG' P M P AJN GH JAG8 i 'KPOM G P+
'A Q A i%O' Ipi'7 M I %O' 7NHP' TK9 LG% G CP8
#iO'L p KP'NHP' ii GN'KPiN p 7NHP'PM NH8
JN' lPNM9' M KJG'GNPP9'N 'NHP' p T'AMKU+
4PN' JIQ' NH' iQG' l P'NMHi' J'AMKUG'KMi'APM '
#iO'G NH'NHP P' G i 'EJGN KP' i'PM NH'i 'HP99+
XP' 99'G 9 K'N'HPM pi'MiO' l P'NHP'Q OG+
'GpiO'O i'EJGN KP'7 'N' PMU' J' iQG+
lP'N 'NH G'QPM 8 T J'M P'M'Q O'M KHP ' M KJG+
9 '31 -' ' ' i2-'
"'5i1 $NHMN%G7 'T J8 HP P' "' ,i *
"'E $NHMN%G7 'lTGP978
"p p'A T'N '-M99MG'8 HP p'N ' pKJ T'
' MNJ i' M JG'i N'N ' MNJ i ip $
4 J' p P'MG'Q O'N 'GH N'MQM iGN'NHP' iO+
'N'A T' M KJG'9 GP' HPi'2'A O
17'lT' O'2'HM P' % NNPi'N 'P77PKN+
HP P%G'i N'M'Q O'9P7N'JiG 9 K NPO+
E ' iGlpi'GH N'M99'T J'GHM7NG iN 'NHP'K J N
XP' 99'M779 KN'NHP'plLP 'i'H G'L OP+
' 'lMGNP G'O M ;' 1' P99'GM O'/JK JG[
+ 5- ii
: O'A T' i' Q %G 9ML8 Q P N'-M99MG+
E ' T'9 O'2'M l'M' l 9P'APT iO'NHP' l i8
4 J'9PNNP 'G NH'?JL NP'AT'NH G+
' "M'HM[-JA9 JG' -JA9 JG' HM'HMGN'NH J'O iP'9
PP'GPP'NH J'HMGN'GH N' 77 iP' 7 MJ JG%H iG+
E ' H G MG'NHP'GL N'lT'9 O' HPi'-JA9 JG'GH N'
HP' J99'AP iQ'QM99%O'QM P'# PG'GJKH'M'UI KU+
HM'O i'7P99'A NH'NHP'&M l %G'H iG i'NHP'K J N+
MUP' pMU' i'&' lP'7 'NH G' iQ MN NJOP8
#iO' piQPMiKP' i'NHP'N M N ' MNJ i ip+
'-JA9 JG'H 'i '\H 'i $' lT l MGNP G\
XHMN'HM P'T J'lPN' NH'HP'\
&(' 'lTQ O'9 O8 AJN'-9JN 'GPiOG'T J' O+
27'T L' 99'HM P' P piQP'7 l'HP99'T J'GHM99'
M T'7 '?JGN KP'GHP' G G 'plL9 T%O+
"p'NH iUG' NH'? P' i'HPM pi' 'G lp HP P'p9GP+
'NHMN'LP 7 KP'T J'lJGN'ippOG'GNMT'M'N lP+
' "P'O NH'lP' iQ'N '7ppO' lP' NH'OP9MTG+
2%9'O P' iN 'NHP'AJ i iQ'9MUP'AP9 +
#iO'LJ99'HP ' JN' 7'#KHP i'AT'NHP'HPP9G+
' X HT'NHP P' N'Q PG' : O'Q P'T J'9 OGH L'E T+D
' lMGNP G'O M ;' 1' P99'GM O'/JK JG[
+ 5- ii
: O'A T' i' Q %G 9ML8 Q P N'-M99MG+
E ' T'9 O'2'M l'M' l 9P'APT iO'NHP' l i8
4 J'9PNNP 'G NH'?JL NP'AT'NH G+
' "M'HM[-JA9 JG' -JA9 JG' HM'HMGN'NH J'O iP'9
PP'GPP'NH J'HMGN'GH N' 77 iP' 7 MJ JG%H iG+
E ' H G MG'NHP'GL N'lT'9 O' HPi'-JA9 JG'GH N'
HP' J99'AP iQ'QM99%O'QM P'# PG'GJKH'M'UI KU+
HM'O i'7P99'A NH'NHP'&M l %G'H iG i'NHP'K J N+
MUP' pMU' i'&' lP'7 'NH G' iQ MN NJOP8
#iO' piQPMiKP' i'NHP'N M N ' MNJ i ip+
'-JA9 JG'H 'i '\H 'i $' lT l MGNP G\
XHMN'HM P'T J'lPN' NH'HP'\
&(' 'lTQ O'9 O8 AJN'-9JN 'GPiOG'T J' O+
27'T L' 99'HM P' P piQP'7 l'HP99'T J'GHM99'
M T'7 '?JGN KP'GHP' G G 'plL9 T%O+
"P'NH iUG' NH'? P' i'HPM pi' 'G lp HP P'p9GP+
'NHMN'LP 7 KP'T J'lJGN'ippOG'GNMT'M'N lP+
' "P'O NH'lP' iQ'N '7ppO' lP' NH'OP9MTG+
2%9'O P' iN 'NHP'AJ i iQ'9MUP'AP9 +
#iO'LJ99'HP ' JN' 7'#KHP i'AT'NHP'HPP9G+
' X HT'NHP P' N'Q PG' : O'Q P'T J'9 OGH L'E T+D
' lMGNP G'O M ;' 1' P99'GM O'/JK JG[
+ 5- ii
: O'A T' i' Q %G 9ML8 Q P N'-M99MG+
E ' T'9 O'2'M l'M' l 9P'APT iO'NHP' l i8
4 J'9PNNP 'G NH'?JL NP'AT'NH G+
' "M'HM[-JA9 JG' -JA9 JG' HM'HMGN'NH J'O iP'9
PP'GPP'NH J'HMGN'GH N' 77 iP' 7 MJ JG%H iG+
E ' H G MG'NHP'GL N'lT'9 O' HPi'-JA9 JG'GH N'
HP' J99'AP iQ'QM99%O'QM P'# PG'GJKH'M'UI KU+
HM'O i'7P99'A NH'NHP'&M l %G'H iG i'NHP'K J N+
MUP' pMU' i'&' lP'7 'NH G' iQ MN NJOP8
#iO' piQPMiKP' i'NHP'N M N ' MNJ i ip+
'-JA9 JG'H 'i '\H 'i $' lT l MGNP G\
XHMN'HM P'T J'lPN' NH'HP'\
&(' 'lTQ O'9 O8 AJN'-9JN 'GPiOG'T J' O+
27'T L' 99'HM P' P piQP'7 l'HP99'T J'GHM99'
M T'7 '?JGN KP'GHP' G G 'plL9 T%O+
"P'NH iUG' NH'? P' i'HPM pi' 'G lp HP P'p9GP+
'NHMN'LP 7 KP'T J'lJGN'ippOG'GNMT'M'N lP+
' "P'O NH'lP' iQ'N '7ppO' lP' NH'OP9MTG+
2%9'O P' iN 'NHP'AJ i iQ'9MUP'AP9 +
#iO'LJ99'HP ' JN' 7'#KHP i'AT'NHP'HPP9G+
' X HT'NHP P' N'Q PG' : O'Q P'T J'9 OGH L'E T+D

' 9 i'2 ' '(-' $ "' 2i',3 i -' '
' P G'ip G7 l'HPM pi[M KJG'NHP'L GN' G K lP+
' MH' HMN'N O iQG'\HM P'T J'MiT'9PNP G'\
HM99'2'HM P'EJGN KP'\ HMN'GMTG'?JL NP'\
i2 ' " [NHP'Q AAPN lMUP'\'HP' GMTG' NHMN' HP' HMNH'
NMUPi'NHPl'O i'MQM i'7 'NHP' lMi' lJGN' i N'AP'HMiQPO'
N 99'NHP'ipWN' ppU+
' JN' HMN'GMTG'?JL NP '2'MGU'NHPP'\
' #9MG'G '2'Ui 'i N'?JL NP
2'ip p'O MiU' NH'H l' i'M99'lT'9 7P+
' XHT' 99M i'M N'i N'NH J'NHP'KM P'9
i2 '#T' 7lTLQP iG'G 8 i NH iQ'P9GP+
' XHT'O OGN'NH J'i N'K lP'7 l'HPM pi'\
i2 'O l'HPM pi'\M9MG'G '[' ip p'KMlP'NHP p+: O'
7 A O'2'GH J9O'AP'G'A 9O'N 'L PGG'N 'HPM pi' i'lTT J1Q'
OMTG'[XHT'2'MI'Q iQ' NH'lTLQP iG'N 'NHP'N AJiM9'
-9PAG'N 'NMUP'JL'M'lMNP ' 7A M 9'APN WN'lT'JiK9P'MiO'
ip 7NHP' lLP M9%G lpi+
E ' XHT'G 'NHMN' G MG'7N'MG'KMi'AP'N 'GP P'7 'T J'
MN i8 MiO'9PN'H l'OP9 p'NHP'LQP iG'N 'NHP'plLP '
7 l'T J+
' P99 lP'KMi'T J'OP9 p'M1' MN i'N 'NHP'plLP '
NH'M'Q MKP'\
' MT'N J9T'G 8 2'K J9O'ip p'GMT'Q MKP' i'M99 lT'
9 7P+
' MH'K lP'H NHP 8 lMUP' i 'l P'MO +
JN'Q P'T J'LQP iG'N 'NHP'plLP '8
T lP'NH J'GHM9N'HM P'EJGN KP'MN'H G'HMiOG+
" 9O'H 9O8 lPMi H 9p'HP p%G l ipT'7 'NHT'KHM QPG+
: P lP'LPi'MiO' iU+
MH'KMi'T J' NH'M'Q MKP'OP9 p'M'GJLL9 KMN i'\
' #T'G +
' HPi' HP P' G M' GJLL9 KMN i'7 'T 'J+ #iO' HPi'
T J'K lP'N 'H l 'MN'NHP'7 GN' MLL MKH'T J' lJGN' UipP98

H G N ' #L 99 'NH G N 'NHP Q O 7 M
PPN GK 99G N '79T MA JN NHP GN PPNG 7& IP[
X HMN%G NH G 'A JN 9 AP99 iQ MQM iGN NHP GPiMNP+
#iO A9MC i iQ' J 'JiEJGN KP AP HMiQ%O+
i2 ' "Mi Q%O [AT%'9MOT 'NHPi2'HM P A JQHN' JL'M'ipKU
N 'M 7M 'PiO‡ 9 4 $3& " "
7 '5PGL NP7J9' MiO' iN 9P MA9P' iQG[
HM99 2'PiOJ P'NH G I iGN JG 99M iT'\
2'Ui '7 I' HPiKP'NH G GM I P'OP KP'L KPPOG
MT'NH G'AP'A ip'MG 7H G N M N JG G iG+
HMN'O PO'AT'9M '7 'I J NHP' 7 J'A NHP +
"M P'AT' I T I PMiG'AppiPi'AJNKHP %O' iQ7J99T'\
: 'O MQ'NHP' 99M i'H NHP 'AT'NHP'HM '8
; 'MQP'i 'H i J 'GHM99'GHML'P L 9PQP
O 'NH G'L JO' I KU'2%99'AP'NHT'G9MJQHNP IMi'8
9T'7 MiN K' PNKH'NHMN'H 9LGN'N 'IMUP IP'Q PMN+
2i'H LP'NHTGP97'GH J9O'Q P i'& I P'MiO' IP+

7 'XHMN'ip G NH'NHPP'3 I 9 JG'\
; # I 'IT'9 O8 & IP'ip P'HMO' I P'KMJGP[
HP' : NHG'HM P'QMNHP %O'HPMO'MiO' NH'M'L P'
1 7H QH PG 9 PO' Ipi'APiN'N 'NHP'GL 9+
HPT'H NHP' IM KH'M I M I'JiOP'K iOJKN'
1 7/JK JG'G i'N ' 9O'#iO i KJG#
XH 'NH PMNG' i'K J GP' 7NH G P piQP'N 'O '
#G IJKH'MG'P P' 9MiJG O O+
7 '2G' M 9 UP' /JK JG QPip M9' 7'NHP' : NHG'\
HPG'N O iQG i L' I pß MiO'2'HMiQ'HP'HPMO'
#G'79 P G NH'7 GN' 'Q MGG'APM'O i' NH'GN I G8
#T'i 'APQ i' J'G G N 'ML L MKH*
% G'HP'NHP'K I I i'LP L9P'9 P G ' IJKH[
TGP97'HMNH' 7NPi'HPM O'NHPI'GMT
@XHPi'2'HM P' M9UPO'9 UP'M'L MNP' IMi

' */

' ' 'NHP' Q iM9'K L PG# HP'MiNPKPOPiN'API'K iGOP PO'J&- $ NHP'
I OPI' PMOiQ'G- ' HP' MIA OQP'PON G'HM P'PMMipO'NHP' Q iM9
=

HM'/JK JG% AMi GHIpiN' MG' iQ7J99T+
#iO'NHPT'HM P' GH%O'NHMN'/JK JG' P P'NHP 'pILP ‡
'XHT'GH J9O'T J'7PM'\ G'i N'T J'K NT'GN iQ'\
7 '#T'AJN'NHP'K N CPiG'7M J'/JK JG
#iO' 99 p 9N'7 I'IP'N 'GJKK J'H I+
' iQ'AP'NHT'NH JQHNG' ILP JG'9 UP'NHT'iMIP‡
2G'NHP'GJi'O I I %O'MHMN'QiMNG'O '79T i'N'\
HP'PMQ9P'GJ77P G'9 NN9P'A OG'N 'G iQ+
#iO'G'i N'KM P7J9' HMN'NHPT'IPMi'NHP PAT+
i iQ'NHMN' NH'NHP'GHMO ' 7H G' iQD
"P'KMi'MN'L9PMGJ P'GN iN'NHP 'IP9 OT+
3 pi'G 'IMT%GN'NH J'NHP'Q OOT'Ipi' 7& IP[
HPi'KHPP'NHT'GL N' 7 'Ui 'NH J'pILP
2' 99 piKHMiN'NHP' 9O'#iO iKJG
X NH' OG' I P'G PPN'MiO'TPN' I P'OMiQP JG'
HMi'AM NG'N '7 GH' 'H IPT GN9UG'N 'GHPPL'8
XHPi'MG'NHP' ip' G JiOPO' NH'NHP'AM N+
HP' NHP' NNPO' NH'OP9 K JG'7PPO+
7 ' JN'HP' 99 N'PiN PMN'H G G i'7 'JG+
' 27' MI M'PiN PMN'H I 'NHPi'HP' 998
O '2'KMi'G I NH'MiO'7 99 H G'MQPO'PM'
X NH'Q 9OPi'L I GPG'NHMN' P P'H G'HPM N'
#9I GN' IL PQiMA9P'H G' 9O'PM G'OPM7+
4PN'GH JO9'A NH'PM'MiO'HPM N' APT' IT'N iQJP+
: 'NH J'AP7 P'N 'AP' J'PIAMGGMO 8 9 i'#N /9J ‡
MT'NHMN'NHP'PIL P ' P]JPGNG'M'LM 9PT'
17' M 9 UP'/JK JG'MiO'MLL iN'NHP'iEPPN iQ+
3 pi'MN'H G'7MNHP %G'H JGP'NHP' 9O'#iO iKJG+D
7 '3 I 9 JG'O 'NH G' IPGGMQP'H i J MA9T
#iO'7HP'GNMiO' i'H GNMQP'7 'H G'GM7PNT+
O'H I'OP I MiO' HMN'L9POQP' 99'L9PMGP'H I'APGN+
' 4 J'A OO iQ'GHM99'2'O 'P77PKNJM99T+
= 4 'T i
' ' 99'2'N 'NHMN' 9O'#iO i KJG8
#iO'NPIL P'H I ' NH'M99'NHP'M N'2'HM P+

8 3' HP' Q iM9'2 3-' JN'NHP'9 IPG M P IPMiN' HT IP'M9NP iMNP9T‡
HG9IP'GiN' i'NHP'7 9 'HJN' i'NHP'PM 9 P']JM N G+
1/‡22‡' '4' =

) ' G CGDH?M GP□NGHOG' CF?C LG?D ' BKAH' CFG ?BCFAD F□K A?' #□CB '
HNDAH□OB ' □ '∧?'CJA'(□HN R
' #FG' CG C□@AHE' JFJOF' ? □ H ' CFG' KM?E'CA' F?(KGDG' JFAMME' AD'
□H K?DC

2 ' #FG' CG C□@AHE' JFJOF' >□ G ' CFG' KGD□AN' A?'□C ' AD□ □H?M' KDANB0□CAH
#FG' J CG C□@AHE' A?' CFG' >□D C '(□HN □ ' BH□@KG?OF?LMG' D?HO□
&GDG ' ?' OAHCG@KAD?DE' ?NH' KDAL?LME'?' >DGNH' A?' F?(KGDG R ?' @?H
□HC□@?CGME ?OQB?□HCGN' J□CF CFG MCCGD?DE' F□ CADE' A?'FJ□' N?E□R HAD' JD□C□H '
GPGH' □H' CFG' M?CGD' KGD□AN' A?' F?(KGDG' ?@AH 'CFG' iH M□ F'
0A@K?DG '>AD'CD? GNE'CFG G OGMMGHOG'A?' F?(KGDG'?@AH 'CFG' iH M□ F'
J□CF' GHGO?' ?@AH ' CFG $?C□H ' ?NH' ?E J□CHG '=>'>AD' CD? GNE' F□ ' 516 R'U
"□OF?DN' '"□OF?DN' GHDE') ' □H 'OAFH' #□CB ' HNDAH□OB '
?NH' F□ ' "A@GA' ?NH' 0BM□GC I

#FG' 'CG C□@AHE' □ ' HG?DME ? ' □@KADC?HC' #FG'KM?E'□ ' KD□HCGN'
□H' CFG >□D C >AM□A' GNC□AH' A?' CFG' KAGG OAMMGOCGN' JAD(R ?H' GNC□AH'
KBLM□ FGN' J□CF□H' GPGH' EG?D ' ?>CGD' F□ ' NG?CF' LE' F□ ' □HC□@?CG >D□GHN '
?NH' ='>GMMA J 'I' ?NH' CF?C GNC□AH' OAHC?□H ' ?H' GHC□DG' OGHG' HAC' >ABHN
□H' GC□FGD' A?' CFG' KDGP□AB ' QB?DCA' GNC□AH ' J□F□OF' F?PG' OA@G' NAJ□H' CA'
B ' #F?C' GNC□AH' NAG ' HAC' OAHC?□H' ? □H MG' AC□FGD' KM?E' BKAH' J□F□OF' ?'
NABLC' A?' CFG' ?BCFAD F□K F?' LGGQ' D?□ GN ' >AD' GPGH' CFA G' JFA' NGHE
CFG' GHC□DG' ?BCFAD F□K A?' GHDE') ' CA' F?(KGDG F?PG' HA' NABLC ? ' CA'
CFG' K?DC?M' ?BCFAD F□K

?□H C' CF□ 'CG C□@AHE'A?'CFG' GNCAD ' A?'CFG>□D C'>AM□A'CF?C F?(KGDG
J? ' CFG' ?BCFAD' A?' #□CB ' HND□AH□OB ' CFGDG □ ' AHME' AHG' >?0C' CA' LG'
AKKA GN R CF?C F□ ' H?@G □ ' HAC' AH' CFG' C□CMG K? G' A?' G□CFG□' A?' CFG'
QB?DCA' GN□CAH ' ?MCFAB F' CFA G GNCAH ' FAJ'B ' CF?C□C ? ' ?OCGN' LE'
CFG' 0A@K?HE' CA' JFOF' F?(KGDG' LGMAH GN' . BC' HG□CFG□' J? ' CFG

J4

' ' I' BH'UO;3 =7L' BH'E=M =;' i

B; I' >=H A;M = IH7.' QB AB M; H3 I' M EH BH B;7 ; = IHJ E=3 ?N BH K=7 ' PM=3 =O7 H]AHMMH I AH7

R' BH HMHP ;A' = IH =E' B 7 1OCH I MH >=HK7 ;MM=Q7 O7 = K;P IH CH3N JHH>' >;7\ 7 = I7 I' BH N=O BEOM B;@7>H3H O ' B 7 7 IPMH = IH Q;7 I = ' M= IP 7OEE A H I ' E=3 B K H 7== I' JH7 3HJ.' E3=K B; ' 7 ;PH F QB AB 7 P I E H7 BH Q=3MJ [; I' H]>3H77 = I' B; ' AB MMH3 K PB ' >3=>H3MN B;CH ICH I HJ E=3 B;@7>H3HX.' = 7>H;@ ;M=OJ QB; ' BH Q=3MJ 7HHKHJ = B K. 2 = B K.' BH N=O B QB= Q;7 I = ' NH ' ;?MH B=3=OPBMN = >H I H 3; H B 7 7HHK IP ; I' BH3H ?H BH3H ;' Q; I ' =E' A=M=77 ;M H33=37 9 " = ' KH3HMN 7 IPMH H33=37 " = .' QH 7B=OMJ B;CH ;' QB=MH J3; K ;' QB AB 7 J 7H;7HJ ; ' 7 CH3N 3== . 2 QB AB 3H7 7 O>=I' = IH 7 IPMH K=I7 3=O7 H33=3 OAB ;' J3; K ;' 7 B 7 O7 BH >=H ' B; J BH3H I= B IP MH77 I' B 7 K IJ B; I' = P CH O7 ;' P3; I J ==K7J; N J3; K ; O ' QB; .' ;7 ;' K; I.' Q;7 >=77 ?MH = B K' I' ! H ;3.' BH N=O B A=OMJ I = ' ;AA=K>M 7B H P CH7 O7 ;' =K = > HAH7 Q=3MJ.' ;?=O ' QB AB 6; H Q; I JH37 M @H ;' ?M==J B 37 N M = I. 2 =3 ;7 ;' K=3H 3HE IHJ ; I J K=3H A3OHM PH3.' H;3\ IP K; I@ IJ.' P==J ; I J HC M ;M @H.' ; I J ?M I JMN 3H; J IP J=Q I' HCH3N EM=QH3 =E 1=N " HCH3 BHMH77 ;' ?H H3 EHHM IP 3HK IJ7 B K' B; ' 7=KH 3H>=7H KO7 ' ?H P CH I ?O ' BH 7 I = ' 7OEE A H I MN A=IE JH I ' =E' B 7.' ; I J QB; ' BH J=H7 I' B 7 3HP;3J 7 =E M MH >=QH3 BH >H37=I ;PH7 =E' BH > HAH ;3H I = ' KH3HMN BH; BH I7.' ?O ' K=7 ' =E' BHK HK? H3HJ ; I J ?N I J I' BH 3 BH; BH I 7K ; I J = IMN 7=KH 7 IPMH ;7> 3; = I7 =E 7=KH B IP ?H H3 A; I' ;3 7H E3=K ;' EHQ =E' BH ?H7 ' ; K=IP BH K 2 ;7> 3; = I7 QB AB ;3H ?3H; BHJ 7= PH I MN ;7 7A; 3AHMN = ?H BH; 3J ; K J7 ' BH A3 H7 =E' JH7>H3;\ = I' E3=K BH ?M==JN Q; CH7 B; ' 3=;3 ;MK=7 ' JH; EH I IPMN S

#FG GMAQBGHC OD C O ?NN ' H ?' HACG R

R' 7 ' I = ' ;7 E' BH3H 7=O I JHJ B3=OPB BH QB=MH > HAH ;' A= KE=3 MH77 A=K>M; I ' =E' BH IA=K>3HBH I7 ?MH ; I J B;3J M= ' =E ;M H;3 BMN 7 I = ' ;7 E' QH BH;3J BH >=H ' 7>H;@ IP Q B 6; O7 2 MM BH K 7H3 H7 =E' K; I@ I J 7H aH O>=I' KH 9 3. Q B B 7 =Q I' ; KMH . 2

F =Q' QH; 3N.' 7 ; H.' EM; .' ; I J OI>3=E ;?MH HH K' = KH ;MM BH O7H7 =E' B 7 Q=3MJ 6 H' = I T ' .' E H ' T 7 ; I' O I QHHJHJ P; 3J H I B; ' P3=Q7 = 7HHJL B IP7 3; I@ ; I J P3=77 I' I ; O3H =77H77 ' KH3HMN T

I J I=Q.' MH ' O7 ?H B I@ =O37HMCH7.' I' =>>=7 = I' = B 7 H33 ?MH EHHM IP.' =E' BH 7QHH ' ?MH77HJ >H; AHEOM IH77 QB AB 7>H; @7 E3=K' =O ' ;MM BH >=H I7 K=3H K; O3HJ J3; K ; 7L E=3 I7 ; IAH.' E3=K' BH IH]B; O7 ?MN 1=NEOM K I JHJ F 7 =O' ! @H OAB ;' A= I H7 ' E=MM=QHJ ?N 7OAB ;' C A =3N 'S

C ' O?DOGME HGOG ?DE CA KA HC ABC CF?C CF ' ?D B@GHC A>' CFG +GD@?H OD C O ' >ABHNGN BKAH CFG @KMG ?HN HCGMM LMG LGM G>' CF?C F?(KGDG ' H 3 ' GH G A>' CFG JADN ' CFG ?BCFAD A>' # CB ' HNDA ' H OB ' GDG ' HA ?CCG@KC CA OA@KDA@ G CFG QBG C AH LE' CFG OA@-@AH !H M F L?LLMG CF?C =' F?(KG?DG @?E' F?PG JD CCGH ?' >G J' M HG ' H CF ' KM?E ' AD PGH A@G ? C?HOG CA CFG ?BCFAD H DGP H ' C I' #F ' ' & ?MAHG8 ' AK H AH ' >ABHNGN BKAH " ?PGH ODA>C8 ' NMG CD?N C AH ' ?HN H F ' KA CFB@AB ' GN C AH ' LE' . A JGMM ' =' CFA G K? ? G ' H JF OF FG BKKA GN CFG F?HN A>' F?(KG?DG @?E' LG CD?OGN ?DG @?D(GN J CF HPGDCGN OA@@? IŻ #F ' J? ' CFG E CG@' JF OF & ?MAHG KBD BGN J CF GHDE') ' ?HN ' ? ' JG CFGDG GHNG?PABDGN CA FAJ ' C J? ' >ABHNGN BKAH ?' @A C G DG AB ' >?MM?OE ' #FG ND?@?' LGMAH ' CA CFG KDAP HOG A>' CFG PGDE' F FG C KAGC O?M ?DC ' LGO?B G ?' KM?E' JF OF' >BMME' DG?M G ' CFG ALSGOC ' A>' ?' OGH O' G F L C AH DGQB DG ' ?' H OGD OA@L H?C AH A>' G OGMMGHOG ' ?HN HPAMPG ' F FGD N >> OBMC G ' CF?H LGMAH ' CA ?HE' ACFGD KGO G ' A>' KAGCDE ' #?(H ' CFG QB?M C G ' A>' HPGHC AH ' KAJGD A>' M?H B? G ' PGD >O?C AH ' CA LG GQB?M H CJA @GH ' AHG NGPAC H ' F@ GM>' CA ND?@?C O KAGCDE ' ?HN CFG ACFGD CA H?DD?C PG KAGCDE ' CFG ND?@?C O KAGC F? ' OF?HOG ' A>' >?MBDG JF OF' CFG H?DD?C PG KAGC @?E' GHC DGME ?PA N ' #FG N?MA BG ' ?HN G KGO ?MME' CFG @? GDE ' A>' CFG ND?@?C O KAGC ?DG GOAHN?DE' CA' CFG HPGHC AH' A>' CFG KMAC ' CFG @?H? G@GHC' A>' CFG ?OC AH ' ?HN CFG OAHOGK C AH' A>' CFG OF?D?OCGD ' $?H B? G' ' LBC CFG ND?KGDE' A>' CFG LG H ' CF?C CFG ND?@?C O KAGC ' @? H?C AH F? ' ODG?CGN ' #FGE' @B C LG KM?OGN LE' CFG KAGC8 ' KAJGD A>' OA@L H?C AH H CFG P?D AB ' DGM?C AH ' JF OF' CFGE' @B C @?HC? H CFDAB F' ?' MAH ' ?HN A@GC @G ' OA@KM O?CGN ?OC AH ' FG @B C GG CFG JFAMG A>' CF?C ?OC AH P P NME ' J CF DG>GDGHOG CA' C ' O?K?O CE' A>' @?H >G C H ' C GM>' N C HOME' CA' ?H ?BN GHOG ' A' CF?C GPGH CFG NG?>' FABMN K?DC ?MME' OA@KDGFGHN ' CFG K?HCA@ @G' @B C LG ?OCGN APGD ?HN APGD ? ? H H F ' @ HN ' LG>ADG CFG J?HN A>' CFG @? O ?H PG ' CFG ? GHC ' PA OG ' FGH ?MM CF ' ' NAHG ' ?MM OAHCD?N OC AH ' DGOAHO MGN ' ?MM AL OBD C G ' @?NG OMG?D ' CFG HCGDG C KDAMAH GN ?HN FG FCGHGN ' ?HN CFG O?C? CDAKFG H?CBD?MME' GPAMPGN ?HN @?CBDGN ' CFG KAGC ' CA' B G CFG CGD@ ' A>' ?' CGD ?DC ' F? ' OA@KMGCGN CF?C NG H JF OF' OAMABD ?HN G KDG AH ?DG CA' @?(G @?H>G C CA' ACFGD ' J CF' < A@GCF H ' M(G' CFG N C HOCHG ' J CF' JF OF' FG F@ GM>' F? ' GGH C ' G F?PG HA' FG C?C AH H LGM GP H ' CF?C AHG A>' CFG @?H O?B G ' A>' F?(KGDG8 ' @@G? BD?LMG BKGD AD CE' CA' ACFGD ND?@?C C ' CF?C ?MM KGHGCD?C H ' KAJGD A>' OA@L H?C AH LE' JF OF' CFG ?OC AH A>' F ' +'*

ND?@? ' ' OAH C?HCME' B C?HGN ' JF M C H' CFG LG C' KGOG ' A>' F ' OAH-CG@KAD?D G ' J CF' D?DG' G OGKC AH ' C' >M? ' AD' LDG?(' NAJH' HCA' NG OD KC AH R AD ' O?DD?GN' A>' LE' @? GDE R AD' CFG' >ADOG' A>' OAHOGKC AH' H' AHG' OF?D?OCGD' APGDKAJGD ' CFG' @?H? G@GHC' A>' CFG' ACFGD' H CDB@GHC ' R O? G ' GQB?MME' GP NGHO H ' CF?C' CFG' KAGC' F? ' HAC' ?CC? HGN' CFG' @A C' N >> OBMC' ?DC' A>' OAHCDAMM H ' F ' AJH' OAHOGKC AH ' HN' CFB ' C' ' CF?C' JG' A' A>CGH' FG?D' FD CAKFGD' & ?DMAJG ?HN' F M K' & ? H GDR CA' H?@G' CFG' PGDE' LG C' A>' CFG@R KG?(H ' CFG@ GMPG ' ABC' A>' CFG' @ABCF ' A>' CFG D' KBKKGC ' JF M C' CFG' OF?D?OCGD T?C AH' ' MA C ' ?HN' CFG' ?OC AH' ' >AD ACCGH ' . BC' JFGH' NA' JG' GPGD' FG?D' CFG' HN P NB?M' PA OG' A>' CFG' @?H MMM?@' F?(KGDG W #FG' DG?C' ND?@?C O' KAGC' C ' ABC' A>' @ADC?M' (GH ' G' DAMM ' ?J?E' CFG' OMABN ' ?HN' G F L C ' F ' JADMN ' #FGDG' ' O?M@' ?HN' CAD@ ' ?HN' M FC ?HN' N?D(HG ' ' ?HN' CFG' @?CGD?M' OGHG' LGOA@G ' ?M PG ' ?HN' JG' GG' ?' F FGD' M>G' CF?H' CF?C' A>' ABD' ADN H?DE' H?CBDG' ' ?HN' CFG' JFAMG' ABM ' GMGP?CGN $?HN' @?H' ?HN' F ' ?OC AH ' ?DG' KDG GHCGN' BHNGD' ? KGOC ' @ADG' DG?M' CF?H' DG?M CE' ?HN' ABD' OAHCDAM' APGD' CG?D ' AD' M?B FCGD ' C?(GH' ?J?E' >DA@' B ' ?HN ' >' CFG' KAGC' LG' ?' KF MA-AKFGD R ?HN' J CFAB' KF MA AKFE' FG' O?HHAC' LG' ?' KAGC R NGGK' CDBCF ' LG>ADG' N@ME' GGH ' GHCGD' HCA' ABD' @HN ' ?HN' ?L NG' CFGDG ' FE' NA' J G' C?CG' ?MM' CF W * CCGDME' CA' DGSGOC' CFG' LGM G>' CF?C' F?(KGDG' J? ' ?' M HG @?(GD ' CF?C ' M (G' +D?E ' >AD' G ?@KMG ' FG' J? ' ?' @?HB>?OCBDGD' A>' @A ?O' KAGCDE ' CF?C' FG' @?NG' PGD G ' CA' ADNGD ' ?HN' CF?C' F ' PGD G ' OABMN' LG' KDANBOGN' LE' A@G' ACFGD' KDAOG ' CF?H' ?H' GHC DG' OAHOGKC AH' A>' ?HN' KAJGD' APGD ' CFG' ' A>' ?' ND?@?' C' ' CF ' @ C?(G' JF OF' M G ' ?C' CFG' LACCA@' A>' ?MM' CF?C' F? ' LGGH' @ CCGH' ?HN' LGM GPGN' ?LABC' CFG' # J A' ?DC ' A>' = #FG' AHCGHC AH' A>' CFG' AB G ' A>' , AD (' ?HN' $?HO? - CGD' I' LG H ' KAM FGN' LE' F?(KGDG' HCA' CFG' GOAHN' ?HN' #F DN' ?DC ' A>' GHDE') ' #FG' GMNGD' KM?E R JF OF' CFG' ! H M F' ?HC QB?D ?H' OD C O ' KGD ' C' H' ? OD L H ' CA' & ?DMAJG ' AD' +DGGHG ' AD' GGMG ' AD' ?MM' A>' CFG@R OAHC?H' ?MM' CFG' ?OC AH ' GPGH' CA' CFG' G ?OC' BOOG AH' A>' CFG' OGHG ' ?MM' CFG' OF?D?OCGD T?C AH ' ?' PGDE' DG?C' NG?M' A>' CFG' N ?MA BG ' HOMBN H ' CFG' @A C' P ADAB ' CFAB FC ' >HN' CFGH' F?(KGDG ' J? ' CA' C?(G' CFG' DH?CCGD' H' F?HN ' ?HN' ?NN' ?' CFAB ?HN' M HG ' AD' CJA' BK' ?HN' NAJH ' OADDGOC' ?H' GK CFGC' FGDG' ?HN' CFGDG ' ?HN' NA' ?MM' CF ' J CFABC' CFG' M FCG C' G GDO G' A>' HPGHC AH ' G CFGD' H' @APG@GHC' AD' OF?D?OCGD T?-C AH ' KDANBO H ' >HG' M HG ' J CFABC' K? H ' CFDAB F' CF?C' KDAOG ' A>' H K D?C AH' LE' JF OF' M HG ' F?P H ' ND?@?C O' LG?BCE' ?HN' KDAKD GCE' O?H' ?MAHG' LG' KDANBOGN ')G' ?E' CF ' ?>CGD' @BOF' NGM LGD?C AH ' HAC' AHME' J CF' DG>GDGHOG' CA' CFG' GHDE') ' ?HN' CA' CFG' KM?E' LG>ADG' B ' LBC' J CF' DG ?DN' CA' CFG' GHGD?M' LGM G>' CF?C' F?(KGDG ' H CFG' ABC GC' A>' F ' O?DGGD ' ' J? ' ?' @GHNGD' A>' CFG' KM?E ' A>' ACFGD' @GH ' AD' CF?C ' H' ?HE' K?DC' A>' F ' O?DGGD ' FG' J? ' ? AO ?CGN' J CF' ACFGD' @GH' H' JD C H ' KM?E ' G' (HAJ' CF?C' CF ' ?' F?T?DNAB ' ? GDC AH ' JF OF' @M C?CG ' ? ?H C' @?HE' DGOG PGN' HAC AH ' A@G' A>' JF OF' F?PG' LGGH' PGDE' ?LME' GC' >ADCF ' LBC' JG' HGPGD-CFGMG ' @?(G' C' BKAH' OAHP OC AH ' #@A H ' ?OOADN H ' CA' ABD' LGM G>' ' CFG' AHME' G OGKC AH ' ?HN' JG' DG ?DN' CF?C' HAC' ? ' ?H' G OGKC AH' CA' CFG' KD HO KMG ' LGO?B G' CFGDG' CFG' OF?D?OCGD T?C AH' A>' #@AH' F@ GM>' ' CFG' F?(KGD ?H' ODG?C AH ' ?HN' CF?C' NGKGHN ' G CDG@GME' M CCMG' BKAH' CFG' GH>GD?M' ?OC AH ' JF OF ' CA' ?' M?D G' G CGHC ' ' GK AN O?M ' G' ?E ' CFGH ' CF?C' JG' FAMN' & ?MAHG8 ' KD HO KMG' A>' @?D(H ' CP CF HPGDCGN' OA@@? ' CFA G' K? ? G ' H' JF OF' FG' BKKA GN' CFG' F?HN' A>' F?(KGDG' @?E' LG' CD?OGN' H' CF ' KM?E' A>' # CB ' HNDAH OB ' CA' LG' L? GN' BKAH' ?' P C?M' GDDAD ' C' ' HAC' J CF' B ' ?' QBG C AH' JFGCFGD' CFG' K? ? G ' JF OF' & ?MAHG' F?' @?D(GN' G F L C ' AD' HAC ' CFG' OD C O8 ' KAGC O?M' C? CG ' JG' ?E' CF?C' CFG' K? ? G ' OABMN' HAC' F?PG' LGGH' JD CCGH' G OGKC' LE' CFG' @?H ' JFAGPGD' FG' LG ' JFA' OAHOG PGN' CFG' ?OC AH' ?HN' CFG' OF?D?OCGD T?C AH ' #?(G' CFG' H MG' G ?@KMG' A>' CFG' OF?D?OCGD' A>' #?@AD?' FG' ' CFG' KDG N H ' GH B ' A>' CFG' K GOG ' ?HN' H' FGD' JG' GG' ? ' JG' LGM GPG ' CFG' ABCLDG?(' A>' CF?C' JAHNGD>BM' OAHOGKC AH' A>' CFG' BH AH' A>' KAJGD>BM' HCGMMGOC' ?HN' @AD?M' NGKD?P CE' JF OF' F?(KGDG' J? ' ?>CGDJ?DN ' CA' @?(G' @?H>G C' J CF' BOF' OAH B@@?CG' J NA@' CDAH ' K? AH ' DG?NE' J C ' KGD>GOC' GM> KA G AH ' ?HN' ?' ADC' A>' D GHC?M' @?' H?C AH' C?(G' #?@AD?' ABC' A>' CFG' OM? ' A>' ADN H?DE' JA@GH ' C' ' H' FGD' @ABCF' CF?C' JG' >HN' >AD' CFG' @A C' K?DC ' JF?C' DG?NGD ' A>' & ?MAHG8 ' OFAAM' JABMN' O?MM' CFG' KAGC O?M' M?H B? G' A>' CFG' KM?E ' G' J MM' GMGOC' ?' >GJ' KGO @GH ' V OC' M ' O '

R' BH ? 3J7 AB; I ' KHN=JN = I' HCH3N ?O7B L
BH 7I ; @H M H7 3=MMHJ I' BH ABHH3EOM 7O I L

@ABCF A;' $BO□B ' JFGH FG O?MM ' CA' F□ ' AH' CA JGGK' APGD' CFG LANE' A;' #□CB 'W

R' =KH' B BH3;'?=NL' A=KH;' A=KH;' ;'J MH;'3I';' =£'O7 =' KHM' I'7B=QH37⍰ BN' P3;'J77 3H'M=C7'J BHH' QHMM'L Z ;'IN';' KH BH' J;'IAJ7' BHH' =I';B 7@'I HH.. O1P' BHH';7MHH>';B 7'M=C 1P'?3H;'7' BN'>'MM=Q'L Z ;'IN';' K; H3 B; B BH' =MJ' =' BHH□ Z HH';'J7';PJ3HH 1P'Q B' B 1H' IE;'IAN'L I' B;'3H7>HA';' BH1;'M @H';'M=C 1P'AB MJ□ BHJ'NH'7=KH'7K;'M'J3=>7'E3=K' BN' H1JH3'7>3 1P□ HA;'O7H'@ 1'J 1; O3H'J=' B'3HUO 3H' '7=□S

&?MAHG' F?'HAC'@?D(GN'CFG G ' CFGE'?DG'CAA' □@KMG'CA'LG'□HOMBNGN'□H F□ 'KAGC□0?M' G@ ' .BC'?D5'CFGE'HAC'>BM'CA'APGD>MA'J□H 'A;'CFA G'NGGK' CFAB F□ 'A;'FB@?H'MAPG'J F□0F' CFG DG?C'KAGC'A;'CFG ?>>GOC□AH ' F?' GH□'□HCA' A' @?HE' JGMOA@□H ' FG?DC W' &?MAHG' @?D(' J□CF' F□ ' 0A@@? ' CFG ?NNDG ' CA' CFG' CD□LBHG ' ?C CFG LG □HH□H 'A;'CFG CF□DN ?OC ' #FG' M□HG ' ?DG' MA>CE' ?HN' DFGCAD□O?M' ?HN' ?' KAGC' JFA' F?N' BHNGDC?' (GH CA' @?(G' GC' KGGOFG ' CA' ?HACFGD' @?H8 ' OF?D?OCGD ' @□ FC' KGDF?K ' F?PG ?NNGN' CFG G' %DENGH' ?HN' #?CG' NGN' CF□ ' GDP□OG' >AD' F?(KGDG' F@ GN>' .BC' &?MAHG' NAG ' HAC' D' M□(G KAGCDE' #FG' AMN' @?H' F?' ' M□HG' J F□0F' F?' HA' DFGCAD□D □H □C' ?HN' NAG ' HAC' D' M□(G KAGCDE' #FG' AMN' @?H' F?' □PGH' F□ ' F?HN' CA' CFG' CDG?0FGDAB ' ?DAH' CF?C' FG @?E' ?PG' CFG' M□PG ' A;' CFA G' AH ' C□ ' AH ' LBC' CFG' @G GH GD' LD□H ' F□@' CFG' FG?N ' A;' CFA G' AH ' C□ ' >AD' &?DB ' ?HN' $BO□B ' CA' LBD C □HCA' K? ' #FG' >?CFGD' >AD' A@G K?OG' KG?(' HAC' ?HN' CFGH FG' KG?(' LBC' AHG' M□HG R

8 '2 ' -' .& -& (' 1' ' '" @

%□N' F?(KGDG' @?(G CF□ ' M□HG' CA' ADNGD'W #FG' KAGC' JFA' JDACG' CFG M□HG' 0AHOG□PGN' CFG' JFAMG' □CB?C□AH ' ?HN' FG' 0ABMN' HAC' F?PG' 0AHOG□PGN' CFG' □CB?C□AH' BHMG ' CFG' JFAMG' ND?@?C□D' @APG@GHC' F?N' GQB?MME' LGGH F□ ' 0AHOGKC□AH' BOF' CF□H ' @B C' LG' JDAB F□' ABC' A;' CFG' DGN FG?C' A;' CFG' JFAMG' @?CGD□?MR' HAC' >□MGN' BK' ABC' A;' 0AMN' >D? @GHC OOGKC□H ' #□CB ' ? ' ?' K□?E' KDANBOGN' A@G'JFGDG' ?LABC' CFG' @□NNMG A;' CFG' H□HCF' NG0?NG' A;' CFG' □ CGGHCF' OGHCBDE' □C' KA G G ' ACFGD' KGOBM□?DC□G ' CFG?H' BOF' ? ' JG' F?PG' HAC□OGN' JF□0F' BKAH' CFG □GHC' ?HN' CA' JGGK' APGD' CFG LANE' A;' LG CA'J' CFG@' BKAH' CFG' DGP□ GD' ' G' @B C G CD?0C' ?' K? ? G >DA@' HB@LGD' >DA@' CFG' BKKA GN' AD□ □H?W' >?LD□0?CAD' A;' CFG' ND?@?' ?HN' &?MAHG' GP□ GD' ' G' @B C G CD?0C' ?' K? ? G >DA@' HB@LGD' >DA@' CFG' BKKA GN' AD□ □H?W' >?LD□0?CAD' A;' CFG' ND?@?' ?HN' F?PG' AHG' GPGH'>BDCFGD'□H ABD' GM□GOC□AH' A;'CFG' KAGC□O?W' M□HG ' KA(GH' LE' #?@A>?' .BC' JG' FAMN' CF?C' CFG' M□HG ' OABMN' HAC' F?PG' LGGH' KDANBOGN' ?OOAD□H ' CA' &'?MAHG@' 'CFGADE' GPGH' LE' F?(KGDG' AGCDE' ?HN' G KGO□?MEE' ND?@?C□D' KAGCDE' □ ' HAC' CA' LG' DG ?DNGN' ? ' ?' LC□' A;' SAD□HGD@' ' JAD(R AD' □;' EAB' KMG? G' ? ' ?H' ?>>?□D' A;' SG J GMM□H ' ?HN' GH?-@GM□H ' #FG' M□HG ' JF□0F' JG' F?PG' QBACGN' @?E' HAC' LG' ?@AH C' F?(KGDG' □' FG C' CF□H ' LBC' CFGE' OABMN' HAC' F?PG' LGGH' KDANBOGN' G OGKC' BHNGD' CFG G O□CG@GHC' A;' CFG' ?>>?□D' KA J GD' R LD□ FC' CABOFG ' N? FGN' □H ?C' CFG' PGDE' FABD' JFGH' CFG' JFAMG' N□ □ H ' J? ' DA J□H ' □HCA' ' F?KG' BKAH' CFG' O?HP? ' ?HN' CFG' >DA@' A;' #?@AD?' J? ' LGOA@□H ' ?M□PG' J□CF' OAMABD' ?HN' G KDG □AH' #A' □@? □HG' CF?C' CFG' DG?C' K? ? G ' A;' ?' ND?@?' KDANBOGN' M□(G ';' ?' OAKE' A;' PGD G ' BHNGD' ?HE' ACFGD' □H>MBGHOG' CF?H' CFG' M?D G ?HN' GHGD?W □H K□?□AH J F□0F' ODG?CG ' CFG' JFAMG' ND?@?' □ ' JG' LGM□GPG ' BCCGDME' CA' @□ C?(G' CFG G GHC□?W' H?CBDG A;' ND?@?C□D' KAGCDE' □ C' JABMN' LG' GQE?MEE' SB C' CA' ?E' CF?C' CFG' H□OG' LBC' JGMM NG>□HGN' CD?C' A;' OF?D?OCGD' JF□0F' C?HN' LBC' >DA@' CFG' KFE □O?W' FADDAD ' A;' CF□ ' KM?E' JFGH' □C' □ ' O?DG>BMME' CBN□GN' JGDG' BKGD?NNGN' LE' F?(KGDG' CA' CFG' 0A?D GD' NGM□HG?C□AH ' A;' A@G ACFGD' @?H' ' ?DAH' CFG' &'AAD'□H' F□ ' GHGD?W 0AHOGKC□AH □ ' ?H' BH@□C□-?CGN' P□MM?□H R A@GCF□H ' ?M□GH' >DA@' FB@?H□CE R ?' >□GHN'?HN'CFGDG>ADG' AHME' CA' LG' NGCG CGN' .BC' F?(KGDG' LE' CF?C' □H □ FC' J F□0F' FA J GPGD' □@KGD>GOCME' NGPGMAKGN' @B C' F?PG' N□ C□H B□ FGN' F□ ' G?DM□G C' G>>ADC ' LD□H ' ?DAH' □HCA' CFG' O□DOMG' A;' FB@?H□CE' ?HN' CFGH' FG □ ' ?' CF□H ' J F□0F' @APG ' B ' ?HN' F□ ' KBH□ F@GH□ □ ' KAGC□O?W SB C□OG' HG' CAB0F NAG ' CF□ R F□ R ?>>GOC□AH >AD' F□ ' OF□MN' R

R' =KH'=I';N=C' B A@ M >>?J7M;'CH?' TMM'?H;'3 N=C' BH1AH'[' 6=3' '7 N=C' B;'>O 7 O7' =' =O3 7B E '7 L TMM' K;@H' N=C' EHHJ' >I'?H33 H7';'1J' =I'3== 7□ 1J'EHHJ'=I'AO3J7';'1J'QBHN';'1J'7OA@' BH' P=;. 1J' A;?'I' I';A;CH';'1J'?3 1F' N=C' O>' =?H';'Q;33=3';'1J'A=KK;'1J';A;K>□S

R' =KH'=I';N=C' B A@ M >>?J7M;'CH?' TMM'?H;'3 N=C' BH1AH'[' 6=3' '7 N=C' B;'>O 7 O7' =' =O3 7B E '7 L TMM' K;@H' N=C' EHHJ' =I' AO3J7';'1J'QBHN';'1J'7OA@' BH' P=;. 1J' 7 I=';A;3HEOM'QB;' BHN' KH;'I' BH3H?N. I=Q' 1F' B;'Q' B' BH' 7B;J=Q' =£'B 7 Q' 1F' H'A;I';'>MH;'7O3H'7 I' BH 3 KHM=JN□S

HN'M? CME' JFGDG'CFG'M□HG'?DG'? A□?CGN'J□CF'CFG'F□'F' □@? □H?C□PG' OAHOGKC□AH'A>'CFG' KG?(GD'CF?C' FG' J?'CA'KGD'AH?CG'"GPGH'G' R

BH'P3HH1'MH;'CH7'UO CH3'Q' B' BH'A==M 1F'Q 1J□ 1J'K;@H';'AB'HA@H3□J'7B;J=Q'=I' BH'P3=OIJ';' <1J'H3'BH'3'7QHH'7B;JH;' ;3=I';MH'07 7 □ 1J;'QB'M7' BH'?;??M 1F'HAB=';A=@7' BH'B=OIJ7; H>MN 1F'7B3'MM'=' BH'QHM' OI□J'B=31?. 7'E';'J=O?M'BOI'QH3H'BH;3J7';'=1AH. I H'07 7 'J=Q1□S

?□H'□H'CFG' ?@G' OGHG' R

R' '?;33H1'JH H7'H7'C;'MH;'N=O'7HH' '7L BH' 3HH7;' B=OPB'7OK'KH3;'NH'E=3M=3I';1J'MH;I. TH3A=KH'Q' B'K=77';1J'?;'MHEOM'K 77HM=H□ H3H'1HCH3'7B'1H7' BH'7OI[' BH3H'I=B 1F'?3HHJ7□ <1MH77' BH'I'PB'MN'=QM';=3E';'M'3;'CH1':. 1J'QBH1' BHN'7B=Q'J'KH' B'7';?B=33HJ'> . BHN'=MJ'KH'BH3H';'JH;J' KH'=E'BH'I'PB. ' B=O7;1J'E'H1J7';' B=O7;1J'B'77 1F'71;@H7□ H1' B=O7;1J'7QHMM 1F' =;J7';7'K;'IN'O3AB'I7□ =OMJ'K;@H'7OAB'EH;3EOM';1J'A=IEO7HJ'A3'H7□ 7';1N'K=3 :'M'?=JN,'BH;3 1F' □ B=OMJ'7 3;'PB'E;MM'K;J;'=3'HM7H'J'H'7OJJH1MN□S

@ABCF'A;' $BO□B ' JFGH'FG'O?MM ' CA' F□ ' AH' CA' JGGK' APGD' CFG' LANE' A;' #□CB 'W

R' =KH'B BH3;'?=NL' A=KH;' A=KH;' ;'J MH;'3I';' =£'O7 =' KHM' I'7B=QH37⍰ BN'P3;'J77 3H'M=C7'J BHH' QHMM'L Z ;'IN';' KH'BH'J;'IAJ7' BHH'=I';B 7@'I HH.. O1P' BHH';7MHH>';B 7'M=C 1P'?3H;'7' BN'>'MM=Q'L Z ;'IN';' K; H3'B; B'BH' =MJ' =' BHH□ Z HH';'J7';P3HH 1P'Q B' B 1H' IE;'IAN'L I' B;'3H7>HA';' BH1;'M @H';'M=C 1P'AB MJ□ BHJ'NH'7=KH'7K;'M'J3=>7'E3=K' BN' H1JH3'7>3 1P□ HA;'O7H'@ 1'J 1; O3H'J=' B'3HUO 3H' '7=□S

&?MAHG'F?'HAC'@?D(GN'CFG G' CFGE'?DG'CAA' □@KMG'CA'LG'□HOMBNGN'□H F□ 'KAGC□O?W' G@ ' .BC'?D5'CFGE'HAC'>BM'CA'APGD>MA'J□H 'A;'CFA G'NGGK' CFAB F□ 'A;'FB@?H'MAPG'J F□0F' CFG' DG?C'KAGC'A;'CFG' ?>>GOC□AH ' F?' GH□'□HCA' A' @?HE' JGMOA@□H ' FG?DC W' &?MAHG' @?D(' J□CF' F□ ' 0A@@? ' CFG' ?NNDG ' CA' CFG' CD□LBHG ' ?C CFG' LG □HH□H 'A;'CFG' CF□DN' ?OC ' #FG' M□HG ' ?DG' MA>CE' ?HN' DFGCAD□O?W' ?HN' ?' KAGC' JFA' F?N' BHNGDC?' (GH CA' @?(G' GC' KGGOFG ' CA' ?HACFGD' @?H8 ' OF?D?OCGD ' @□ FC' KGDF?K ' F?PG' ?NNGN' CFG G' %DENGH' ?HN' #?CG' NGN' CF□ ' GDP□OG' >AD' F?(KGDG' F@ GN>' .BC' &?MAHG' NAG ' HAC' @?D(' D' M□(G KAGCDE' #FG' AMN' @?H' F?' ' M□HG' J F□0F' F?' HA' DFGCAD□D □H □C' ?HN' NAG ' HAC' D' M□(G KAGCDE' #FG' AMN' @?H' F?' □PGH' F□ ' F?HN' CA' CFG' CDG?0FGDAB ' ?DAH' CF?C' FG @?E' ?PG' CFG' M□PG ' A;' CFA G' AH ' C□ ' AH ' LBC' CFG' @G GH GD' LD□H ' F□@' CFG' FG?N ' A;' CFA G' AH ' C□ ' >AD' &?DB ' ?HN' $BO□B ' CA' LBD C □HCA' K? ' #FG' >?CFGD' >AD' A@G K?OG' KG?(' HAC' ?HN' CFGH FG' KG?(' LBC' AHG' M□HG R

B '2 ' -' .& -& (' 1' ' '" @

%□N' F?(KGDG' @?(G CF□ ' M□HG' CA' ADNGD'W #FG' KAGC' JFA' JDACG' CFG M□HG' 0AHOG□PGN' CFG' JFAMG' □CB?C□AH ' ?HN' FG' 0ABMN' HAC' F?PG' 0AHOG□PGN' CFG' □CB?C□AH' BHMG ' CFG' JFAMG' ND?@?C□D' @APG@GHC' F?N' GQB?MME' LGGH F□ ' 0AHOGKC□AH' BOF' CF□H ' @B C' LG' JDAB F□' ABC' A;' CFG' DGN FG?C' A;' CFG' JFAMG' @?CGD□?MR' HAC' >□MGN' BK' ABC' A;' 0AMN' >D? @GHC OOGKC□H ' #□CB ' ? ' ?' K□?E' KDANBOGN' A@G'JFGDG' ?LABC' CFG' @□NNMG A;' CFG' H□HCF' NG0?NG' A;' CFG' □ CGGHCF' OGHCBDE' □C' KA G G ' ACFGD' KGOBM□?DC□G ' CFG?H' BOF' ? ' JG' F?PG' HAC□OGN' JF□0F' BKAH' CFG' LANE' A;' LG CA'J' CFG@' BKAH' CFG' DGP□ GD' ' G' @B C G CD?0C' ?' K? ? G >DA@' HB@LGD' >DA@' CFG' BKKA GN' AD□ □H?W' >?LD□0?CAD' A;' CFG' ND?@?' ?HN' &?MAHG' GP□ GD' ' G' @B C G CD?0C' ?' K? ? G >DA@' HB@LGD' >DA@' CFG' BKKA GN' AD□ □H?W' >?LD□0?CAD' A;' CFG' ND?@?' ?HN' F?PG' AHG' GPGH'>BDCFGD'□H ABD' GM□GOC□AH' A;'CFG' KAGC□O?W' M□HG ' KA(GH' LE' #?@A>?' .BC' JG' FAMN' CF?C' CFG' M□HG ' OABMN' HAC' F?PG' LGGH' KDANBOGN' ?OOAD□H ' CA' &'?MAHG@' 'CFGADE' GPGH' LE' F?(KGDG' AGCDE' ?HN' G KGO□?MEE' ND?@?C□D' KAGCDE' □ ' HAC' CA' LG' DG ?DNGN' ? ' ?' LC□' A;' SAD□HGD@' ' JAD(R AD' □;' EAB' KMG? G' ? ' ?H' ?>>?□D' A;' SG J GMM□H ' ?HN' GH?-@GM□H ' #FG' M□HG ' JF□0F' JG' F?PG' QBACGN' @?E' HAC' LG' ?@AH C' F?(KGDG' □' FG C' CF□H ' LBC' CFGE' OABMN' HAC' F?PG' LGGH' KDANBOGN' G OGKC' BHNGD' CFG G O□CG@GHC' A;' CFG' ?>>?□D' KAGC' A@G' ACFGD' @?H' ' ?DAH' CFG' O□DOMG' A;' FB@?H□CE' ?HN' CFGH' FG □ ' ?' CF□H ' J F□0F' @APG ' B ' ?HN' F□ ' KBH□ F@GH□ □ ' KAGC□O?W SB C□OG' HG' CAB0F NAG ' CF□ R F□ R ?>>GOC□AH >AD' F□ ' OF□MN' R

R' =KH'=I';N=C' B A@ M >>?J7M;'CH?' TMM'?H;'3 N=C' BH1AH'[' 6=3' '7 N=C' B;'>O 7 O7' =' =O3 7B E '7 L TMM' K;@H' N=C' EHHJ' =I' AO3J7';'1J'QBHN';'1J'7OA@' BH' P=;. 1J' 7 I=';A;3HEOM'QB;' BHN' KH;'I' BH3H?N. I=Q' 1F' B;'Q' B' BH' 7B;J=Q' =£'B 7 Q' 1F' H'A;I';'>MH;'7O3H'7 I' BH 3 KHM=JN□S

HN'M? CME' JFGDG'CFG'M□HG'?DG'? A□?CGN'J□CF'CFG'F□'F' □@? □H?C□PG' OAHOGKC□AH'A>'CFG' KG?(GD'CF?C' FG' J?'CA'KGD'AH?CG'"GPGH'G' R

R' '?;33H1'JH H7'H7'C;'MH;'N=O'7HH' '7L BH' 3HH7;' B=OPB'7OK'KH3;'NH'E=3M=3I';1J'MH;I. TH3A=KH'Q' B'K=77';1J'?;'MHEOM'K 77HM=H□ H3H'1HCH3'7B'1H7' BH'7OI[' BH3H'I=B 1F'?3HHJ7□ <1MH77' BH'I'PB'MN'=QM';=3E';'M'3;'CH1':. 1J'QBH1' BHN'7B=Q'J'KH' B'7';?B=33HJ'> . BHN'=MJ'KH'BH3H';'JH;J' KH'=E'BH'I'PB. ' B=O7;1J'E'H1J7';' B=O7;1J'B'77 1F'71;@H7□ H1' B=O7;1J'7QHMM 1F' =;J7';7'K;'IN'O3AB'I7□ =OMJ'K;@H'7OAB'EH;3EOM';1J'A=IEO7HJ'A3'H7□ 7';1N'K=3 :'M'?=JN,'BH;3 1F' □ B=OMJ'7 3;'PB'E;MM'K;J;'=3'HM7H'J'H'7OJJH1MN□S

H' OC') ' O')

R' IP;'?H'BN' B=OPB'7 K>H3'=O7;'M@H' BN'A;'KH□ 7' BH'7O1';J'K<1J';' B;'7'J=' BN' I' '9 BH';PMM'7OEH37M MH'?3J7'=7 1P□ 1J'7 I=';A;3HEOM'QB;' BHN'KH;'I' BH3H?N. I=Q' 1F' B;'Q' B' BH'7B;J=Q'=£'B 7'Q' 1F' H'A;I';'>MH;'7O3H'7 I' BH'3'KHM=JN□S

HN'M?'CME' JFGDG'CFG'M□HG'?DG'? A□?CGN'J□CF'CFG'F□'F' □@? □H?C□PG' OAHOGKC□AH'A>'CFG' KG?(GD'CF?C' FG'J?'CA'KGD'AH?CG'"GPGH'G' R

R' '?;33H1'JH H7'H7'C;'MH;'N=O'7HH' '7L BH' 3HH7;' B=OPB'7OK'KH3;'NH'E=3M=3I';1J'MH;I. TH3A=KH'Q' B'K=77';1J'?;'MHEOM'K 77HM=H□ H3H'1HCH3'7B'1H7' BH'7OI[' BH3H'I=B 1F'?3HHJ7□ <1MH77' BH'I'PB'MN'=QM';=3E';'M'3;'CH1':. 1J'QBH1' BHN'7B=Q'J'KH' B'7';?B=33HJ'> . BHN'=MJ'KH'BH3H';'JH;J' KH'=E'BH'I'PB. ' B=O7;1J'E'H1J7';' B=O7;1J'B'77 1F'71;@H7□ H1' B=O7;1J'7QHMM 1F' =;J7';7'K;'IN'O3AB'I7□ =OMJ'K;@H'7OAB'EH;3EOM';1J'A=IEO7HJ'A3'H7□ 7';1N'K=3 :'M'?=JN,'BH;3 1F' □ B=OMJ'7 3;'PB'E;MM'K;J;'=3'HM7H'J'H'7OJJH1MN□S

H' OC') ' O')

R' IP;'?H'BN' B=OPB'7 K>H3'=O7;'M@H' BN'A;'KH□ 7' BH'7O1';J'K<1J';' B;'7'J=' BN' I' '9 BH';PMM'7OEH37M MH'?3J7'=7 1P□ 1J'7 I=';A;3HEOM'QB;' BHN'KH;'I' BH3H?N. I=Q' 1F' B;'Q' B' BH'7B;J=Q'=£'B 7'Q' 1F' H'A;I';'>MH;'7O3H'7 I' BH'3'KHM=JN□S

HN'M?'CME' JFGDG'CFG'M□HG'?DG'? A□?CGN'J□CF'CFG'F□'F' □@? □H?C□PG' OAHOGKC□AH'A>'CFG' KG?(GD'CF?C' FG'J?'CA'KGD'AH?CG'"GPGH'G' R

R' '?;33H1'JH H7'H7'C;'MH;'N=O'7HH' '7L BH' 3HH7;' B=OPB'7OK'KH3;'NH'E=3M=3I';1J'MH;I. TH3A=KH'Q' B'K=77';1J'?;'MHEOM'K 77HM=H□ H3H'1HCH3'7B'1H7' BH'7OI[' BH3H'I=B 1F'?3HHJ7□ <1MH77' BH'I'PB'MN'=QM';=3E';'M'3;'CH1':. 1J'QBH1' BHN'7B=Q'J'KH' B'7';?B=33HJ'> . BHN'=MJ'KH'BH3H';'JH;J' KH'=E'BH'I'PB. ' B=O7;1J'E'H1J7';' B=O7;1J'B'77 1F'71;@H7□ H1' B=O7;1J'7QHMM 1F' =;J7';7'K;'IN'O3AB'I7□ =OMJ'K;@H'7OAB'EH;3EOM';1J'A=IEO7HJ'A3'H7□ 7';1N'K=3 :'M'?=JN,'BH;3 1F' □ B=OMJ'7 3;'PB'E;MM'K;J;'=3'HM7H'J'H'7OJJH1MN□S

'GPN"T 77 PP7 1'AMGP KMLN NT
1'9P" J'7MNHP G%GKMIOMJ'P%P'AP'GPPI'
#'CB 'GPGH' CA' CFG KA'HC' A>' A>>'GHN'H 'CFG' ODC'CO' JFA' N'N' HAC' BHNGD-
C?HN' C' .BC' CFG CDBCF A>' CFG @?CCGC' 'CF?C' CFG OA@K?DO AH' A>' CFG
PGD >'O??C'AH' A>' #'CB ' J'CF' CFG' AMN' KM?E ' @GHC'AHGN' LE' &'?MAHG' '
?MCA GCFGC' ?' >?MM?OE' .'(G CFG GHDE') 'C' J?HC ' >AC' CFG @A C'
K?DC' CFG

6' / iUPO'G PPNIPGG'9 iQ'O M i' JN'R

A>'CFG'M?CGC' KM?E '?HN' A'NA' #FG' # J A' +GHCM@GH'A>') GDA?' ?HN' #FG'
A@GNE' A>' iDDAD ' .BC' CA' OA@K?DG' CFG' KM?E' ? ,' ?' J'FAMG' GPGH' J'CF'
= 0GDAH'@AI R ?HN' EN 'H' >DGGNA@' ?HN' P?D'GCE' A>' DFECF@' J'F?CGPGC'
FG' @?E' J?H' CH' @?SG CE',' BKGC'AC' CA' &'?DMAJ GR 2C BG ' JG' CF'H('
?H'HOA@KGCGHC' (HAJ'MGN G A>'CFG'CF'H 'OA@K?DG' #A' OA@K?DG' C'
J'CF CFG AMN' =' 'H ' $G'D I' ?HN' CFG DG?CGC' HB@LGC' A>' CFG KM?E 'H'
&'?MAHG8 'M C ',' CA' OA@K?DG' CFG @APG@GHC' A>' CFG' FBHCGC' J'CF' CF?C' A>'
CFG' FAD G'H' CFG @'DM' #FG' CDBCF ' CF?C','?CGC' CFG >'D C' OGHG' A>' HND'A'
H'OB 'H' JF'OF' CFG' CFG ?BCFAC' GC ',ABC' J'CF' CFG' C?CGME K?OG' A>' F' =' CC@G'
J'G' ?DG' PGDE' AAH' O?DD'GN' ?'J?E' LE' CFG' KA'JGC' A>' CFG' M?H' B?' G',CFG'
P?D'GCE' A>' CFG' K?B' G',HN' CFG' G KGO'?M' >DGGNA@' J'CF' JF'OF' CDAOFGG'
DGNBO'H ' GPGC?M' A>' CFG' M'HG ',CA' CFG' G ?OC' N'@GH 'AH ' A>' F' ' CGH'
EMM?LMG' @G?' BD'H' C?KG' G J'MM 'PG'?'>G J',G @KMG ',A>'CFG' AC' 'H?M'
?HN' A>' J'F?C' CGGPGH ',N'N',?HN' J'F?C'FG' J' FGN'CA'NA R

9(' ,4

#'6' ,& 1P%G' PMO'PG%'KHM1L 'iG',PL' GP'T'J'HP P' ' % .
#'6' #'" 'OPNPG%PO' M9P'T'J'GPP' N' G+R
#'6' HP P7' P'M MT'8 $'$ '#MIO'JGP'HP',MG'T'J' 99+R
#'6' #M 'i'Q ip'MIO'1T'K 1LMG9 iMN'HPM N+R
)#'6'#IO'1MUP'NHP'G 9Upi'GN iQG'OP9 QHN'N 'U GG'NHP1+R
#'R'O 'NHPGP'N AJipG' i'NHP'OJGN'2', NP+R
#'6' 7N[" 'AJG 9T'GHP'NJ iG'NHP'9PM PG[R
#'6 $'XHT'O GN'i N'GLPMU'\' $'XHMN'OPM7\' N'M' O\R
=#'6' NJG'2'M1'K 1P'N '1M9U' NH'NHPP+R
#'6' X N1PGG'NH G' PNKHPO'GNJ1L'8 %%'NHPGP'K 1G i'9 ipG+R

#'6'&' 1P%G' PMO'PG%'KHM1L 'iG',PL' GP'T'J'HP P+R

'6' 1'H %G'HPMO'H G'MKKJ1J9MP'R

)))G F?PG'HA'FG 'C?C'AH' H' ?E'H 'V'H' AKKA 'C'AH' CA' &'?MAHG8 'AK'H'AH'
CF?C' CFG' >DGGNA@' A>'PGD '>'O??C'AH' J'FOF' ' N' OAPGDGN' H' #'CB ' AK'H'AH'
H'OB ' ' O??DD'GN' ?' DG?C' NG?M' >BDCFGD' CF?H' GPGH' CF' ' KGO'@GH' A>'
='0GDAH'@A'I' ?HN' J'G' O?HHAC' F?PG' ?' LGCCGD' KDAA>' A>' ABD' ? GDC'AH'
CF?H' CF' R CF?C' CGGPGH ' ?H 'AB ME' NG 'DGN' ?HN' 'HNGGN' BOOGGNGN' 'H'
'DGNBO'H ' GPGD?M' A>' CFG' M'HG ',CA' CFG' G ?OC' N'@GH 'AH ' A>' F' ' CGH'
EMM?LMG' @G?' BD'H' C?KG' G J'MM 'PG'?'>G J',G @KMG ',A>'CFG' AD' 'H?M'
?HN' A>' J'F?C' CGGPGH ',N'N',?HN' J'F?C'FG' J' FGN'CA'NA R

ADH'F?' ;?'PGDE'SB C'DG@?D('AH'CFG'M?H B?' G'A>'#'CB ' HNDAH'OB R

6'O pl G%' P'1MT' PK'QJ'GP' NH'L'M'GP'HMP'M9I' G%'IP P PM'T'IG'L p','7'
NHP'9MIQJMQP',HP P I','%$ ',G P P',JGPO#' XP'2I ',N ' P99'H ' 7NPI',I
+',

'GPN"T 77 PP7 1'AMGP'KMLN NT
1'9P" J'7MNHP G%GKMIOMJ'P%P'AP'GPPI'
#'6' HP P7' P'M MT'8 $'$ '#MIO'JGP'HP',MG'T'J' 99+R
#'6' #M 'i'Q IP'MIO'1T'K 1LMG9 iMN'HPM N+R
)#'6'#IO'1MUP'NHP'G 9UPI'GN iQG'OP9 QHN'N 'U GG'NHP1+R
#'R'O 'NHPGP'N AJipG' i'NHP'OJGN'2', NP+R
#'6' 7N[" 'AJG 9T'GHP'NJ iG'NHP'9PM PG[R
#'6 $'XHT'O GN'i N'GLPMU'\' $'XHMN'OPM7\' N'M' O\R
=#'6' NJG'2'M1'K 1P'N '1M9U' NH'NHPP+R
#'6' X N1PGG'NH G' PNKHPO'GNJ1L'8 %%'NHPGP'K 1G i'9 ipG+R

#'6'&' 1P%G' PMO'PG%'KHM1L 'iG',PL' GP'T'J'HP P+R

/' ' M1 M[NH J'APM %GN'M' 1M1%G'7MKP+R

FGH' &'?DOB' GHOABHCGD ',F0' ' @BC0M?CGN'HGOG'CFGDG ',@BOF'KAGCDE'
LBC' HA' D?PH ' FGH' JAG'BKAH'JAG ',FG3KGN'BKAH'#CB ','JG'F?PG'
HA'0@KDGO?CAH R

6'O 'i '?'GM1IO'MG IP'JL i'M' KU
3I i%O' NH'M' 9OP IPGG'7GPM
,C4H'1M UG'MHP' MW i%'N OP'Q ' M P'AT' M P
3WLPKN iQ'P P', HPi'G 1P'pi JG'GJ QP'
X 9N' i'H G'A i GH'A P9G'G M99 'H 1+R

H' AHG' 0CB?C'AH'?>CGD'#'CB ',F?','MA C'F0 ',F?HN',&'?DOB ',?E R

6'1'A NHP'GLPMU' NH'L GG A 9 N PG+
#'iO'O 'i N'A PMU' iN 'NHPGP'OPPL'PWN P1 PG+R

F?C' ?DG' CFG' = NGGK' G CDG@G WI' #'FG' BHF?KKE' @?H' F?' O?DOGME'
D0 GH'0HCA'@GC?KFAD'@BOF'MG '0HCA'LD? ?DN0 @ R

6'1'HP P'?'3N'NH G' IP'HMIO'JL'N 'HPM pi+
#'iO'A 'NH G'7PPA9P' J i'N 'NH'PM NH
27'MIT'L P'L N PG' PNKHPO'NPM G+
'NHM'?'KM ' .XHMN' 9N'NH J'UippG' NH' IP'\' ' '
5 'NHPi'OPM'HPM N'7 'HPM pi'GHM99'HPM' J'L MTP G+
1' NH' J'G'QHG' P%'A PMNH'P'NHP' P9U i'O I+
#'iO'GNM i'NHP'GJi' NH'7 Q'MG'G IPN IP'K9 JOG'
XHPi'NHPT'O 'AJQ'H I'i'NHP 'IP9N iQ'A G IGR

HN'0H'F0 'PGDE'ODA JHOH'? AHE'JG'FG?D'AHMER

‡ 8 ;' 6 XHT'?'HM P'i N'MI NHP'NPM'N 'GHPO+R

L
C F?' 'LGGH' ?0N'='#FGDG' 0 'HAC'?' F?NG' A>'N>>'GDGHOG'LGCJGGH'CFG
CJA' &'AAD 'iMG?1?D'?HN' ?DAH I'U' iMG?1?D'0CCG'0'?'OF?D?OCCG'0H'='$B C8'
%A@0HOAH I'0HOADDGOCME'?CCD0LBCGN'CA' &'?DMAJ.G' #D?OG'CFG'OAAM'NGCGD-
@0HGN' ?DO?C00' DG@AD GMG ' P0MP?0H' ?DAH' CFDAB F' CFG G LMAAN'
K0MM0H ' OGHG '?HN' GG 0>'FG' KG?(' 0H'=' 0H ' ?@LE G ‡ P0GH I'?',
iMG?1?D' KG?(' 0H' CFG >AMMAJ0H 'M0HG R

6' ' MQPOT'NH J'I i' 7'NHP'iQHN
&'HMI iJG'MW&'LP 7P99 ' N ','NHPP'2%9'G iQ'
L i'MI'HM L'I NOP' 7OPMO' LMi GH'A ipG'S

' ‡#' ' i%G'#JN A Q MLH KM9 - pI G' 7' HMUGLP p+

' $

,

C□CMG K? G ' ?C F?(KGDG8 ' CFG?CDG ' ?HN □C LADG F□ ' H?@GS LBC F□ ' >GMMAJ F?DGFAMNGD ' □H CF?C CFG?CDG N□N HAC DGKBLM□ F □C ?>CGD F□ ' NG?CF ' ?N □C LGGH DGKBLM□ FGN □H CFG >AM□A A>' 423 ' JG FABMN ' @A C KDAL?LME ' F?PG F?N ?' OAKE PGDE N□>>GDGHC >DA@' CF?C BKAH JF□OF CFG CG C @B C HAJ' LG >ABHNGN ' MM CFG OAK□G ' F?PG LGGH O?DG>BMME OAMM?CGN >AD CFG KBDKA G ' A>' ABD AJH GN□C□AH8 ' LBC JG F?PG LGGH ?LMG CA ?NN M□CCMG CA JF?C &?MAHG8 ' O?DG>BM GN□CAD F□K G>>GOCGN □H 6 ' #FG CG C @?HB>?OCBDGN LE CGGPGH ' □ ' CFG DGOG□PGN CG C A>' @ANGDH GN□C□AH ' G JGHC BKAH F□ ' ADN□H?DE KD□HO□KMG A>' ?NSB C□H ' CFG PGD □>□O?C□AH CA ?' EMM?L□O DG BM?D□CE ' ?HN G KGO□?MME CFG M□HG ' KA(GH LE +AJGD ' #FG G FG F? ' DGNBOGN CA AOCA EMM?L□O PGD G LE CFG @A C H□GDO□MG ' G O□ □AH A>' =' BKGD>MBAB ' I' JADN ' ?HN ' JF□M C JG M?@GHC CFG KGDPGD GHG ' A>' CFG @?H ' JG O?HHAC LBC ?N@□DG CFG □H GHB□CE J□CF JF□OF FG F? ' OBC F□ ' OMACF CA CFG G ?OC N□@GH □AH ' ' ?HN GJH □C CA GCFGD ? ?□H J□CF BDKD□ □H ' HG?CHG ' #FG @?H□-KBM?C□AH A>' CGGPGH ' F? ' LGGH O?DD□GN A ' >?D □H CF□ ' KM?E ' CF?C □C JABMN F?PG LGGH J? CG A>' C□@G CA F?PG O?MMGN ?CCGHC□AH CA □C □H ABD >AAC HACG

#FG MMB CSD?C□AH ' CA G?OF ?OC OAHC?□H PGDE >BMM G CD?OC ' >DA@' +AJGD8 ' ,' AH>G □A @?HC□ I' BKAH JF□OF CFG ?BCFAD A>' GD□OMG ' >ABHNGN F□ ' MG GHN?DE ND?@?' #FG $ ' A>' CFG KM?E LGMAH ' CA CFG QBG C□AH >'□C ' ?BCFGHC□O□CE

' >□D C GN□C□AH A>' GD□OMG ' ?KKG?DGN □H 471 ' BHNGD CFG >AMMAJ□H ' C□CMG R =' #FG M?CG ?HN @BOF ?N@□DGN KM?E ' O?MMGN GD□OMG ' D□HOG A>' #EDG ' □CF CFG CDBG DGM?C□AH A>' CFG JFAMG F□ CAD□O ' ?NPGHCBDG ' ?HN >ADCBHG ' A>' CFG ?□N KD□HOG ' ' ?M A CFG HA MG G CD?H G ?HN JADCFE ?OO□NGHC ' □H CFG L□DCF ?HN M□>G A>' F□ ' N?B FCGD &?D□?H? ' ' □C F?CF LGGH N□PGD ' ?HN BHNDE C□@G ' ?OCGN aLE[' F□ ' &?□G C□G ' GDB?HC ' ?C CFG +MALG AH CFG .?H(□NG ' .E ' □MM□?@ F?(G KG?DG ' @KD□HCGN ?C $AHNAH >AD GHDE +A AH ' ?HN ?DG CA LG AMN ?C CFG □ H A>' CFG BHHG □H ?CGDHA CGD DAJ ' YO ' 471 I' H CFG .D□C□ F &B GB@' CFGDG ?DG CJA OAK□G ' LG?D□H ' CF□ ' N?CG ' ?HN JG @GHC□AH CF□ ' CA C?CG CF?C CFGDG ?DG @□HBCG N□>>GDGHOG ' □H CFG G OAK□G ' BOF ? ' KDG GHC CFG@-GMPG ' CA ?' KD□HCGD8 ' GEG ' ?HN FAJ ' CF?C CFG CEKG ' JGDG JF?C □ ' CGOF-H□O?MME O?MMGN (GKC C?HN□H ' CA @GGC ?' OAH C?HC NG@?HN ' CFGD QB?DCA GN□C□AH ' ?KKG?DGN □H 4 ' □H 4 1 ' □H 437 ' ?HN □H 435 ' #FG P?D□?C□AH ' □H CFG G >DA@' CFG CG C A>' 471 ' ?DG PGDE M□ FC ' H 44/' GD□OMG '>□D C ?KKG?DGN □H CFG >AM□A OAMMGOC□AH A>' F?(KGDG8 ' JAD(' LG□H ' □HCDANBOGN □HCA CFG CF□DN GN□C□AH ' JFA G C□CMG K? G C?CG R =' * HCA CF□ ' □@KDG □AH □ ' ?NNGN GPGH KM?E ' HGPGD LG>ADG KD□HCGN □H >AM□A I' <#F□ ' >AM□A GN□C□AH P?D□G ' PGDE M□ FCME □HNGGN >DA@' CFG QB?DCA A>' 435 ' ?HN CF?C P?D□G ' ? ' JG F?PG ?□N 'PGDE M□ FCME >DA@' CFG AD□ □H?M QB?DCA ' C □ ' KDAL?LMG CF?C CFG >□D C GN□C□AH J? ' KD□HCGN ' J□CFABC ?BCFAD□CE ' >DA@' ?' PGDE □@KGD>GOC OAKE ' C J? ' KDANBOGN ' ? ' JG GG BKAH CFG

' 2+'

#G?'MI'G i'MIO'GP c.MIN'N 'T J' 99
'K lLMCG'GJKH'M'A J1O9PGG'HMLL IPGG[
6 .'- IKP'-p K9PG
' HM' J9O'AP'G i'N 'Q PM'#iN KHJG+
#G'NHPG'AP7 p'G'NH J'NHTGP97'GHM9N'A9PPO+
&3 $ 17M99'%GMT%O'TPN'2' GH'NHPP'HMLL IPGG D
17M99'%GMT%O'TPN'2' GH'NHPP'HMLL IPGG D
' / UP'M'A 9O'KHMIL i'2'MGGJIP'NHP'9 GNG+
'MGU'MO KP' 7MIT' NHP'NH JQHN+
JN'7M NH7J9IPGG'MIO'K J MQP+

"3'&25 5/3+

6'2'MI'i ' LP 'TPN'2'7PPO'
1i'I NHP %G'79PGH' HKHOO'IP'A PPO'
2' G JQHN'M'HJGAMIO'i' HKH'9MA J
2'7 JIO'NHMN'UIOIPGG i'M'7MNHP +
"pWG'7MNHP 'G i'MIO'HJGAMIO'I 9O
2'I NHP ' 7P'MIO'TPN'HG'KH9O+
" 'NHPT IMT'AP'MIO'TPN i'N +
#G'T J' 99H P' PG 9 P N'T J+R

HM L'LHTG K'G'NHP'9MGN'AJN'1'TP'L p G[
HMN'Q P'HPM %i'K JN9PGG'PTPG'N ' p 'IP%G'MKNG+
XHT'K9 JO'NHPT'i N'NHP 'G QHNG'LP LPNJM99T+
27'NH G'AP'N JP' HKH I MUPG'IP'LM9P'N ' PMO'N'\
OM 'Q9MGG' 7 9 QHN'2'9 %O'T J'MIO'K J9O'GN 99
= ' -' i "i;' ' "i;' i-' iKPGG+
XP P'i N'NH G'Q9 JG KMGUPN'GN %O' NH' 99
JN'2'I JGN'NP99'T J SI 'IT'NH JQHNG' P 9N8
O 'HP%G'i'IMI' i' H I'LP 7PKN IG' M N+
HMN'UI IQG i' NH i' 99N JKH'NHP'QMNP+
4 J%P'M'7M ' 9'MIO'T J'GPIGP'NHP'GN IQG'8
XH '7IQP %O'N 'I MUP'I MI'H G'9M 7J9'I JG K+
X J9O'O M 'HPM %i'O i'MIO'M99'NHP'Q OG'N 'HPM UPi8
JN'AP IQ'L9MT%O'JL i'AP7 P'T J'N IP+
"P99' i9T'OMiKPNH'MN'G 'HM GH'M'KH IP'
: O'G NH'2'KM P'i N'7 'T J+

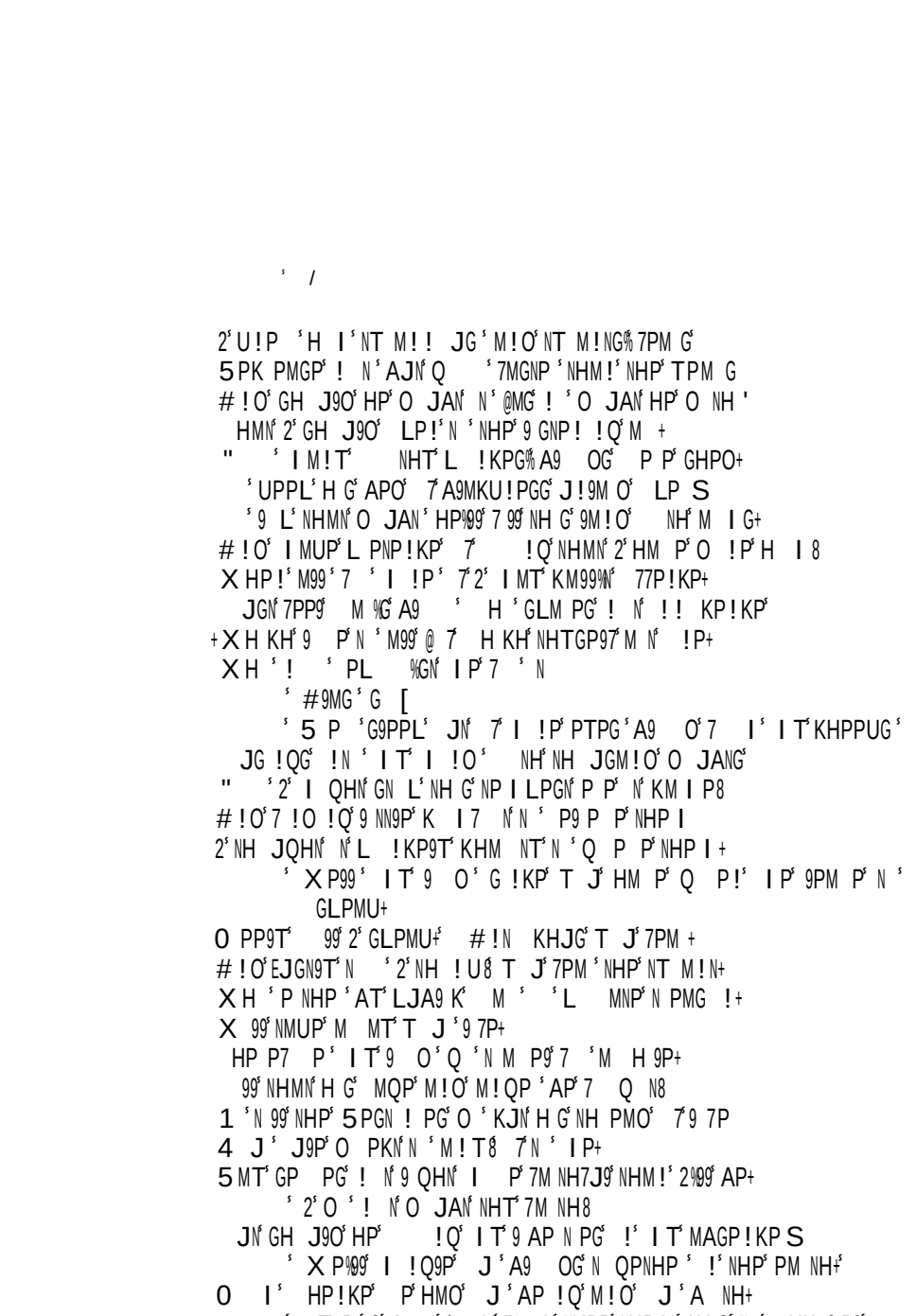
' HP'PM 9T'PO N iG Q P'NHPGP'9 IPG K i7JGPO9T S
6'2' M N'NHP'GHM LPGN'A9 '@#iN KHJG
K i IQ'MO KP8 PMO'NHP'K IK9JG i'NHPi+R
HP'IM I P' 7NHP'KHM MKNP' MG P OPIN9T I GNMUPi'7 'NLM N' 7NHP'O M9 QJP+
))

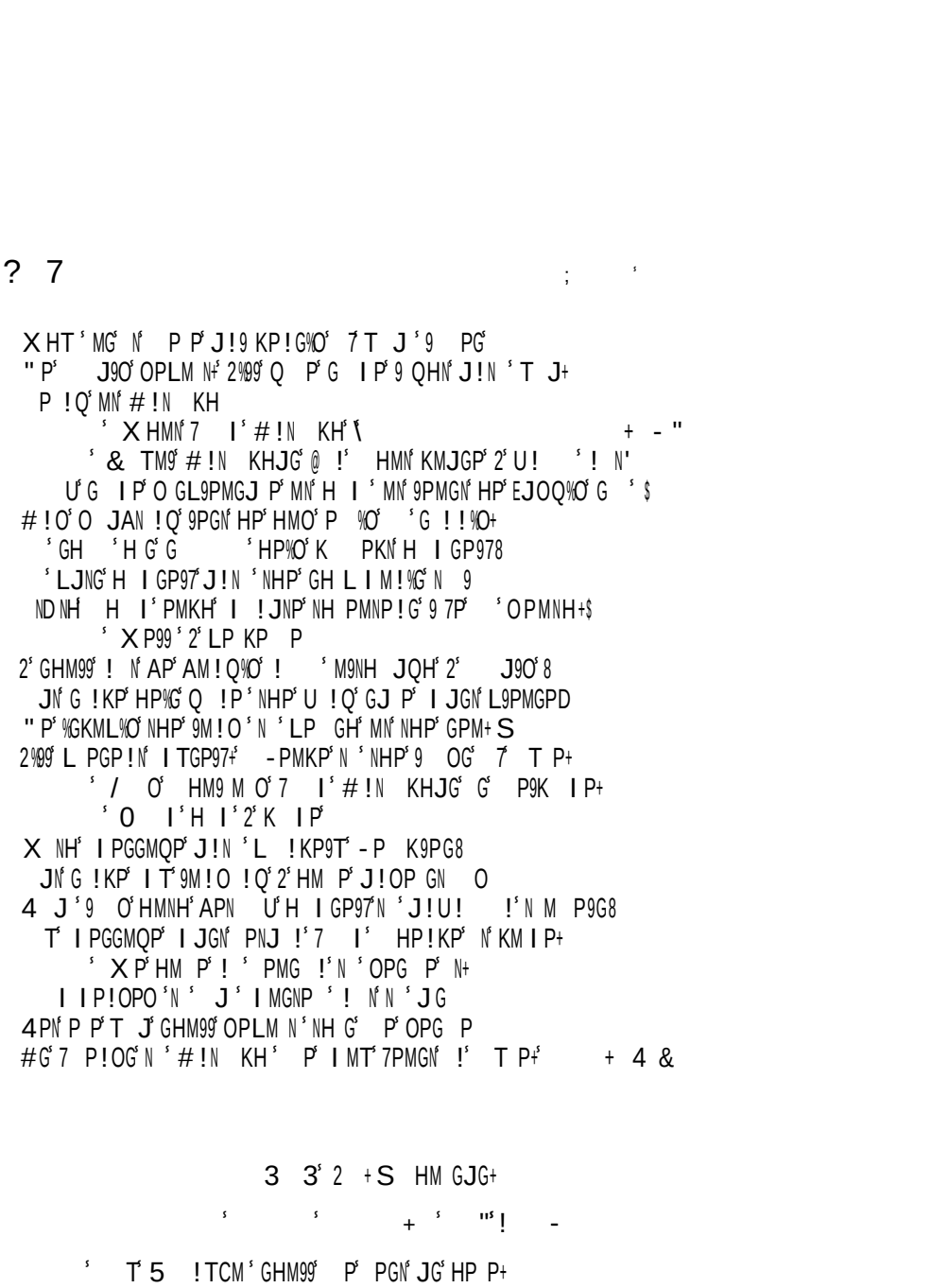
; ')

' - IKP'-p K9PG'N JKH'i N'JL i'NT'9 7P+
O 'NHMN%G'MI'M N K9P' NH i' J'9M +
#G'OMIQP JG'MG'NHP$ PGN+' 4 J'N IP%G'PWL %O'8
3 NHP'PWL JIO'I ' 'PKP P'T J'GPINPIKP+
' : PM'U IQ
OP '9 P'N 'HPM'NHP'G IG'NHPT'9 P'N 'MKN8
% J9O'%A M O'T J GP97'N 'IPM'7 'I P'N 'NP99' N+
XH 'HMNH'M'A U' 7M99'NHMN' I IM KHG'O
"P%G I P'GPKJ P'N 'UPPL' N'GHJN'NHMI'GH i'
O ' KP' PLPMNPO' G 9 UP'NHP' MIO% IQ' IO
9 G'OJJGN' i' NHP G% PTPG'N 'GL PMO' NGP97
#IO'TPN'NHP'PIO' 7M99' G A JQHN'NHJG'OPM +
HP'A PMNH' G Q IP'MIO'NHP'G P'PTPG'GPP'K9PM
'GN L'NHP'M ' J9O'HJ N'NHPI+' HP'A9 IO' I 9P'KMGNG
LL%O'H 99G'N M O'HPM PI'N 'NP99'NHP'PM NH' G'NH IQ%O'F
T'I M!%G' LL PGG i8 MIO'NHP'L ' 'I'O NH'O P'7 %+'
2"IQG'M P'PM NH%G'Q OG' i' KP'NHP '9M %G'NHP ' 998
#IO' 7'? P'GN MT' H 'OM PG'GMT'? P'O NH' 99'\
2N'G PI JQH'T J'UI 8 MIO' N'G 7N+
XHMN'AP IQ'I P'UI i'Q G GP'N 'S
#99'9 P'NHP' IA'NHMN'NHP '7 GN'AP iQ'A PO+
HPI'Q P'IT'N IQJP'9 UP'9PM P'N '9 P'IT'HPMO+
' "PM PI' NHMN'2' HMO' NHT'HPMO[HP' HMG'7 JIO' NHP
T P
I PMI IQ[+
JN'2' 99'Q9 CP' NH' H I+' = -" 9 4 JIQ' L IKP' 7
H JQH'AT'NHP'NPI ' 7 J'GN KN'PO KN+
4 J'PWL G N i'I G iNP L PN iQ
XP'I QHN'L KPPO'N 'KMIKPQ 7T J'OMTG.'
4PN'H LP'GJKKPPO IQ'7 I'G '7M 'M'N PP'
#G'T J'7M 'GP97'O NH'NJIP'JG NHP GP'
O NT'OMTG9 IQP' P'O' PGL NP'T J+
27'AT' H KH'N I P' J'GPK PN'AP'JIO IP+
H G'I P KT'GH G P%99E T' i'GJKH'M'G i'
#IO'JIN 9'NHPI'T J'PINP NM i'GHM99'AP+

' "P'HMNH'7 JIO'NHP'IPMI IQ'7 'NHP' H KH' P'IPMI'
'HM P'H G'HPMO'8
"P'IJGN'I N'9 P'N'NJILPN'7 NH' IT' I7MI T+
'NP99'NHP' 9O'#iN KHJG'O NH'G i'
2i'GJKH'M'9 MNHPO'IMIIP

' -' ,"" 2 2 'GNHP'MIK'PIN' PMO IQ' H KH'-P KT'GJQQPGNPO' IPMINS17'M99
H 'HM P'PGGMTPO'TPN+
D NPP PIG'PMOG'8 0
' HP']JMN G'(% "' ;'NHP'7 '@ '(("
=4$ "' HP' Q IN9'K L PG'%'





#9NH JQH'NHPT'QM P'NHP 'K PMNJ PG' i'MAJiOMiKP+
#G'H JGPG'M P'OP7 9%O'7 ' MiN' 7JGP+
HPT'M P'i 'GNM %O'7 ' MiN' 7PWP K GP8
H GP'LM9MNPG' H 'i N'JGPO'N 'HJiQP %G'GM J D
JGN'HM P'i piN iG'N 'OP9 QHN'NHP'MMGNP
X J9O'i 'AP'Q9MO' 7A PMO'MiO'APQ'7 ' N8
H GP'l NHP G' H 'N 'i JC9P'JL'NHP 'AMAPG+
H JQHN'iMJQHN'N 'KJ JG'M P'PMOT'i '
'PMN'N7 GP'9 NN9P'OM 9 iQG' H l'NHPT'9 %O 8
'GHM L'M P'HJiQP %G'NPPNH''NHMN'lMi'MiO' 7P'
5M# '9 NG' H '7 GN'GHM99'O P'N '9PiQNHPi'9 7P
"P P'GMMiOG'M'9 O'MiO'NHP P'M'9MOT' ppL iQ8
"P P'lMiT'G iU'TPN'NH GP' H KH'GPP'NHPl'7M99'
"M P'GKM KP'GN PiQNH'9P7N'Q P'NHPl'AJ M9+
2G'i N'NH G'N JP'\
i$ 1J'KHPPUG'MiO'H 99 'pTPG'O ' NipGG N+
' 1'9PN'NH GP'K N PG'G '9M QP9T'NMGNP+
#iO'HP'L GLP N PG'G '9M QP9T'NMGNP+
X NH'NHP 'GJLP 79J JG NG'HPM'NHPGP'NPM G'
HP'l GP T' 7 HM GJG'lMT'AP'NHP G+

' '/ O+

XHP P%G'NHP'9 O'Q p i '\
' "P P+
LPMU' JN'NHT'G G' H KH'NH J'A iQ%GN'i'HMGNP+
O 'K l7 N'G'N '7M'7 'JG'N 'PWLPKN+
?i "' XP'HM P'OPGK PO'JL i' J'ip QHA iQ'GH P'
#'L N9T'GM 9' 7'GH LG'lMUP'H NHP M O+
'?'NH JQHN'MG'lJKH+
lip'G 'ip p'K lPG'AJN'A iDQG'Mi'HP +
HMN'lMT'GJKKPPO'MG'H G'iHP N 8

p'9 UP'M'APMK i'7 %O'N'MlMCP'T J'PTPG+
XP'HM P'HPM O'T J'l GP PG'MG'7M'MG' TP
#iO'GPPi'NHP'OPG 9MN i' 7T J'GN PPNG8
'K lP P'N'MOO'G 'N'T J'NPM G+
JN'N ' P9 P P'NHPl' 7'NHP 'HPM T'9 MO8
#iO'NHPGP' J'GH LG'@T J'HMLL 9T' lMT'NH iU'
P'9 UP'NHP' EMi'H GP' M GNJ77%OD' NH i+
X NH'A9 OT' P G'PWLPKN iQ' P NH
P'GN %O' NH'K i'N 'lMUP'T J'ippOT'A PMO+
#iO'Q P'NHPl'9 7P' H l'HJlQP'GNM %O'HM97'OPMO+
-' HP'Q OG' 7':ppKP'L NPKN'T J[
#iO' P' 99'L MT'7 'T J+
GP'2'L MT'T J' GP8
XP'O'i N'9 U'7 'P P piKP'AJN'7 '9 P+
#iO'HM A J MQP'7 ' J'GP97' J'GH LG'MiO' lPi+
' HP' H KH' HPi'MiT'GHM99'i N'Q MN 7T+
1 'LMT'T J' NH'JiNHMiUJ9ipGG' i'NH JQHN+
P' N' J' PG' J'KH 9O pi' ' J GP9 PG+
HP'KJ GP' 7HPM pi'MiO' lPi'GJKKPPO'NHP 'P 9G'
99' HPi'@NHP' H KH'?'H LP'GHM99'ipWP'AP'GPPi +
4 J'Q MKP'G' P9K lP'N ' J'N i'MiO'JG+
', ' XH KH' P9K lP' P99'MKKPLN8 7PMGN'HP P'M H 9P'
iN 9' J'GNM G'NHMN'7 i'9piO'JG'M'G l 9P+ = 4 &

% XP'Q P'NH G "'4$ 8'9 NP M99T'MG i'NHP' Q iM9+
F9 $' 2i'NHP' 9O'K L PG'$
F4 %'8 ' 2i'NHP' 9O'K L PG'% G '
1/+ 22+

' XPP' 5'7 ŃJ!PG' PJJMŲ' Ń ' I T'OPG PG'2' K J9O' GH'
Ń ' I MUP' !P' ŃHP P+
(I- ' 1 ' G ' ŃH !QG' I JGŃ' AP' MG' ŃHPT' I MT'8 M!O' HMŃ' M'
I M!' KM!! Ń' QPŃ' HP' I MT'9M 7J99T'OPMŲ'7 SH G' 7P%G G J9+

B ' 2!'O GHP I P!' " 2 3'&,' '

%' > - ' " P9L ' I MGŃP ' HP9L8 HP P%G' M' 7 GH' HM!QG' !' ŃHP'
!PŃ' 9 UP' M' L ' I M!%G QHŃ' !' ŃHP' 9M 8 %Ń 99' HM O9T' K I P'
JŃ#' " M[A ŃG' ! '%Ń ' %Ń G' K I P' MŃ' 9MGŃ ' M!O' %Ń G' ŃJ !%O' N ' M'
JGŃT' M I J [
' #!' M I J ' 7 P!OG[2' L MT' T J' 9P%' I P' GPP' N#'
HM!UG' O ŃJ!P' TPŃ' ŃHMŃ' M7ŃP ' Ų99' I T' K GGPG+
H J'Q %GŃ I P' G I P HMŃ' Ń ' PLM ' I TGP978
#!O' ŃH JQH' Ń' MG' I !P' ! ' LM Ń' 7' I !P' HP ŃMQP'
X H KH' I T' OPMO' 7MŃHP ' O O' AP] JPMŃH' Ń ' I P+
X ŃH' ŃH G' GŃ KŃ' KHM QP' @P P!' MG' HP' 9P7Ń' H G' 9 7P
6' PPL' Ń' I T'-P K9PG ' Ń' HMŃH' APP!' M' GH P9O'
% WŃ' I P' M!O' OPMŃH' @M!O' L ! ŃPO' Ń ' ŃH G' A MKP 8
O ' ŃHMŃ' Ń' GM %O' I P ' UPPL' Ń8 !' 9 UP' !PKPGG ŃT+
HP' H KH' ŃHP' Q OG' L ŃPKŃ' ŃHPP'7 I [%Ń' I MT' OP7P ! O' ŃHPP+R' D
2Ń' UPL Ń' HP P' 2' UPLŃ' ' 2' G ' OPM 9T' 9 %O' Ń8
99' ŃHP' JQH' GPMG ' ŃHMŃ' GLM P' ! Ń' M!' T I M!
U' Ń' !' MQP ' ŃH JQH' KM9 I %O' ŃHPT% P' Q P!' Ń' MQM !
2' ŃHM!U' ŃHPP' 7 ' Ń8 I T' GH L MKU' ! ' %G ' ! ' 99+
!KP' 2' HM P' HP P' I T' 7MŃHP %G Q 7Ń' !' H G' 99+
> - ' X HMŃ' ! PM!' T J' G '
' APQ' 7' T J' U !O' 7 P!OG ' ŃH G' K MŃ' 7' ŃH+
O ' Ń' MG' G I PŃ I P' ŃM QPŃ' Ń ' M' U !Q8
2' U! ' Ń' AT' ŃH G' I M U8 HP' 9 %O' I P' OPM 9T+
#!O' 7 ' H G' GMUP' 2' GH' ŃHP' HM !Q' 7 Ń8
#!O' ŃHMŃ' T J%O' QJ OP' I P' N ' T J ' G P P Q!%G K J N+
X HP P' ŃH' Ń' 2' I MT' MLLPM ' M' QP!Ń9P I M!8
#!O' 7' HMŃ' P P ' I T' 9 ' 7 ŃJ!P%G APŃNP +
2%99' LMT' T J ' A J!Ń PG8 Ń 99' ŃHP!' PGŃ' T J ' OPAŃ +
HP' O' <&!'" ' $' ' 4 3&
' 2%99' GH ' ŃHP' ŃJP' 2' HM P' A !P' !' M I G+
> - ' X HT' O%TP' ŃMUP' Ń' M!O' ŃHP' Q OG' Q P' ŃHPP' Q O'
! %Ń+
%' > - ' #T' AJŃ' HM U' T J' I T' 7 P!O8 %Ń MG' P' ŃHMŃ' I MOP'
JL' ŃH G' QM I P!' Ń' ŃH JQH' ŃHP' JQH' GPM I G' 7' ŃHP' MŃP '
ŃHP P' M P' KP ŃM !' K !O 9P I P!ŃG' KP ŃM !' M 9G#' 2' H LP' G '
7'T J' ŃH P' T J%99' P9!P I AP' 7 I' HP!KP' T J' HMO' Ń+
P9 P P' Ń' 2' 998
T' T J' 7J ŃHP M!KP' 2' M I' K9 ŃH%O' !' GŃPP98
!O' GL ŃP' 7' M99' ŃHP' JLŃJ P' 7' ŃHP' GPM
H G' EP P9' H 9OG' H G' A O !QF' !' I T' M I 8
!Ń' ŃHT' M9JP' 2' 99' I J!Ń' I TGP97
L !' M' K J GP ' H GP' OP9 QHŃ7J9' GŃPLG'
HM99' I MUP' ŃHP' QMCP ' E T' Ń ' GPP' H I ' Ń PMO+ S
1!9T' I T' 7 P!O ' 2' TPŃ' M I ' J!L OPO'
1'7' M' LM ' 7' AMGPG+D
%' > - ' X P%99' GJ P' L OP' ŃH J' GHM9Ń' HM P' I T' APGŃ'
Q !' Ń ' I MUP' ŃHPP' M' LM 8 M!O' 2%99' A !Q' ŃHPP' Ń ' ŃHP' K J Ń'
I TGP97# +
' HP!' H ! J ' AP' AJŃ' ' Q M9' Ń ' I T' 99 ' = 4 &
H G' OMT' 2%99' GP' ' P9GP' MOO' 99' Ń ' 99+'

3 3' 22+S ' ,& ' 8 5'! ' .! $' " 3' !' '? - - '
' 1 ! ' 5' ' -" ' !.' $'.! ' ' ' ! ' ! '.' ' !Q'
"' - !KPGG+F
' ' / OG' ' "' # ŃNP! OM! ŃG+'

7 ' # P' ŃHP' U! QHŃG' PMOT' Ń ' APQ !' ' ŃHP' Ń J I LH' \

' X P' KM!! Ń' MŃNP I LL' Ń ' PWL9M !' ŃH G+' HP P' M P' I P' OO8PG' !' ŃH G' L9MT' ŃHM!'
ŃHMŃ' 7'# !Ń KHJG+
D HP' 9O' K L PG' PMO S
' 6' HP' H KH' HP' Q OG' L ŃPKŃ' ŃHPP M <' I MT' OP7P!O' ŃHPP+R
\' 3 ' HP' 9O' K L PG' 2'

3 3 222+ S ! .'7 % N& . ,

! QHNG. ! 3

7 ! QHNG
GMT T J M P P9K I P P GJLP 79J JG+
L9MKP JL !' NHP 9J I P 7 T J OPPOG+
#G !' M N N9P LMQP T J NH !' M IG+
X P P I P NHM!' T J PWLPKN I P NHM! %G 7 N+
!KP P P T NH !' GH K I I P!OG NGP97+
- PLM P 7 I NH 7 I NH APK I PG M 7PMGN
4 J M P L !KPG M!O I T QJPGNG+
JN a$ J I T U! QHN M!O QJPGN8
H I NH G PMNH 7 KN T 2 Q P
#!O K !' T J U !Q 7 NH G OMT%G HMLL !PGG+
% G I P AT 7 NJ!P 9MOT NHM!' AT I P N
7 M99 N AT HMN T J 99 NHP OMT G T J G 8
#!O HP P 2 H LP G ! !P NHMN P! PG N+
2!7 M I !Q M!' M N GN M N HMNH NHJG OPK PPO+
I MUP G I P Q O AJN NHP G N PWKPPO8
#!O T J% P HP 9MA J %O GKH 9M I P]JPP!' % NHP 7PMGN
@O OMJQHNP G T J M P HP P NMUP T J L9MKP
M GHM9 NHP PGN MG NHPT OPGP P NHP Q MKP+
3 - X P M P H ! J %O I JKH AT Q O I ! OPG
7 4 J L PGP!KP Q9MOG J OMTG8 H ! J P 9 P+
0 H HMNPG H ! J HMNPG NHP Q OG MA P $
E - T !OP G T J L9MKP+
I P NHP G I P 7 N+
2 P; 3 ; !NP!O ! N G 8 7 P M P QP!N9P I P!+
HMN ! P NHP ! J HPM NG ! JN M O PTPG+
3! T NHP Q PMN ! O NHP 9 OPGL GP+
4 J M P QHN K J NP JG U! QHNG+
7 N G G N+
T ? P 2 !OP NHMN G U !Q 7 NH JQHNG+
HPGP KMNPG PG GN I P HP ! N NH JQHN JL !+D
T ?J! NHMN G]JPP!' 7 I M MQP+
#99 M!OG NHMN 2 PMN O GPP I J!GM J T+
X GH !Q H I I PMN GJ P HP%G M QM99M!N QP!N9P I M!+
7 " P%G AJN M K J!N T QP!N9P I M!8 HMG O !P ! I P
HM!' NHP U! QHNG HM P O !P8 HMG A UP!' M GNM77+
1 G 8 G 9PN N LMGG+
I PDHP GPP I G 9 UP O M I !O N Q9MGG+
4 !' U !Q%G N I P 9 UP N I T 7MNHP %G L KNJ P+
X H KH NP99G I P !' NHMN Q9 T !KP HP MG 8
" MO L !KPG G N 9 UP GNM G MA JN H G NH !P+
#!O HP NHP GJ!' 7 NHP I N P P P!KP+
!P NHMN APHP9O H I AJN 9 UP 9PGGP 9 QHNG+
5 O M 9 NHP K !G N H G GJL P I MKT8
XHP PD ! H G G !%G 9 UP M Q9 I !' NHP ! QHN+
HP H KH HMNH 7 P !' OM U!PGG ! !P !' 9 QHN8
XHP PAT 2 GPP NHMN I P%G NHP U !Q 7 I P!+
0 HP%G NHP LM P!N M!O HP G NHP Q M P+
#!O Q PG NHP I HMN HP 99 ! N HMN NHPT K M P+
7 X HMN M P T J I P T U! QHNG \
2 3 X H KM!' AP NHP !' NH G TM9 L PGP!KP \
7 " P P NH M KJL NHMN%G GN %O FJ!N NHP A I +
@#G T J O 9 P 7 99 N T J I GN PGG%9 LG
XP O !U NH G HPM9NH N T J+
3 - XP NHM!U T J Q MKP+
7 4PN LMJGP M H 9P8 T !' U! QHN O NH G N N I P9M!_
KH 9T

H G GLPPKH G JGJM99T MGG Q!PO N - P K9PG 8 M!O !' NHP GPK !O 9 !P J!OP NH G M M!QP I P!N P PMO' B%$ =' NH JQHN JL !+R' JN NH JQH JN NHP P I M !OP 7 NHP GKP!P - P K9PG Q PG ! !N I MN !' 7 M GJOOP!' MNNMKH I P!N N NHP L !KPGG HP N !Q ' !' NHP K !N M T G P OP!N9T I PO N N PMN H I NH I M UPO MNNP!N !' M!O N APGN H G NH JQHNG JL !' H I M9 I GN MG PWK9JG P9T MG H G OMJQHNP 27 P 9PM P NHP 9O PMO !Q M!O NHP 9O !O KMN !' 7 NHP GLPMUP I ! OPG ! OP G NHMN HP KM!! N PMN S 6 NHPGP KMNPG PG GN I P R S M9NH JQH HP @ - P K9PG G 6 ! N NH JQHN JL !+R H G G M!' MNNP I LN O GQJ GP NHP KMJGP 7 H G G 9 K NJOP P P!N H I GP97 2N I JGN AP AGP PO NHMN NHP GJKKPPO !Q GLPPKHPG 7 I ! OPG HM GM M!O - P K9PG M P M99 N AP PKP PO MG G 9 9]J PG 2!' NHP GPK !O GLPPKH I ! OPG K !N !JPG NHP OPM 7 6 HP ! N NH JQHN JL ! R AT MNNP I LN !Q N OPL PK MNP - P K9PG S6 " P%G AJN M K J!N T QP!N9P I M!+R
F &$ S HP PMG+
4 G HP 7 GN]JM N HMG % ;' NHP GJAGP]JP!N K L PG % G SPMKH NHP GM I P O+

#G 7 NHP P!NP NM ! I P!N !' J K J N
" MO ! N M GH I QHN K J!NP M 9 H G NH+
NP N ! N T J HM GM \
X HMN G%N I P I T 7MNHP \
7 1 MNNP!O I T OMJQHNP 8
- !KPG !' NH G GH J9O 9 P 9 UP Q OG MA P+
XH 7 PP9T Q P N P P T !P NHMN K I PG
H ! J NHP I
#!O L !KPG ! N O !Q G M P 9 UP N Q!MNG +
XH KH I MUP M G J!O AJN U 99%O M P !OP %O MN+
HP P7 P N I MUP H G P!N M!KP I P G PPN+
" P P GMT P O !U NH G GNM!O !Q A 9 7 !P N H I +
#9MG I T 7MNHP N AP7 NG ! N I P
!N M GN M!QP U! QHN N AP G A 9O8
" P I MT I T L 77P NMUP 7 M!' 77P!KP+
!KP I P!' NMUP I P!%G Q 7NG 7 I LJOP!KP+
7 " [O MG 2 A O T J T J%99 I P I P P9GP+
AT NHP Q OG HP K J9O ! N L9PMGP I P APNNP +
+ - "
7 #!O 7J NHP NP99 H I P OPG P N U! 7 H I +
17 HP!KP HP G H G !M I P M!O LM P!NMQP+
HP U !Q I T 7MNHP G HMNH O J!U N T J+
2 NHM!U H I +
X GH !Q N G I JKH A9 O J!N T J 9 7P+
2 NHM!U A NH H I M!O T J M!O L9POQP H I 7 PP9T+
#!O 7J NHP HP OPG PG N U! 7 T J+
17 HP!KP T J M P T J !M I P M!O LM P!NMQP+
#' QP!N9P I M!' 7 T P S@ I T !M I P - P K9PG
T POJKMN !' HMG APP!' !' M NG M!O M I G8
XH 9 U !Q 7 MO P!NJ PG !' NHP 9O+
X MG AT NHP JQH GPMG P7N 7 GH LG M!O I P!+
#!O M7NP GH L MKU O P!' JL !' NH G GH P+
" P NHM!UG T J Q MKP8 !M I PG H I GP97 - P K9PG
#' QP!N9P I M!' 7 T P H !9T AT
G7 NJ!P 7 NHP GPM HMG APP!' AP P7N
17 GH LG M!O I P!' M!O KMGN JL !' NH G GH P+D
7 AT NHPD OG 2 L NT H G I G7 NJ!P+
#!O 99 M MUP H I 7 I H G I P9M!KH 9T+
I P QP!N9P I P!' P G N 9 !Q !' N 79PG+
#!O MGNP NHP N I P H KH 9 UG 7 NHP P P9G+
3 P!' !' T J M I J G MG T J M P MOO PGG%O+
X 99 P T P99 APK I P M G 9O P %G OM!KP F
2' 99 ! N HM P PWKJGP NH GMT !Q NH G
/ JO I JG K G N HM GH 7 9MO PG% HPMOG8
!KP NHPT 9 P I P!' !' M I G MG P99 MG APOG+
+ ! QHNG "
NH G MG P99 MGU%O 8 %N MG P99 LP 7 I %O+
I P G 8 HP P G M 9MOT NHMN M!NG A PMNH !Q N +
#!O 2 HM P 7NP!' HPM O T J U! QHNG 7 T P
P PWKP99P!N !' I MU !Q 9MO PG N L8
#!O NHMN NHP I PMGJ PG M P MG PWKP99P!N+
2!' NH GP NHMN L MKN GP NHP I NHPT M P I T 9 O+
7 1 NHMN%G MG I JKH MG T J J9O AP OP! PO+
+ ! QHNG "' / MO PG " & '
17 T J 7M K J NPGT+S !K9MGL J!K9MGL8
HM!UG QP!N9P I P!' N M99# M99 HM P O !P P99+
JN T J NHP APGN+' + !' :' - MQPG M!O 9 QHNG N '
K !OJKN
HPGP U! QHNG J!N NHP GP P MG 9 OQ !QG 4 J G G
XP HM P Q P!' OP N AP !PWN J !+
' M I MN T J Q MKP%G L9PMGJ P+
7 - !KPG N G N 9MNP N NM9U 79 P

Y 2!' NHP 9O PO N !G NHP P G M M!N 7 K HP P!KP !' G I P LM NG 7 N9 G GLPPKH
' X H NP NH !UG M'9 !P HMG APP!' I NNPO' XP Q P NHP LMGGMQP MG N GNM!OG !' NHP M J I PO N !G
F M9 !P GMTG 6 HP OM!KP HP P !N OJKPO G NHJG OPGK APO !' M!' M!K P!N Y5 M9 QJP MQM !GN NHP #AJGP 75M!K !Q%@A9MKU 9PNNP ! ' OMNP[S $

Y HP P G M OM!KP KM %O H M
XH KH E T O NH NPGN 7T 8
#! NHP KM99PO - T KUP
XH KH M 9 UP 7PMNG O NH N T+
O I P!' !' M I J QPGNJ PG I MOP+
#!O 9PML%O NHMN G NHPT I QHN+
XHP!' !PPO P]J PG AP I P L I LN
2!' LJA9 K PM9 N 7 QHN+%R

0 NHMN%G NHP I M U 2 U! T J 9P P9 M N
HP P7 P PMKH !P APNMUP H I N H G PGN8
I M99 7 GLPPO !Q O NHP APGN+ + 4 &

3 3 2 +S T P+

% ("

3GKM!PG U! NH G 7 I P
#!N KHJG 7 I !KPGN 9 %O ! N 7 PP8
0 H KH NHP I GN H QH Q OG ! N I !O !Q 9 !QP
NHH 9O NHP P!QPM!KP NHMN NHPT HMO !GN P+
5JP N NH G HP ! JG KML NM9 77P!KP8
3 P! !NHP HP QHN M!O L OP 7 M99 H G Q9 T
XHP!HP MG GPMNPO !M KHM N 7
#! !PGN I MA9P M9JP M!O H G OMJQHNP
X NH H I M7 P7 I HPM P! KM I P M!O GH P99%O JL
H GP A O PG P P!N 9 MNH !Q8 7 NHPT G GNJ!U+
HMN M99 NH GP PTPG MO %O NHP I D P P NHP 7M99+
K ! ! NHP HM!O GH J9O Q P NHP I AJ M9+
- % MG P T GN M!QP+
!O TPN AJN EJGN KP8 7 NH JQH
H G U !Q P P Q PMN H G Q PMN!PGG MG ! QJM O
AM HPM %!%G GHM7N AJN G !HMO H G P M O+
- % G P T N JP+

/ OG+

?! " PP ! N M I M! ! L MNP K !7P P!KP+
1 K J!K 9 HMNH PGLPKN NH H I AJN HP+
% ?! " 2N GHM99 ! 9 !QP Q P P NH JN PL 7+
) ?! " # !O KJ G%O AP HP NHMN 99 ! N GPK !O N+
2 ?! " O 99 I P NHP ! 9 O " P9 KM!P M O+
X NH I P \ M!O P9K I P HMLLT OMT I T 9 OG+
?! " ! NHMN J Q P7G M P GP!N NHP N L+
#!O ! MN 9P!QNH NHPT P 79 NHP AM!UG+
4 J Q P7G 7 HMN \ !Q ! N T J L !KP T J
9 P+ +
?! " X !Q ! N T J GP97 NHP! ! A9P " P9 KM!P8
JN 7 NHP L !KP O 9 P 9PN JG GM9JNP H I+
1 U! HMN Q J!O%G I MOP HMLLT AT H G A PMNH+
27 !NHP 9O HP 9 P P%99 GPPU H I JN8
27 !H G Q M P HP PGN P%99 7 !O H I NHP P8
#!O AP PG 9 %O HP 9 PG N Q P !JG+
1 OPMO Q PG KMJGP N I J !H G 7J!P M9
#!O 9PM PG JG N J 7 PP P9PKN !+
%?! " XH GP OPMNH%G !OPPO NHP GN !QPGN !J
KP!GJ P
#!O U! !Q NH G U !QO I G NH JN M HPMO
@/ UP Q O9T AJ 9O !QG 9P7N NH JN M 1 7
!7M99 N J ! a T J ! A9P GP97+
HMN APGN U! %GN H N J9P M!O H N P Q!+
XP NHJG GJA I N J!N S J G P P Q!+
-/ P ! A9P " P9 KM!P+
O H ! J %G KMJGP F 7 APM T J GJ77 MQPG
27 NHMN T J 9 P L !KP -P K9PG 7 APM +
MUP 2 T J GH 2 9PML !N NHP GPMG D
XHP P%G H J 9T N JA9P 7 M I !JNP%G PMGP+
#N P9 P I !NH 9 !QP 9PN I P P!N PMN T J
7 APM NHP MAGP!KP 7 T J U !Q 8
27 ! H KH N I P PWL %O HP ! N PNJ !
2 GHM99 NH MQPO LMN P!KP APM T J T UP+
JN 7 2 KM!! N ! T J N NH G 9 P+
: GPM KH 9 UP ! A9PG 9 UP ! A9P GJAEPKNG+
#!O ! T J GPM KH GLP!O T J MO P!NJ JG NH8
XH I 7 T J 7 !O M!O ! J!N PNJ !+
4 J GHM99 9 UP O M I !OG G N MA JN H G K !+
2 ?! " O GO I HP%G M 7 9 NHMN 99 ! N T P9O8

$ # !P99 LN KM9 K !GN JKN ! SM99 NH GP PTPG 8$ ($ MO PO NHP I +
% S L ! ! X P AP9 P P GMTG NHP GLPMUP NHMN NHP L AMA 9 NT 7 NHP
OPMNH 7 -P K9PG G NHP GN !QPGN " P NHP! L KPPOG N MGGJ I P NHMN NHP U !QO I
% NH JN M HPMO NHP M!K P!N PMO !QG H KH P 7 99 +

#!O G !KP 9 O " P9 KM!P P!E !PNH JG+
XP NH J N M P9G 99 P!OPM J N F
HP! T J 9 P JG P T J M!O P%99 K9MGL HM!OG8
XHP! LPP G NHJG U! N M U !QO I P P GNM!OG+ + 4 &

3 3 +S-P!NML 9 G+

" 3 # ! QHNG

3 : O I N NHP Q O I ! OPG+
7 ! QHNG 7 I T OMJQHNP NH G 2 9PN T J U! +
HMN 7 NH G N P9 P I !NH GHP 99 ! N J!OP NMUP
#I M PO 9 7P8
" P PMG !N HP GP97 G !9T U! !+
XH KH 7 I HP GP97 AT ! I PM!G KM! 2 QPN+
% 3 MT P ! N QPN MKKPGG N HP I T 9 O \
7 %OM NH AT ! I PM!G8 GHP HMNH G GN KN9T N PO HP
HP KHM I AP NHMN N G I L GG A9P+
1!P N P9 P I !G I P GHP%99 PM 5 M!M%G 9 P T 8
H G AT NHP PTP 7 T!NH M HMNH GHP %O+
#!O !HP Q !H ! J 99 ! N A PMU+
)3 / MNH N A O 7M P P99 P NMUP J 9PM PG+
+ 4 &
7
HPT% P P99 OPGLMNKH%O 8 ! N I T OMJQHNP %G 9PNNP
HP NP99G I P HP P GHP%99 PO NHP GN M!QP U! QHN+
1 !P P I P N P ! OMT ! 9 QHN+
% G P99 I GN PGG T J KH KP MQ PPG NH I !P8
2 9 UP NHMN P99 S!MT H MAG 9JNP GHP%G ! %N+
N I !O !Q HPNHP 2 O G9 UP ! [
XP99 2 O K I I P!O HP KH KP+
#!O 99 ! 9 !QP HM P N AP OP9MT%O
7N HP P HP K I P G 2 I JGN O GGP I A9P N+

- 3&2 /3 +

#99 7 NJ!P N NHP Q O I ! OPG[
7 T J MG I JKH[2 M I APH 9OP!N T J+
O T J G PPN I JG K NH G 9MGN ! QHN 2 O
- NPGN N T PM G P P !P P APNNP 7PO
X N9 GJKH OP9 QHN7J9 L9PMG !Q HM I !T+
2N G T J Q MKP%G L9PMGJ P N K I I P!O8
N I T OPGP N+
7 T J M P I JG K$G I MGNP +
HP GN 7 M99 HP GKH 9M G I T Q O 9 O+
7 /PN I P MGU T J !P NH !Q+ XHMN O T J NH !U
17 I T OMJQHNP G \
#9 I GN NJ JG L !KPGG+
7 #!O GHP G 7M N G GHP ! N \
#G M 7M OMT !GJ I I P 8 !O JG 7M +
7 T OMJQHNP G NH !UG P T P99 7 T J8
#T G P99 NHMN T J I JGN AP HP I MGNP +
#!O GHP 99 AP T J GKH 9M 8 NHP P7 P 9 U N +
M I J! NHT 7 HP GKH 9 I MGNP +
7 HP NH !UG ! N G 8 LP JGP NH G N !Q P9GP+
X HMN%G HP P \
#9PNNP NHMN GHP 9 PG NHP U! QHN 7 T P \
% G NHP U !Q%G GJAN 9NT N HM P I T 9 7P+ + - "
1 GPPU ! N N P!N ML I P Q MK JG 9 O
#GN M!QP M!O O GN PGGPO QP!N9P I M!+
HMN !P P M I %O G H QH N 9 P T J OMJQHNP +
JN AP!N M99 77 KPG N H ! J HP +
7 H J HMGN AP NKH%O I T OMJQHNP M!O NH J M N
#99M !+
T NHP Q OG 2 HM P ! N8
P P O O NH JQHN 7 I !P 9P T 77P!KP8
!P P O O I T MKN !G TPN K I I P!KP
#OPPO I QHN QM !HP 9 P T J O GL9PMGJ P+

D HP Q !M9 HMG A2 +5a$KP L L GPO NH G OPK OPO M I P!O I P!N S
NHPT M P PWH NPO N 7 APM 7 6 H ! J %G KMJGP+R
D 4 % M9 !P L L GPO N PMO %
F HMG APP!MOOPO N NHP 9O PMO !Q+
1/+ 22+ 5

X NH T J 7 !P 7M!K PG]JM !N9T PKHP 8 F
X HMN%G OJ I A !GH + 2%99 L9M ! NH GLPPKH+

& (7 !2

- ! " !! $ 2 # N
NP!OM!NG8 PGGP!QP -$ $ ' -$ "" 3 1 -
- ! ! - !2- ! 3
/ OG ' ! ; 2 "$
" 3 V # - 6! -* - " - 0*
' 1 ! . $ " ,

!I1 T I M!T M OP !P M!O LM !7J9 LP KH +
1 -P K9PG NHP KM P7J9 GPM KH
T NHP 7 J LL G !Q K Q!PG F
X H KH NHP 9O N QPNHP E !G+
2G I MOP NH M99 OJP O 9 QP!KP+
HMN H GP M!O GM 9 M!O H QH PWLP!GP
M! GNPMO NHP]JPGN+ #N 9MGN 7 I T P
@OM I P M!G P !Q NHP I GN GN M!QP !]J P
NHP K J N 7U !Q I ! OPG
P 9PNNP G A JQHN8 NHP NP! NHPGP
#!N KHJG M!O H G OMJQHNP OPMO8
HP I P! 7 T JG !NHP HPMO
1 " P9 KM!JG J9O GPN !
HP K ! 7 T P AJN HP 99 ! !P
HP I JN !T HP NHP P HMGNPG N% LL PGG8
MTG N NHP I 7U !Q -P K9PG
I+P ! N H I P !N KP G W I !G+
" P APO P!N N NHP O I G+
X 99 NMUP NHP K !+ HP GJ I 7 NH G+
JQHN H NHP N -P!NML 9 G
4 M GHPO NHP PQ !G J!O+
#!O P P T !P cF K9MLG %QM!G J!O
6 1J HP MLLM P!N G M U !Q
X H O PM I %O H NH JQHN 7 GJKH M NH !Q \R
P7 HP I JGN HP!KP OPLM N N T P 8
" G]JPP! NH KH 9O I MUPG HP OPG P
@XH KH H GHM99 K GG \ M9 !Q N Q 8
@1 I N P M99 NHP O 9P M!O P
/TKH OM HP !J GP GHP NMUPG+
#!O G N GPM+ HP PGGP9 GHMUPG
1 ! PLNJ!P%G A 99 8 HM97 NHP 79 O
" MNH NHP UPP9 KJN8 AJN 7 NJ!P I $O F
M PG MQM ! NHP Q CC9PO ! NH
5 GQ QPG GJKH M NP I LPGN 7 NH+
HMN MG M OJKU 7 9 7P NHMN O PG+
JL M!O O ! NHP L GH L O PG+
HP 9MOT GH PUG M!O P99 M !PM
5 NH 7M99 ! N M M 9 NH HP 7PM 8
#!O HMN P!GJPG ! NH G%7P99 GN I +
HM99 7 NGP97 NGP97 LP 7 I 8
2 ! 99 P9MNP 8 MKN ! I MT
! P! P!N9T NHP PGN K ! PT
X H KH I QHN ! N HMN AT I P G N 9O+ S
2! T J I MQ !MN ! H 9O
H G GNMQP NHP GH L JL ! H GP OPKU
HP GPM N GG%O -P K9PG MLLPM G N GLPMU+ + 4

3 3 2+

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H J : O 7 NH G Q PMN MGN PAJUP NHPGP GJ QPG+
X H KH MGH A NH HPM P!M!O HP998 M!O NH J NHMN HMGN

NHP Q !M9+ 5TKP PMOG 5 $
SPUP JN+
F M9 !P GMTG 6 HP 9 OG U!PP9 N -P K9PG APKMJ EP NHPT M P ! 7 NHP
7 GN I P !7 I PO AT NH G 9PNNP NHMN HP G U !Q 7 T P+
SG 9 NM T+
F ! 3 - HP 9O K L PG HM P 3 -
D >! & ! 1 " NHP 9O K L PG+ 7 <9<_ -4< ; "7 6 . ! . & - !!"

7 [
7 M N NH J 9 PGN+
M N [
7 #T N M N +
3 P! ! H G NH MN @J!9PGG N AP M U !Q +
HMN KM99G I P N M N 2 PNJ ! NHP 9 P+
7 AT NHP Q OG 2 O MLL9MJO H G K J MQP+
+ - "
T MKN !G M P MG ! A9P MG I T NH JQHNG+
HMN !P P P9 GH%O 7 M AMGP OPGKP!N+
2 KM I P J!N T J K J N 7 H ! J %G KMJGP+
O ! N N AP M PAP9 N HP GNMNP8
#!O HP NHMN NHP GP MKK J!NG 7 I P+
H G G O GHM99 L P HP%G H ! J %G P!P I T+
7 [S
"P P K I PG I T OMJQHNP GHP KM! N!PGG N+

HP! MG T J M P MG NJ JG MG 7M +
&PG 9 P T J M!Q T 7MNHP 7 I T N !QJP
5 O P%P G 9 K N I T HM!O GJAGK AP
M!T GT99MA9P NHMN I MOP 9 P N T J\
X HT G GMT 7 T J HMO H NMUPG 77P!KP
#N NHMN J9O I MUP I P Q9MO \
7 4PM I GN PGG M P T J G LP P I LN T\
2 M I Q9MO 7 N NH M99 I T HPM N + - "
2%99 NM I P T J8 2%99 A !Q T J !GJAEPKN !+
X 99 T J ! N HM !Q I T K !GP!N APGN
4 J 9 P M!O T J M77PKN !G JL ! M GN M!QP \
@XH 7 MJQHN 2 U! +
MT AP ! KM! 2 NH !U NHP K !N M T+
#G Q PMN !A9 O MG 2 I TGP97+ + - "
HP P7 P HPM T J I GN PGG8 P NHP 7 M I P
4 J 99 N I !PSM!O T J G HPM T J
3 NHP AP J9%O AT I P 2 99 I MUP T JS
M!M!O 7P8
MT K I P T J HM!OG M!O 9 LG I JGN GPM9 N N
#!O AP !Q E !%O 2%99 NHJG T J H LPG OPGN T8S
#!O 7 M 7J NHP Q P7 S : O Q P T J E T[S
XHMN M P T J A NH L9PMG%O \
4PG 7 T J 9 P I P G +
3 P! MG I T 9 7P D A9 O NHMN 7 GNP G N+
7 XHMN M P T J A NH MQ PPO \
%! 4PG 7 N L9PMGP T J I MEPGNT+
7 2N L9PMGPNH I P G P99 NHMN 2%99 GPP T J PO
HP! NH %HMN HMGNP T J KM! QPN T J N APO+ + 4 &

) 6

!2 G9PPL TG9MUPO HMNH NHP JN 8
O !AJN G! PG NHP H JGP MA JN
MOP 9 JOP AT NHP %P 7PO A PMGN
17 NH G I GN L I L JG I M MQP 7PMGN+
HP KMN NH PT!P 7 AJ ! !Q K M9+
K JKHPG 7 I NHP I JGP%G H 9P8
#!O K KUPNG G !Q MN NHP P!%G I JNH
PD NHP A9 NHP 7 NHP O JNH+
;+ "T I P!HMNH A JQHN NHP A OP N APO+
XHP P AT NHP 9 GG 7 I M OP!HPMO
#AMAP G I J9OPO S P MNNP!N+
#!O N I P NHMN G G A P79T GLP!N

$! NHP 9O K L PG+ M9 !P PMOG S
6 3 P! MG I T 9 7P 5 A9 O R BK+
3 P! MG MT 9 7P 9 PG I T A9 O+ HP Q !M9 M!G P G K9PM P! JQH S2 9 P
T J P P! MG I T 9 7P NHMN 7 GNP G I T 9 7P+
J2&- (!& 2! NHP Q !M9 (!& !&-
> ! SAP7 P M GH N O GNM!KP 77+
547

MJ P GH J9O'AP'G 'K i p GMi" NF'LM i+
p iQ'NHP PN 'i N'K lLP99%O+
2'HP9O' N'p p
NJP'MiO'KJii iQ' p'pio lpiNG'Q PMNP'
HMi'i Ap9ipGG MiO' KHPG'KM p9PGG HP G'
27'NHP'GPM%G GN lMK'AP' %P KHM Q%O' NF'Q 9O+
2N'GM'Q O'K iGN M iN' 7O NJip'N'Ap9KHPG'JL i'JG+
%' ' 2N'G G 'lT'9 O+
" 'K9 GP'%N G'KMJ9U%O'MiO'A NJ l%O [+
5 O'NHP'GPM'KMGN''N'JL'\
7 '2'ip p'GM 'G 'HJQP'M'A 99 'G +
#G'N GG%O'N'JL i'GH P+
' X piKH'N' LPi8
7NS N'G lp99G l GN'G ppN9T' i'lT'GpiGP+
' #'OP9 KMNP' O J +
%' ' N'F N+
' #GP p'H N'lT'i GN 98 G SJL'
1'T J l GN'L NPiN'Q OG[HMN%G HP P'\M'K GP[
' ' GN'GN MiQP[
H JOPO' i'K9 NF' 7GNMNP[
M9 l%O'MiO'piN PMGJ %O' NH'7J99'AMQG' 7GL KPG[
#'LMGGL N'N '[#L 99 'LP 7PK'N lP
2i'NHP'KHM MKNP G2 9 ' "-'i&'i_';_ i
6'"P P2'Q P'N'JiOP GMiO'
@27PMP'NH G K 77 i'O P'M 9MiO
2'U iQ'-p K9PG'HM P9 GN
H G']JPPi' NF'M99' J'lJiOMiP'K GN+
XH'7iOG HP 'Q P'HP'AJ T iQ'
HP' MG'NHP'OMJQHNP' 7M'U iQ'
PG OPG'NH G N PMGJ P'7 'M 7PP
HP'Q OG P]J NP'H G'KHM NT[R

27'NH J'9 %GN'-P K9PG'NH J'HMGN'M'HPM N
HMN'P PI'K MKUG'7 ' PL H G'KHMiK%O'N i QHN+
%' ' GN'9 UP9T'G +
' MT'KP NM i9T'N i QHN8
O '9 U'H '7 PGH'GHP'9 UG[SD HPT' P P'N ' JQH

$' UI 9POQP+
' ' i' PMGJ P7 ' PMGJ P8S
6' 9P9T'NH J\ '" G-'ii $
O 'H I'NH J'9MA J %N'AT'NHT'79 QHN'N 'GHJI
#iO'TPN' JIi%GN M O'H I'GN 99+R

MU P'GH J9O'AP'G 'K i p GMi" NF'LM i+
p iQ'NHP PN 'i N'K lLP99%O+
2'HP9O' N'p p
NJP'MiO'KJii iQ' p'pio lpiNG'Q PMNP'
HMi'i Ap9ipGG MiO' KHPG'

O I GNP I N GNP I NHP A MNG M ! H GN9PG M!O
HP I MGNP KM99G M!O N PA9PG NHP K !7JG !+
? ! IP GMT T J L MTP G+
E X HMN I PM! T J\
? ! 27T J P]J P M 9 NN9P GLMKP 7 L MTP
2 Q M!N N L MT8 AJN AP ! N NPO JG+
O NHP Q OG M P]J KU 7 PM M!O 2 M I G !
O I T U 9 IP \
E X HT J U 9 IP \
? ! GMN G7T I T 9MOT+
E X HT GH J9O GHP HM P IP U 99%O \
MG 2 KM! P I P I AP AT I T NH
2 !P P O O HP HJ N ! M9 I T 9 7P 8
2 !P P GLMUP AMO O ! O O 9 NJ !+
M!T 9 !Q K PMNJ P AP9 P P IP 9M
2 !P P U 99%O M I JGP ! HJ N N 79T
2 NH G J!L 7 NMA9P P[
IP Q P IP T J 79 P G PMP NHP GPM I M NHP I +
X M9U NH / P ! !P8 NHP M %G]J KU NHP P+
#!O N L P KPG M!O GHM LP!G NHP GN I MKH
/P ! IP NMUP HP AT NHP M I M9U NH HP +
E 2 L MT J 8
2%99 ! N AP PM P T J 7T J GP M!N+
i IP K I P8
2 9 P NHP U !Q T J 7MNHP M!O T J GP97
X NH I P NHM! 7 P Q! HPM N X P P P T OMT
3WLPKN H I HP P HP! HP GHM99 K IP M!O 7 !O
1J LM MQ ! N M99 PL NG NHJG A9MGNPO+
P 99 PLP I N NHP A PMONH 7H G Q PIMN TMQP 8
9M IP A NH IT 9 O M!O IP NHMN$ P HM P NM#P!
KM P T J APGN K J GPG : 2 L MT T J+
X M9U M!O AP KHPP 7J9 !KP MQM ! 8 PGP P F
HMN PWKP99P! N K I L9PW ! H KH O O GNPM9
HP PTPG 7T J!Q M!O 9O P M P ! N 7 I P8
2 KM! Q H IP M9 !P+
E X P99 2 99 Q 8
JN TPN 2 HM P ! OPG P N N+
i IP K IP 2 U! M G Q O 7 T J+
X M9U HM97 M! H J / P ! IP NM NHP 9PMGN8
&P I P I AP HMN 2 HM P GM O+
? ! 2 M M!N T J I MOM I +
i 2%99 9PM P T J I T G PPN 9MOT 7 M H 9P 8
- MT M9U G 7N9T O ! N HPMN T J A9 O
X HMN[2 I JGN HM P M KM P 7T J+
E T NHM!UG G PPN I MOM I +
= 4 5 D
2G NH G ! O PGNP 9T NHMN A9 G \ JNH PGN+
? ! X HP! 2 MG A ! NHP ! O MG ! NH+ X MGM G \
E T 7MNHP MG !J GP GM O O O !P P 7PM +
JN K PO 6 : O GPM I P! R N NHP GM 9 G QM99 !Q
" G U !Q9T HM!OG NH HMJ9 !Q 7 NHP LPG#
#!O K9MGL !Q N NHP I MGN P!OJ %O M GPM
HMN M9 I GN AJ GN NHP OPKU+
? ! X HP! 2 MG A !+
P P MG M PG ! ! O I P 9P!N8
#!O 7 I NHP 9MOOP NMKU9P MGHPG 77
#KM! MG K9 I AP 6 " M R GMTG !P 6 9N JN R
#!O NH M O LL !Q !OJGN T NHPT GU L

M9 !P L !NG NH G S
6 " P P GHP K I PG PPL !Q 7 HP 19T I GN PGG+
5PMNH SNH J M N PG 9 %O+R
-P KT GJOQPGNPO NHMM NHP LMGGMQP GH J8O AP M9MP PO N S6 PPL !Q 7 HP !L"
% GN OPMNH+R X P 7 99 NHP Q !M9 NH JQH L AMA9T % %% G M I GL I N
(! NHP JJM N G 8 NHP 7 9 7 @ PP NHP !PMN ! NP+ JN N G
5 - NHP 9O K L PG P I OP I PMO !Q MG $ - JN N G
P OP N NHMM NHP L PN MG NH !U ! Q 7 NHP I J !Q MHM I M UG NHP 9MGN
PGN !Q L9MKP 7 NHP HJ I A9P M !O ! N 7 NHP GKJ9LNJ PO N I A N AP MO !PO NH
+*'

MU iQ'@N 'NMUP'T J' lMQ iMN i
O l'A J i'N 'A J i' 'PQ i'N ' PQ i+
T'T J'Ap iQ'LM O i%O' P'K ll N' i 'K lP'
'JGP' iP'9MiQJMQP' i'PMKH'GP P MG'K9 lP'
"p'LJNG' i'GMKUK9 NH'MiO'N 'GPM+' "P'APM G'
"P'LIPGN' HKH'H G l NMG' pGGPG'NPM G+
#'NPlLPGN' HKH'H G l NMG' pGGPG'NPM G+
#iO'TPN'HP' OPG' N' JN+' 'L9PMGP'T J' N'D
HP'PL NMLH' G'7 ' M iM' N'
T' KUPO'5 iTCM+
= "-' ' - , i'i'< ?'EI &
S' HP'7M PGN'G ppNPGN'APGN'9 PG HP P
XH ' NHP %O' i'HP'GL iQ' 7TPM +
HP' MG' 7 T JG'NHP'U iQ%G OMJQHNP +
1i' H l'7 J9 OPMNH'HMNH'f lMOP'NH G G9MJQHNP 8
M iM' MG GHP'KM99%O'8 MiO'MN'HP'A NH
HPN G'AP iQL JO'G M99 %O'G lPLM N' %NHP'PM NH'8
HP 7' P'NHP'PM NH'7PM iQ'N 'AP' 9P 79 %O+
"MO' HPN G%A NH KH 9O' i'NHP'HP] piG APGN %O
XHP 7' P'GHP O PG'MiO'G PM G'GHP%9f ip p'GN iN+
MUP' MQ iQ'AMNP T'JL i'GH PG' 7'79 iN+R

' C 'O PG'APK lP'A9MKU' 99M iT+
' P99'MG'G 7N'MiO'NPiOP'79MNNP T+
/PN'-P K9PG'AP9 P'H G'OMJQHNP %G OPMO+
#iO'APM'H G K J GPG'N 'AP' OP PO
T'9MOT'O NJip'8 H 9P' J'GKPipF' lJGN'L9MT
" G'OMJQHNP %G' P'MiO'HPM T' P99 M OMT+
2i'HP'JiH 9T'GP KP+' -MN piKP'NHPi+
#iO'NH iU'T J'i 'M P'M99' i' NT9pip+' = 4

3 3' +S NT9pip+'$ '7 '(.i ' '% i '
$.i ' '% i $ 2i' :piN9plpi+
' '5 O'T J'p p'HPM'NHP'9 UP'
%' ' ' i ' p'GHM99' O ' i' GJKH' M'L9MKP'MG'NH G'
GHP'Ap iQ' iKP'Q ip+

19O'3GKpipG' H l'"P9 KMiJG'9MNP'
1 5 iTCM'GJKH'ML pKP' 7GMJQHNP'
'i iP'KMi'Ui +'/p i iP'Ap iQ'Q ip+
HP'O O'O GOM i' MT'KH 9O'MiO'GN O'APN ppi'D
"p'MiO'HP'7 NJipG8 i ip' J9O'9 U i'HP +
JN'KMG'NHP 'QMCPG' i' M i%G'7MKP'8
XH 9GN' J G' MG'A9J NPO'MN'MiO'HP9O'M' lM9U i'
N' NH'NHP'N lP' 7OMT+' 2N'L p K%O' lP'NH JQH8
#iO'NH JQH'T J'KM99' lT'K J GP'JiiMNJ M9
4 J'i N'T J'KH 9O' p99'9 iQ'TPN'2'7 iO+
2N'Q ppNG' lP'MG'Mi'piNP L GP' 7U iOIpGG+
-P 7 l%O'N 'T J'G 9P'OMJQHNP +
' "PM piG'7 Q P'N[
i ' #iO'MG'7 '-p K9PG
XMMN'GH J9O'HP'GMT'\ XP' PLN'M7NP'HP'HPM GP+
#iO'p pi'TPN' P'l J i'HP'l iJlpiN'
2G'M9l GN'7 i GH%O'MiO'HP'PL NMLHG'
2i'Q9 NNP iQ'Q 9OPi'KHM MKNP G'PWL PGG'
#'QPip M9'L M GP'N 'HP 'MiO'KM P' i'JG'
#N' H GP'PWLPiGP'%N G O ip+
' H J'M N'9 UP'NHP'HM LT+
XH KH'N 'APN MT'O GN' NH'NH ip'MiQP9%G 7MKP+
p CP' NH'NH ip'PMQ9p%G NM9 iG+
i ' 4 J'M P'9 UP' iP'NHMN'GJLP GN N JG9T'
5 NH'G PM'N 'NHP'Q OG'NHMN' iNP'U 99G'NHP'79 PG
JN'TPN'2'Ui 'T J%9'O 'MG2'MO GP+' 9 4

') 6 'Ei & 'i'3 7 4 ' ' HM GJG+
i2' HJG N lP' P' MGNP'Mi0' 9 iQPGN'9PMQJPG' lMU'
GH N+
M 9' GPMG' i'K KU9PG'HM P'Mi0' GH'AJN'7 %N 8

' 8 i - ' HP'7 GN']JM N 'HMG S, 'K iGpiN8R'NHP'GPK iO']JM N '
6'2 i 'K iGpiN+R' NPP piG'lMOP'NHP'EJO'K JG'M9NP'MN i+
-"' ' ' ' 5TK'P' J9O' PMO"-
F2i'NHP' 9O'K L PG'NHPG' iPG M P'NHJG l GL9MKPO S
6 19O' "P9 KMiJG'Q PG'M9 iQ'APH iO'
2G'9P7N'N 'Q PiP' N'T J'APM P' i'l iO'

‘ ‘
‘) 6
..2‘ M !‘ NHJG‘ NHP‘ A NHP9‘ GKMLPG‘ M!O‘ KHM!KPG‘
2!N ‘ M!‘ H !PGN‘ H JGP‘ ‘ J ‘GN T‘ GMTG+
HP‘ G !QG‘ 9 UP‘ !P‘ I I NM9‘ M!O‘ GHP‘ OM!KPG‘
#G‘ Q OOPGG 9 UP‘ N ‘ HP ‘ MO I PO‘ 9MTG‘
5PPL‘ K9P UG‘ GHP‘ OJ I AG8 M!O‘ NH‘ HP ‘ !PP9O‘ K I L GPG‘
MNJ P%G !‘ GHMLP‘ ‘7AJO‘ A O‘ A M!KH‘ AP T8‘
HM‘ P P!‘ HP ‘M N‘ G GNP G‘ NHP‘ ! MNJ M9‘ GPG8
" P ‘ !U9P ‘ G 9U‘ N !‘ NH‘ NHP‘ JA PO‘ KHP T
HM‘ LJL 9G‘ 9MKUG‘ GHP‘ ! !P ‘7 ! A9P‘ MKP+
X H ‘ L J ‘ NHP ‘A J!NT‘ !‘ HP 8‘ M!O‘ HP ‘QM !‘
HP‘ Q PG‘ NHP‘ KJ GPO‘ AM O+‘ " P P‘ P‘ HP ‘ L9MKP+
!O‘ N ‘ HP ‘7MNHP ‘NJ !‘ J ‘NH JQHNG‘ MQM !+
X HP P‘ P‘ 9P7N‘ H I‘ !‘ NHP‘ GPM+‘ X P‘ NHP P‘ H I ‘9 GN8
X HP!KP‘ O P!‘ AP7 P‘ NHP‘ !OG‘ HP‘ G‘ M %O‘
" P P‘ HP P‘ H G‘ OMJQHNP ‘O P99G8 M!O‘ !‘ NH G‘ K MGN‘
JLL GP‘ H I‘ ! ‘ MN‘ M!KH + HP‘ K NT‘ GN %O‘
: O‘ PLNJ!P%G‘ M ! !JM9‘ 7PMGN‘ N ‘ UPPL‘ ‘ 7 I‘ HP!KP‘
/TG I MKHJG‘ J‘ T M!‘ GH L‘ PGL PG+
" G‘ AM! !P G‘ GMA9P ‘N I I %O‘ NH‘ KH‘ PWLP!GP8
!O‘ N ‘ H I‘ !‘ H G‘ AM QP‘ NH‘ 7P J‘ H PG+
2!‘ T J ‘GJLL G !Q‘ !KP‘ I P‘ LJN‘ T J ‘G QHN+
17HPM T‘ -P K9PG‘ NH !U‘ NH G‘ H G‘ AM U‘ ‘
X HP P‘ HMN‘ G‘ O !P‘ !‘ MKN ! ‘ I P‘ 7‘ I QHN+
HM99 AP‘ O GK P %O 8 L9PMGP‘ T J‘ G N‘ M!O‘ HM U‘ = 4

3 3‘ 2+S ‘ (! " %) ? 7‘- ‘D NT9P!P+‘ ‘ !-‘
1 ! ‘ ! " ‘$ 2 ‘ ‘ & ‘ (.! ‘ #‘ !" $! ‘
2 ‘ $‘ " ‘ ! ‘ ‘ !& ‘ ‘ (3 ‘ 5 3‘ (-" ‘ ‘
5 ‘1 --
‘ 2!‘ M 9 G‘ ! ‘ (! 3 3‘ !‘ ‘ 5 ‘ 1 -- $ ‘
! ‘ !‘ ‘ (3 # !T‘ ‘ + !
5 ‘7 ‘ X HP P‘ G‘ NHP‘ 9 O‘ " P9 KM!JG‘ \ " P‘ KM!‘ PG 9 P‘
T J+ = !‘ ‘ M 9 ‘ !.‘ NT9P!P+" 1‘ HP P‘ HP‘ G+‘ ‘
NHP P‘ G‘ M‘ AM QP‘ LJN‘ ‘77 7 I‘ NT9P!P‘ M ! O ‡ !‘ N‘ G‘ / TG
I MKHJG‘ NHP‘ Q P ! ‘ H ‘ K M PG‘ N ‘ K I P‘ MA M O+‘ X HMN‘
G‘ T J‘ 9$ \
‘ HMN‘ HP‘ HM P‘ H G+‘ M99‘ JL‘ G I P‘ QP!N9P I P!+
5 ‘7 ‘ " ‘ QP!N9P I P![I T‘ 9 O‘ KM99G+

‘ 2!‘ : P!N9P I P!+

2 ‘ 5 NH‘ T J‘ 9 OGH L‘ KM99‘ \
‘ : P!N9P I P!‘ NHP P‘ G‘ G I P‘ 7‘ NH‘ J9O‘ K I P‘
MA M O8 2‘ L MT‘ Q PPN‘ NHP I‘ 7M 9T+
= ‘ : P!N9P I P!‘ "‘ ‘ 2!‘ M 9 G‘ " - "$ "‘ 3!‘ ! ‘
(! "‘ ‘ (3

‘ . ! ‘ ‘ ‘ ! ‘ ‘ " "8‘ ‘ 5 ‘
: P N9P I P! ‘ "‘ ‘ 2!‘ M 9 G+

5 ‘7 ‘ ‘ NH G‘ G‘ NHP‘ I M!‘ NHM‘ KM! ‘ !‘ MJQHN‘ T J‘
J9O‘ PG 9 P‘ T J+
?5- ‘ " M 9 ‘ P P P!O‘ G [HP‘ Q OG‘ L PGP P‘ T J[
‘ # !O‘ T J‘ G ‘ N ‘ J9 P‘ NHP‘ MQP‘ 2‘ M I +
!O‘ O P‘ MG‘ 2‘ J9O‘ O +
?5- ‘ 4 J‘ GH‘ I P‘ P99+
P !Q‘ !‘ GH P‘ H ! J !Q‘ 7‘ PLNJ!P%G‘ N J I LHG+
PP !Q‘ NH G‘ Q O9T‘ PGGP9‘ OP‘ AP7 P‘ JG
2‘ I MOP‘ N ‘ N‘ N ‘ U! ‘ 7‘ HP!KP‘ T J‘ M P+
‘ O GN‘ HM‘ G‘ T J‘ L9MKP‘ \
?5- ‘ ‘ M I ‘ NHP‘ Q P ! ‘ 7‘ NH G‘ L9MKP‘ T J‘ 9 P‘ AP7 P+
‘ ‘ J‘ PGGP9‘ G‘ 7‘ T P‘ ! ‘ N‘ NHP‘ U !Q8
#‘ I M! ‘ H ‘7 ‘ NH G‘ NH PP‘ I !NHG‘ HMN\H‘ ! N‘ GL UP!‘
‘ M!T‘ !P‘ ! ‘ NMUP!‘ GJGNP!M!KP+
JN‘ N ‘ L QJP‘ H G‘ Q P7+
?5- ‘ L ! ‘ HMN‘ Q J!O‘ G‘ H G‘ O GNP I LP MNJ P‘
G*,

H J'9 NN9P'UI pG'H 'NH J'O GN'GNM N9P' IP+
'KM99'NHTGP97' M IM+
E ' HP'IM'P MG'Q pi'IP
T' IP'NHM'HMO'G IP'L P 8 IT'7MNHP'MIO'M'U IQ+
' " [M'U IQ%'OMJQHNP 'MIO'KM99%O' M IM'9
E ' 4 J'GM O'T J' J9O'AP9 P P' I P8
JN'i N'N 'AP'M'N JA9P' 7T J'LPMKP
2' 99'pIO'HP P+
' JN'M P'T J'79PGH'MIO'A9 O'\
"M P'T J'M U IQ'LJ9GP'MIO'M P'i '7M T I N i'\
X P998 GLPMU' i+ XHP P P'T J'A i'
#iO' HP P7 P'KM99%O' M IM'\
' M99%O' M IM
O '2' MG A I'MN'GPM+
' #N'GPM'\ H ' MG'NHT' I NHP'\
' T I NHP' MG'NHP'OMJQHNP ' 7M'U IQ8
XH'O POJNHP' P T I iJNP'2' MG'A i
'#G'IT'Q O'iJ GP'/TKH OM'HMNH' 7N'
5P9 P %O' PPL iQ+
' 1'GN L'N9 P P'M'9 NN9P[
H G G'NHP' M PGN'O PM1'NHMN'P%P'OJ99'G9PPL'
5 O'I KU'GMO'7 9G' NHM9'NH G'KMii N'AP'
T'OMJQHNP' AJ PO?+ 9 -" 9 X P998SD HP'P P'T J'
A PO\
'HPM'T J'I P'N'NHP'A NN I' 7T J'GN T+
#iO'IP P'iNP JLN'T J+
E ' 4 J%9G'GKM KPD'AP9 P P'I P8'%M P P'APGN'2'O O'Q P'
%P+
' 2' 99'AP9 P P'T J'AT'NHP'GT99MA9P'
1 7' HMN'T J'GHM99'OP9 P ;' 4P%'Q P'I P'9PM PS
" 'KM1P'T J'i'NHPGP'LM NG'\ HP P' P P'T J'A PO'\
E ' HP'U IQ'I T'7MNHP 'O O'i' HM GJG'9PM P'I P8
99'K JP9' 9P i' NH'H G' KUPO' 7P+
5 O'GPPUN 'I J NHP'I P';MIO'HM IQ' %O'
#' 99M i'N 'MNNP1LN' N' H'HM IQ'O M i'N 'O %
#'K P ' 7L MNPG'KM1P'MIO'PGKJPO'I P8
NPP PIG' I NG- '-
+'

O 'N JNH'KMi'IP P'AP'K i7 I%'PI JQH+
H JQH'O JAN'G O O'P P';G9PPL+
'O GN'G '2'L MT' HMN' G T J'N N9P'\
'2'MI'-P K9PG 7 T P8 AJN'NP99' I P'i '
T'O i%'J]PPI%'G IMI P';MG' i'NHP' PGN'T J'GM O+
H J'HMGN'APPI'Q O 9 UP'LP 7PKN'NHP'HP ' 7U iQO IG+
#iO'MI NHP'9 UP'N '-P K9PG'NHT'7MNHP +
'2G'N'i 'I P'N 'AP'T J'OMJQHNP 'NHMI'
'GMT'IT'I NHP%'G IM1P' MG' HM GM\
HM GM' MG' IT' I NHP ' H 'O O'PIO'
HP'I iJNP'2'APQMI+
' 'A9PGG iQ' i'NHPP' GP8 NH J'M N'IT'KH 9O+
: P'I P7 PGH'QM I PING+ iP' i' M99%O' M IM
N'OPMO'MN' HM GJG'MG'GHP'GH J9O'HM P'APPI+
T'GM MQP' 9P i'' GHP'GHM99'NP99'NHPP'M 998
XHPI'NH J'GHM9N'UIPP9'MIO'EJGN 7T' i'UI 9POQP+
HP'G'NHT' P'L IKPGG+SDXH' G'NH G'\
' '%N G'NHP'Q P i ' 7' NT9PIP
XH 'HPM iQ' 7T J'I P9MiKH 9T'GNMNP+
5 O'K IP'N 'GPP'T J+
'2'PIA MKP'T J+
: P'I P'IT' APG8 2'MI' 9O' i'IT'APH 9O iQ+
I'HPM PIG'A9PGG'IT'Q 9[JN'HM U' HMN'I JG K%G'NH G'\
P99' "P9 KMiJG'IT' M IM'NP99'H I
1%P 'L iN'ATL iN'7 'TPN'HP'GPPIG'N 'O JAN+
" 'GJ P'T J'M P'IT'OMJQHNP +S JN' HMN'I JG K'
' T'9 O'2'HPM'i ip+
' ip\
HP'I JG K' 7NHP'GLHP PG' 9 GN'IT' M iM+
?5-'2N'G i N'Q O'N 'K GG'H I'8 Q P'H I' MT+
'&M PGN'G JiOG'O 'TP'i N'HPM'\
?5-' JG K\' T'9 O'2'HPM S
' GN'HPM PI9T'I JG K
2N'i LG' IP'JiN '9 GN%i iQ'MiO'NH KU'G9J1AP'
"MIQG' i' I ip'pTPG8 9PN' IP' PGN+ 9 '- ' 9 '-
?5-'#'L 99 '7 'H G'HPMO+

3 3' F;' '-
- i 'i'" " -';# 5 ' ,, 3'i'E ' -' '
1-i
' T'NP I L9P'GNMiOG' i'3LHPGJG8 H P'NHPP'NH NHP ;'
#iO'O 'JL i'I ip'M9NM 'GMK 7KP+
HP p' HPi'IT I M Opi'L PGNG'M P'I PN'N QPNHP +
P7 P'NHP'LP L9P'M99
&P PM9'H 'NH J'MN'GPM'O OGN'9 GP'NHT' 7P
'I J i'NHT'K GGPG' NH'NHT'OMJQHNP %G'KM99+
#iO'Q P'NHPI' PLPN i'N 'NHP'9 UP+
-P 7 I'IT'A OO iQ' 'NH J'9 %GN' i' P'
5 %'MiO'AP'HMLLT' AT' IT'G 9 P'A
J ?(G '?HN'CGMM'CF'E'NDG?@' a%□ '"- ,, -
' P9PGN M9'5 Mi'Q OOPGG'M QPiN ip
2' 99' APT'NHPP'[S"P9 KMiJG'[
' i + i ' "'<
T'LJ L GP' MG$7 ' HM GJG'NHP P'N 'GN UP'
H% iH GL NMA9P' 9P i8 AJN'2'MI'
O ' NHP'GP KP'7 GN'N M O'3LHPGJG'
J i' J'A9 i'GM 9G8 P7NG iG 2%9G'NP99'NHPP' HT+
= i'+ i
' 5TKP'IMUPG NH G M GNMQP' O PKN i8 AJN'GJ P9T'NHP' IJG K MG i'NHP
IMQ iMN i' 7 -P K9PG'MiO' i E'N 'AP'HPM O'AT'NH GP' i'NHP'GNMQP' 'AT'NHP
MJO'PiKP+
' M9 iP'NH iUG'NH G GPiNPiKP'GH J9O'AP'GL UPi'AT M iM'N ' HP'7PIM9P
K 'ILMi iG+

H ! JL ! NH G GH P 2 LPO NHP K 77 ! 8
O J!O NHP P KH EP P9G8 PK P %O HP M!O L9MK%O HP
" P P ! 5 M! M%G NP I L9P+
MT P GPP NHP I \
: PMN G NHPT GHM99 AP A JQHN T J N I T H JGP+
X H NHP 2 ! NP T J+ / U HM GM G
&PK P PO+
1 9PN IP 9 U[
27HP AP ! !P 7 I !P I T GM!KN NT
X 99 N I T GP!GP AP!O ! 9 KP!N JG PM +
JN KJ A N GL NP 7GPP !Q+ 1 I T 9 O+
P T J ! N -P K9PG\ / UP H I T J GLPMU+
/ UP H I T J M P 5 O T J ! N !M I P M NP I LPGN
A NH M!O OPMNH \
HP KP 7 OPMO HM GM[
HMN HM GM M I 2 GJLL GPO OPMO
!O O !%O+
2 I I NM9 5 M ! [2U! T J APNNP +S
X HP! P NH NPM G LM NPO -P !NML 9 G + a J GM!OG M P M9 I GN J ! 8
HP U !Q I T 7MNHP QM P T J GJKH M !Q =7 !2- 3
H G NH G8 ! I P T J Q OG[T J L PGP!N U !O_
!PGG
MUPG I T LMGN I GP PG GL NG 4 J GHM99 O P99+
HMN !NHP N JKH !Q 7 HP 9 LG 2 I MT
P9N M!O ! I P AP GPP1+ 1 K I P AP AJ PO
#GPK !O N I P NH !NHPGP M I G+
E T HPM N
/PMLG N AP Q !P !NA I T I NHP %G A G I+ = - !)
$ / U H U!PP9G HP P[O9PGH 7NHT 79PGH HM GM8
HT AJ NHP! MN NHP GPM M!O KM99%O M !M
O GHP MG T P9OPO NHP P+ 9PGG%O M!O I !P !2
M 9 I MOM I M!O I T]JPP![
2U! T J ! N+
4 J HM P HPM O I PGMT HP! 2 O 79T 7 I T P
3 I A MKP H I OPM HM GM 8 NH G G HP+
O 2 9 !Q N HPM H T J P P7 J!O8
L GG A9T L PGP %O 8 M!O H I N NHM!U+
PG OPG NHP Q OG 7 NH G Q PMN I MK9P+
/ O P I ! I T 9 O8 NH G I M! NH JQH H I
HP Q OG HM P GH ! NHP L P 8 NHMN KM! 7 I 7 GN
9MGN PG 9 P T J+
&P P P!O G NHP Q OG
M! HM P ! I NM9 7 KP I P 9 UP
#Q O NHM! T J X 99 T J OP9 P H
H G OPMO]JPP! P 9 PG \
2 99 I T 9 O+
PGPPKH T J 7 GN Q NH I P N I T H JGP+
X HP P GHM99 AP GH ! T J M99 MG 7 J!O NH HP #
 GHP KM I P L9MKPO HP P NH ! NHP NP I L9P8
!PPO7J9 NH !Q I NNPO+
-J P 5 M! M[
2 A9PGG NHPP 7 NHT G ! M!O 99 77P
QHN A9MN !G N NHPP HM GM
H G L !KP NHP 7M APN NHPO 7T J OMJQHNP
HM99 I M T HP MN -P!NML 9 G # !O ! +
H G !M I P!N HNM MUPG I P 9 U G O G I M9+
X 99 2 I T 9 %O M !M K9 L N 7 I 8
!O HMN NH G 7 J NPP! TPM G ! MC N JKH%O+
Q MKP NHT I M MQP OMT 2%99 APMJN 7T+D
/ O P I ! HMNH 9PNNP G 7Q O K PO N+
NHMN I T 7MNHP %G OPMO+
= 4 &

X P 7 99 G I P M9NP MI !G AT M9 !P 7 NHP 9O NPMN H KH NH JN NHPGP
G H LP9PG9TT AGKJ P+
1 / 22 5 2

H ! JL ! NH G GH P 2 LPO NHP K 77 ! 8
O J!O NHP P KH EP P9G8 PK P %O HP M!O L9MK%O HP
" P P ! 5 M! M%G NP I L9P+
MT P GPP NHP I \
: PMN G NHPT GHM99 AP A JQHN T J N I T H JGP+
X H NHP 2 ! NP T J+ / U HM GM G
&PK P PO+
1 9PN IP 9 U[
27HP AP ! !P 7 I !P I T GM!KN NT
X 99 N I T GP!GP AP!O ! 9 KP!N JG PM +
JN KJ A N GL NP 7GPP !Q+ 1 I T 9 O+
P T J ! N -P K9PG\ / UP H I T J GLPMU+
/ UP H I T J M P 5 O T J ! N !M I P M NP I LPGN
A NH M!O OPMNH \
HP KP 7 OPMO HM GM[
HMN HM GM M I 2 GJLL GPO OPMO
!O O !%O+
2 I I NM9 5 M ! [2U! T J APNNP +S
X HP! P NH NPM G LM NPO -P !NML 9 G + a J GM!OG M P M9 I GN J ! 8
HP U !Q I T 7MNHP QM P T J GJKH M !Q =7 !2- 3
H G NH G8 ! I P T J Q OG[T J L PGP!N U !O_
!PGG
MUPG I T LMGN I GP PG GL NG 4 J GHM99 O P99+
HMN !NHP N JKH !Q 7 HP 9 LG 2 I MT
P9N M!O ! I P AP GPP1+ 1 K I P AP AJ PO
#GPK !O N I P NH !NHPGP M I G+
E T HPM N
/PMLG N AP Q !P !NA I T I NHP %G A G I+ = - !)
$ / U H U!PP9G HP P[O9PGH 7NHT 79PGH HM GM8
HT AJ NHP! MN NHP GPM M!O KM99%O M !M
O GHP MG T P9OPO NHP P+ 9PGG%O M!O I !P !2
M 9 I MOM I M!O I T]JPP![
2U! T J ! N+
4 J HM P HPM O I PGMT HP! 2 O 79T 7 I T P
3 I A MKP H I OPM HM GM 8 NH G G HP+
O 2 9 !Q N HPM H T J P P7 J!O8
L GG A9T L PGP %O 8 M!O H I N NHM!U+
PG OPG NHP Q OG 7 NH G Q PMN I MK9P+
/ O P I ! I T 9 O8 NH G I M! NH JQH H I
HP Q OG HM P GH ! NHP L P 8 NHMN KM! 7 I 7 GN
9MGN PG 9 P T J+
&P P P!O G NHP Q OG
M! HM P ! I NM9 7 KP I P 9 UP
#Q O NHM! T J X 99 T J OP9 P H
H G OPMO]JPP! P 9 PG \
2 99 I T 9 O+
PGPPKH T J 7 GN Q NH I P N I T H JGP+
X HP P GHM99 AP GH ! T J M99 MG 7 J!O NH HP #
 GHP KM I P L9MKPO HP P NH ! NHP NP I L9P8
!PPO7J9 NH !Q I NNPO+
-J P 5 M! M[
2 A9PGG NHPP 7 NHT G ! M!O 99 77P
QHN A9MN !G N NHPP HM GM
H G L !KP NHP 7M APN NHPO 7T J OMJQHNP
HM99 I M T HP MN -P!NML 9 G # !O ! +
H G !M I P!N HNM MUPG I P 9 U G O G I M9+
X 99 2 I T 9 %O M !M K9 L N 7 I 8
!O HMN NH G 7 J NPP! TPM G ! MC N JKH%O+
Q MKP NHT I M MQP OMT 2%99 APMJN 7T+D
/ O P I ! HMNH 9PNNP G 7Q O K PO N+
NHMN I T 7MNHP %G OPMO+
= 4 &

3 3 222 F !.5 M! 3LHPGJG)
- " 3 $ - 3 - -# & (!:
Q !G ! - "# " ! 2!HMA NM!NG
!. 3LHPGJG " 3 2 /MOT+
21 " % MG " P9 KM!JG NHP!+
" M 9 5 M! [N LP 7 NHT EJGN K I I M!O
2 HP P K !7PGG I TGP97NHP 27 !Q 7 T P &;
X H 7 QHNPO 7 I T K J!N T O O PO
N -P!NML 9 G NHP 7M HM GM+
GPM !KH 9OAPO O PO GHP AJN A JQHN 7 NH
I M O KH 9O KM99%O M !M H 1 Q OOPGG+
X PM G TPN NHT G 9 P 9 P T HP MN HM GJG
X MG !J G%O NH 9P ! H I MN 7 J NPP! TPM G
 P G JQHN N I J NHP AJN HP AP NNP GNM G
JQHN HP N NT9P!P MQM !GN H GP GH P
& O !Q HP 7 NJ!PG A JQHN NHP I M O MA M O JG+
X HP P AT HP ! I GN K9PM P I P I A M!KP GHP
MOP U! ! HP GP97 I T OMJQHNP + KP M!O 7M J [S
4 J M P T J M P S1 TM -P K9PG [S =7 -
 X HMN I PM!G NHP I M! \ GHP O PG[HP9L QP!N9P_
I P! [
A9P G +
27 T J HM P N 9O 5 M!M%G M9NM N JP+
H G G T J 7P+ &P P P!O MLLPM P ! 8
2 NH P HP %P A M O NH NHPGP P T M I G+
L ! NH G K MGN 2 M M! T J+ % G I GN KP NM !+
/ U N NHP 9MOT 8S1 GHP%G AJN %P E T%O+
3M 9T ! A9JG%% !Q I ! NH G 9MOT MG
$ 4 HP 9O K L PG HM P % $

' "PM PIG IMUP M GNM' 7 H I[4PN NHP P' IT
]JPPI
X P%9' KP9PA MNP' NHP 'IJLN M9G' MIO' J GP9 PG
X 99' I'NHMN' U IQO I'GLPIO' J'7 99 IQ OMTG8
1J'G I'MIO'OMJQHNP'GHM99' I' TJG P QI+
/ O' P I I' P'O' J'9 IQ IQ'GNMT+
'HPM'NHP'PGN'JIN 9O+S '9PMO'NHP' MT+

?U J ' %

6

..2' 2I'#IN KHJG'MIO'H G'OMJQHNP 'T J'HM P'HPM O
1'7 I IGN JG'9JGN'NHP'OJP'MIO'EJGN' P M O8
2I'-P K9PG'H G']JPPI'MIO'OMJQHNP 'GPPI
@#9NH JQH'MGGM 9%O' NH'7 NJIP'7 P KP'MIO'UPPI

J ' .

NJP'L PGP %O'7 I'7P99'OPGN JKN I%G A9MGN+
/PO' I'AT'HPM PI'MIO'K I%O' NH'E T'MN'9MGN+
2I'"P9 KMIJG'IMT'T J' P99'OPGK T
#'7QJ P'7N JNH'7'7M NH'7'9 TM9NT'
2I' P P PIO' P I I'NHP P' P99'MLLPM G+
HP' NH'NHMN'9PM IPO'KHM NT'MTP' PM G+
O ' KUPO' 9P I'MIO'H G' 7P' HPI'7M I P
"MO'GL PMO'NHP 'KJ GPO'OPPO'MIO'H I J %O'IM I P
17-P K9PG'N ' MQP'NHP'K NT'NJ I8
HMN'H I'MIO'H G'NHPT' I'H G LM9MKP'AJ I+
HP'Q OG'7 'I J NHP'GPPI PO'G 'K INPIN'
'LJI GH'NHPI' M9NH JQH'I N'O IP'AJN' IPMIN+
' I'T J'LMN PIKP'P P'I P'MNNPIO IQ+
P 'E T' M N' I'T J'["P P' J'L9MT'HMNH'PIO IQ+

'2+

' GH?LMG CFG DG?NGD' CA' SBN G FAJ'OMA GME CFG ?BCFAD' 7' GDMOMG
F?'>AMMAJ GN' CFG OABD G A;' CFG H?DD?C□PG □H' +AJGD8'= AH>G □A
@?HC□ I'JG F?WM'@?(G A@G OAH □NGD?LMG G CD?0C'>DA@'CF?C KAG@'S
>AMMAJ□H'CFG G ?0C' ADNGD' A>'CFG KAG@' A'?'CA'□HOMBNG CFG'GPGHC'A>
G?0F'?0C' C'J□M' LG BHHGOG ?DE'>AD' B' CA' CD?0G' CFG' ? AO□?C□AH' LE
DG>GDGHOG' CA' K?DC□OBM?D' OGHG' ?HN' K? ? G F?PG' @ANGDH□ GN
CFG' ADCFA' D?KFE' A' CF?C' CFG' OA@K?D□ AH' @?E' LG' KBD BGN' J□CF' @ADG
>?O□M□CE' ?HN' JG' □PG'M!'□HCGDKDGC?C□AH' A>' A@G' AL AMGCG' JADN

6' HP'7MNHP ' HPI'HP'JIOP GN O

' $ ' G I NNPO' I'NHP' 9O'K L PG#
F' $SD MG MA9P#
F' %%' 'SMIG P#
' ' $ 'D N% < 'NHP' IMIIP#
' F SN T#

F: S7 PP+
% SDMMJ'QHN+
G SM7 M O+
SO PMOPO+
2 SO G I MTPO+

4 $SN JNH# 36 S]J KU+

F3 8 20 SO GK P PO# % $ 8SN IP
' % SPGKML P# YF4 $ SGM +

HP U iQ MG T7 'M H 9P
JM HPI'HP GM 'NHMM NH i 9P
"P' I QHN MKA P H G K JP9NT+
"P'GN i'N H G MNH' MiO' 9PN' H 1'AP+

JM P'NH G i 7 'N 'NP99
1 7'MO PiNJ PG' NHMM APZP99
iN 'NH G L iKP' 7 H 1'TN 9O'
"P'HMNH' H G QHN'K J GP7 NH'H 9O'
T'GNP1'MiO' ippO9P $ N 99'HP'KM1P'
HM GP'MiO'NHP P'H G 9MiO'HP'iM1P+
'AJ QPGG KH' 7 9O'MiO'7PP'
X MG'NH 9UP'N 1P' i'NHMN'K NT+
X H KH' p9pLPO' MG' N MiQJ 9 '8
" G' 7P' MG 5 i GP' M9G +
H G T JiQ'L iKP'MG'GM NH'NHP'A U'
X NH'H 1'H G HP AP QMQP'FN U8
#iO' N'AP7P99'9HMN'K NT'G +
T'7 P N 1P'MiO'NHPi'M9G
HJ H'GN iQ'7M1 ip' H KH' NHP1'9MO '
X MG' i ip' NHMN' MiT' HPMN' HMO+'
#LL 99 iJG' HPi'NHMN' HP'HPM O'
HP' I GKH P7H 'NHP'K NT'7P OP F
'GPiO'H 1'E T'M7NP'H G G +
#iO'L MTPO' : O' NH'Q O' iNPiN'
2N' MG' i N'TPN'LMGGPO' iQ O 1 . +

HPi'NH NHP M O'H G MT'HP'iM1P F
X HP P'G i'JL i'NHP' i i'HP'KM1P+
"P'PMN'GJKH'MG HP' 1 QHN'QPN+
#iO'7 NH'Mi i' HPi'HP'HMO'PMN
"P'Q PNH'N 'GPP%NHP'N i'MA JN'8
#iO'KM1P'NHP P'MG HP'7 JiO'M' JN
1'7T JiQ'9JGNT'1Pi' NHM98
#iO'MG N'GH J9O'NHPi'AP7M99+
HMN'OMT' MG GPN' 7'GJKH'MGG GP+
HMN'NHPT'GH J9O' i'NHP'9MiO%G'QJ GP+
#G'HP'HPM O' 7NHP'LP L9P'GMT+
HP'K 1 1 i'QM1P'NHPi'L9MT

HP'KM1P'M'7 GHP'i'MUPO'GN iO
#iO'GM 'M'1Mi'NHP P'iMUPO'GN iO
#iO' HPi'NHMN'HP'HMNH'JiOP GNMiO'
HP'KMJGP'HP'HMNH' 7H 1'Q PMN' JNH %
#iO' i9T' 7H G'L 'N JNH+
1 7'GJKH'K9 NHPG'MG'HP'HMO'
X NH'Q PMN'L NT'NH G'9 O'HP'K9MO+
#iO'HP'H 1'NHMiUPNH'MG'HP'GH J9O+
#iO'GM NH'H 1'NHMN' N'GHM99'AP'Q 9O
27'P P'HP'QPN'H G GNMNP'MQM i'8
', #iO'L MT%O'NHMN'HP' J9O'H 1'GPTIF
27'i QH' P P'MiT'N i'7 'H 1'\
"P'GM O?4PM'-PJNML 9 1
X HP P'A NH'U iQ'MiO']JPPi'O p99pi+
X HPi'HP'NH G NM9P'HPM O'NP99pi'
"P'Q9MOOPNH'H 1'MiO'%QMi'APGPPKH'
HMN'HP'NHP' MT'H 1' J9O'NPMKH8
#iO'L MTPO' : O' NH'Q O'iNPiN'
'GPiO'H 1'E T'M7NP'H G G +
2N' MG'i N'TPN'LMGGPO' iQ O 1 . +

HPi'NH NHP M O'H G MT'HP'iM1P F
X HP P'G i'JL i'NHP' i i'HP'KM1P+
"P'PMN'GJKH'MG HP' 1 QHN'QPN+
#iO'7 NH'Mi i' HPi'HP'HMO'PMN
"P'Q PNH'N 'GPP%NHP'N i'MA JN'8
#iO'KM1P'NHP P'MG HP'7 JiO'M' JN
1'7T JiQ'9JGNT'1Pi' NHM98
#iO'MG N'GH J9O'NHPi'AP7M99+
HMN'OMT' MG GPN' 7'GJKH'MGG GP+
HMN'NHPT'GH J9O' i'NHP'9MiO%G'QJ GP+
#G'HP'HPM O' 7NHP'LP L9P'GMT+
HP'K 1 1 i'QM1P'NHPi'L9MT

HP'KM1P'M'7 GHP'i'MUPO'GN iO
#iO'GM 'M'1Mi'NHP P'iMUPO'GN iO
#iO' HPi'NHMN'HP'HMNH'JiOP GNMiO'
HP'KMJGP'HP'HMNH' 7H 1'Q PMN' JNH %
#iO' i9T' 7H G'L 'N JNH+
1 7'GJKH'K9 NHPG'MG'HP'HMO'
X NH'Q PMN'L NT'NH G'9 O'HP'K9MO+
#iO'HP'H 1'NHMiUPNH'MG'HP'GH J9O+
#iO'GM NH'H 1'NHMN' N'GHM99'AP'Q 9O
27'P P'HP'QPN'H G GNMNP'MQM i'8
', #iO'L MT%O'NHMN'HP' J9O'H 1'GPTIF
27'i QH' P P'MiT'N i'7 'H 1'\
"P'GM O?4PM'-PJNML 9 1
X HP P'A NH'U iQ'MiO']JPPi'O p99pi+
X HPi'HP'NH G NM9P'HPM O'NP99pi'
"P'Q9MOOPNH'H 1'MiO'%QMi'APGPPKH'
HMN'HP'NHP' MT'H 1' J9O'NPMKH8
#iO'HP'H 1'NMJQHN'MiO'7 NH'HP' piN+

s s s s >

s s s s

" OF?DN . DA@G8 = 0AP?M DG J I V 452 KG?(M FCH MEA>F?(-
KGDG?HN A>CF K?DCOBM?D ND?@?R

6 JN HMUPGLPM P NHP L9PAP M!O 9P MG
O J!OP %O !H G -P K9PG M!O I JGN ! NLMGG+R

%DENGH HF KDAMA BG CA F?DMG %8 PGH?HC8 = DOG I H 4 5
F? CFG GWHG R

6 4 J P!M!O O9PNKHP !NHP 7 GN T J!Q 79 QHN
5 O ! 9L !P ! ! # AMKPG NP8
JN H LL%O MA JN M!O GH N PWKJ G !G I MOP
O I A JQH N A JQH MG 7NHPT P P M7 M O+
#!O PMKH MG QJ 9NT 7G I P G9 QHNPO I M O+
HMUGL]M PG ! JGP H G -P K9PG 7 GN A P8
HP - !KP 7 T P MG P9OP NHM!NHP +
% G I MK9P N GPP M 7 GN Q O L9MT
#99 HM NH !G O ! N A9 I ! H GN I MG OMT+R

#FG @GHCAH A>F?(KGDG ? CFG ?BCFAD A>GDOMG HF CFG KAG@
KDHCGN H 4/4 ?HN 452 @?EH A@G DG KGOC LG O?MMGN CD?NCAH?DE
>AD CFG KM?E J? HAC KDHCGN ?>CGD 435 CMM C ?KKG?DGN H CFG >AMA A>
44/ %DENGH @A C KDAL?LME DG?N CFG KM?E H CF?C >AMA GNCAH
H 41 $?H L?HG DGOGPG CFG KM?E JCFABC ?HE NABLC A>CFG ?BCFAD-
FK LBC FG ?M A ?OOGKC ? ? JDCCGH LE F?(KGDG CFG ACFGD
NABLC>BM KM?E JFOF ?KKG?DGN H CFG >AMA A>F?(KGDG CFG ACFGD
F?HN +MNAH H 71 H F DG@?D(BLSACHGN CA "AJG8 GNCAH
CDG?C GDOMG ? ? GHBHG KM?E LE F?(KGDG LBC A>CFG ACFGD
? ODLGN KM?E FG ?E CFGE =?DG HAHG A>F?(G KG?DG8 HAD F?PG
?HECFH H CFG@ CA PG CFG MG? C DABHN CA CFH(CFG@ F I "AJG
F@ GM> KG?(@ADG O?BCAB ME R = C AJHGN CF?C A@G K?DC A>
GDOMG OGDC?HME J? JDCCGH LE F@ K?DCOBM?DME CFG M? C ?OC I
.G>ADG JG KDAOGGN CA CFG HCGDH?M GPNGHOG A> CFG ?BCFGHCOCE A>

GDOMG CC JMM LG HGOG ?DE CA ? OGDC?H CFG N?CG A>C KDANBOCAH
#FG CCMG K? G A>CFG >D C GNCAH O?MM C =#FG M?CG ?HN @BOF ?N@DGN
KM?E I H @ANG@ KFD? GAMA E =CFG M?CG I JABMN LG $ K3 AD $
#F?C GNCAH J? KDHCGN H 471 #FG KM?E J? GHCGDGN ?C
C?CAHGD 8 ?MM H 476 #FGDG ?DG ACFGD ODOB@ C?HOG MG?NH CA
CFG LGMG>CF?C ?LABC CFG KGDAN A>C KBLMO?CAH GDOMG J? ?
HGJ KM?E H A@G GH G A>CFG JADN &?MAHG F? G CD?OCGN
MHG >DA@ ? @GCDO?M K?@KFMGC GHCCMGN = @MEOA I JFOF FG AD-
H?MME CFAB FC J? KDHCGN H 514 LBC BL GQBGHCME >ABHN LADG CFG
N?CG A> 471 #FGE ?DG ? >AMMAJ R

6 # I MCPO 2 GN O N GPP M K O
17K 9NH MNG GN PNKH%O JN G 9 JO
#G MN M 8 2*M NHP IG
5 O GXM I NH QP!N9PG I W%O NH Q I G8
NHMN 2 N J9T NH JQHN M99 NHPGP
M I P N GPP 4$ (% B

&?MAHG QBACG CFG G MHG HAC CA > CFG N?CG A>CFG KM?E LBC CA FAJ
CF?C C @GHCAHGN = ? ? PGDE KAKBM?D KGD>AD@?HOG I &D AMMGD
FAMN CF?C CF K? ? G >DA@ = @MEOA I NGO PG ? CA CFG N?CG R
= H CF EG?D V 471 C ? ?OCB?MME KA(GH A>LE CFG ?HAHE@AB
?BCFAD A>7 J ? HGJ KM?E I b "GOGPH Z
? &D AMMGD NAG CFG @GCDO?M CD?OC A>= @MEOA I ? >D C KBLM FGN
H 471 V?MCFAB F &?MAHG ?E = C @ FC F?PG LGGH ?DGKBLMO?CAHI
CFGDG ? ?PGDE ALPAB QBG CAH B G CGN LE CFG M? C A>CFG G
MHG JFOF &D AMMGD F? HAC ?NPGDCGN CA H CFG GM?LAD?CG K?DCOB-
M?D JFOF FG F? A HNB CDAB ME OAMMGOCGN AH CFG BLSGOC A> GDOMG
#F?C QBG CAH CF R Z ?($? JGMM ? 7 ?' 0 H
471 W &D AMMGD F?MM FO@ GM>?H JGD CF?C QBG CAH H F G CD?OC
>DA@ ?HN AL GDP?CAH BKAH GH MAJG8 %?DE KDG GDPGN ?C %BMJOF
AMMG G JFOF &?MAHG F?N KDGPAB ME HACOGN R =#FG <f ?XG ($.
? HGN CA FGCCMG ?HN %?E H 0?HB?DE 47 2 J? AHME ?' DGPP?M
A>?H AMNGD KM?E ? GH MAJG CFGH ?PG >ADCE FMMH CA CFA G KAGC
H ADNGD CF?C <CFG LAA(G A> FA?DG8 @ FC LG <HAJ HGJME JDCCGH >AD

' 8 CG C@AHE CF?C F?(KGDG J? CFG ?BCFAD A>GDOMG
JABMN ?KKG?D CA DG C BKAH CDAH GD GPNGHOG ? >?D ? DG ?DN CFG
>?OC A>KBLMO?CAH CF?H CF?C JFOF? H CA F@' CFG ?BCFAD FK A>
#CB HNDAHOB #F?C KM?E J? HAC KBLM FGN ? F JAD(CMM ?>CGD
F NG?CF GDOMG J? KBLM FGN J CF F?(KGDG8 H?@G ? CFG
?BCFAD NBDH F M>GC@G . BC CF GPNGHOG H AC NGO PG H
477 J? KDHCGN =#FG >D C K?DC A>CFG CDBG ?HN FAHABD?LMG F CADE
A>CFG $>G A> D 0AFH MNO? CMG YO DCCGH LE MM?@ F?(G-
KG?DG I ?HN JG FABMN LG GHCCMGN CA DGOGPG CF?C DGKDG GHC?CAH A>
CFG JDCGD A> = D 0AFH MNO? CMGI ? AAN GPNGHOG A>CFG ?BCFAD-
FK JGDG JG HAC HA KA G AH A> ?>OC JFOF GHCDGME ABCJG F
CFG LAA(GMMGD8 H GDCAH A>?KAKBM?D H?@G H F CCMG K? G
H CFG @?HB ODKC N?DE A> FMK GH MAJG KDG GDPGN ?C %BMJOF AMMG G
CFG >AMAJH GHCDE R = #FG 4CF A> OCALGD 11 "GOGPGN LE
@G #FA@? %AJHCAH A> FMK GH MAJG CA K?E &D &AHN?E &D
%D?ECAH &D M AH ?HN ?CF?J?E >AD #FG >D C K?DC A>CFG $E>G A>
D 0FAH BMNO? CGMM ?HN H G?DHG C A> CFG GOAHN CG >AD CFG B G
A>CFG OA@K?HE CGH KABHN ?E DGOGPGN 7 ML I U #FG CCMG K? G
A> GDOMG H 471 @ FC F?PG LGGH ? >D?BNBMGHC ? CF?C A> =
0AFH MNO? CMG I H 477

#FG KM?E A> GDOMG ? JG MG?DH LE CFG AD H?M CCMG K? G J? ?
= BHNDE C@G ?OCGN LE F &?SG CE8 GDP?HC ?C CFG +MALG I #FG
KDAKDGC?DE HCGDG C H CFG KM?E >AD CFG KBDKA G A> CFG C? G VJFAGPGD
JDACG C HA NABLC DG@?HGN H 423 JCF CFG KDAKDGCAD A> CFG
+MALG #FG?CDG R F?(KGDG8 >GMMAJ F?DGFAMNGD > CFG KAKBM?DCE
A> GDOMG CFGDG ?H LG HA NABLC C J? KDHCGN CFDGG C@G GK?-
D?CGME LG>ADG CFG KBLMO?CAH A> CFG >AMA H 423 ?HN C JABMN F?PG
LGGH CA CFG HCGDG C A> CFG KDAKDGCAD A> CF?C GNCAH CA F?PG HOMBNGN

C ?@AH C F?(KGDG8 JAD(%N CFGE DGSGOC C LGO?B G CFGE OABMN
HAC OAH O GHCAB ME ?>>D@ C CA LG JDCCGH LE F@ AD JGDG CFGE BH?LMG
CA @?(G CGD@ JCF CFA G JFA F?N CFG D FC A> KBLMO?CAH W #FGDG
J? ?H GHCDE ?C C?CAHGD 8 ?MM AH CFG 27CF A> &?E 476 LE
!NJ?DN . MABHC A> = #FG LAA(A> GDOMG DEHOG A> #EDG I ?HN
. MABHC ?C CFG ?@G CG GHCGD =' LAA(O?MMGN HCFAHE ?HN MGA-
K?CD? I . BC GDOMG J? >D C KBLM FGN LE GHDE +A AH . MABHC
J? AHG A> CFG KDAKDGCAD A> CFG >AMA A> 423 G GG@ CA F?PG
KA G GN CFG D FC A> KDHCH GDOMG H 476 ?HN FG KDAL?LME
? HGN CC CA +A AH JFA VBKAH ?' @@M?D KDAL?LMCE BL GQBGHCME
? HGN CC CA ' V @AH C?>>ADN JFA KDHCGN CC H 4D ?HN JFA
? ?H ? HGN CC CA #FA@? ?PGD JFA KDHCGN CC H 41 '
QBG CAH CFGH H?CBD?MME ?D G JFGCFGD . MABHC CFG KDAKDGCAD A> CFG
>AMA J? BH?LMG CA DGOAPGD L?O(' JF?C FG F?N ? HGN ? ?' GK?D?CG
KBLMO?CAH ?HN JFGCFGD CFG HAH ?N@ AH CFGDG>ADG A> GDOMG H
CFG >AMA A> 423' J? HAC JFAMME ?' OA@@GDO?M @?CCGD NGKGHNH
BKAH CFG OM?@' CA OAKED FC C ALPAB CF?C CF ?' QBG CAH
JFOF HAC M(GME CA LG NGONGN

C ?' @A C @KADC?HC O DOB@ C?HOG JCF DG>GDGHOG CA CFG ?BCFGH-
CO CE A> #CB HNDAHOB CF?C &GDG H 511 ? OD LGN CF?C KM?E
CA F?(KGDG G F?PG HA B0F CG C@AHE H CFG O? G A> GDOMG
LBC CFG CD?N CAH JFOF ? H C CA F?(KGDG ? KDGCCE OAH C?HC
&?MAHG F? QBACGN ?' K? ? G >DA@ =#FG #@G N KM?EGN H
G C?N I ?KAG@' KBLM FGN H 4/4 ?HN NGNO?CGN LE FGKF?DN
CA FMK ! ?DM A> G@LDA(G R

6 PP H I H GP N MQ K GKP!PG 3J L OPG
5 NH P]JM9 M!O NH LH K9PG P I MT
I LM P Q PMN HMUGLPM P # GN LHM!PG
P P 9 UP H I H G 7M!KT K J9O O GL9MT
X N!PGG HP - !KP 7 T P H G -P K9PG
" G G PPN M!O H G N AP MO I PO 9MT
" P NP 79JGN7J9 M]J !%G MLP GH G HP
5 O J!OP GNM!O NHP OPLNH 7L PG P+R

EG?D M?CGD ?HACFGD JDCGD 0 #?CF?@ H PGD G KDG>GN CA

G P99%G M9 !P 9 L =+

N OM NHP -M N KJ9M G BK+ L +

CFDAB F 'F?P□H ' LGGH' FAC' CA' NG?CF' LE' ?DD□ AH ' ?>CGD' FG' F?N' M?□N' NAJH' F□ ' ?D@ ' J□CF' CF□ ' G OM?@?C□AH' >DA@' CFG' CG@' "GKBLM□O?H ' 6 6' BD GN' □ ' FG' CF?C' NACF' CFG' JAD(' A>' CFG' $ADN' HG M□ GHCME I' C' □ ' □@KA □LMG' CA' NABLC ' CFGH ' CF?C' %DENGH' J? ' ?' OA@KGCGHC' DGKADCGD' A>' CFG' CD?N□C□A□□ ' A>' CFG' C? G ' ?HN' HAC' HGOG ?D□ME' A>' CFG' CD?N□C□AH ' CF?C' BDP□PGN' ?>CGD' CFG' "G CAD?C□AH ' G' O?H' K□OCBDG' CFG' EABH ' KAGC ' H?CBD?MME' ?H □AB ' CA' ?KKDA?OF' ? ' OMA GME' CA' F?(KGDG' ? ' KA □LMG ' C?(□H ' ?' OFGGD>BM' OBK' J□CF' KAAD' $AJ□H' □H' F□ ' FB@LMG' □HH ' ?HN' M□ CGH□H ' CA' CFG' AMN' @?H8 ' DGO□C?M' A>' CFG' DGOAMMGOC□AH ' A>' F□ ' EABCF' ?@□N C' CFA G' OGHG ' >DA@' JF□OF' FG' J? ' L?H□ FGN' LE' CFG' P□AMGHOG' A>' O□P□M' J?D' ?HN' CFG' >BDE' A>' BD□C?H□O?M' □HCAMGD?HOG ' G' ?OOGKC ' CFGH ' %DENGH8 ' ? GDC□AH' J□CF' M□CCMG' NABLC' Ó ?HN' JG' ?KKDA?OF' CA' CFG' G ?@□H?C□AH' A>' CFG' ' GP□NGHOG' A>' CFG ' ?BCFGHC□O□CE' A>' GD□OMG ' J□CF' CFG' OAHP□OC□AH' CF?C ' □>' □C' LG' CFG' JAD(' A>' F?(KGDG ' CFG' >ABHN?-C□AH ' A>' □C' JGDG' M?□N' JFGH' F□ ' ?DC' J? ' □@KGD>GOC ' ?HN' FG' M?LABDGN' A@GJF?C' □H' BLSGOC□AH' CA' CFG' □H>MBGHOG' A>' CFA G' D?NGD' @ANGM ' >AD' JF□OF' FG' GPGHCB?MME' BL C□CBCGN' F□ ' AJH' KMGHN□N' G ?@KMG ' A>' ND?@?C□O' G OGMMGHOG

#FGDG' □ ' ?' PGDE' CD□(□H ' K? ? G' □H' □NHGE8 ' =' %G>GHOG' A>' AG E I' JF□OF' @?E' LG' C?(GH' KDGCCE' ?OOBD?CGME' CA' NG OD□LG' CFG' □H>?HOE' A>' CFG' ND?@?C□O' ?DC' □H' !H M?HN ' LG□H ' JD□CCGH' A@G' >ABD' AD' >□PG' EG?D ' LG>ADG' JG' O?H' CD?OG' ?HE' OAHHGOC□AH' A>' F?(KGDG' J□CF' CFG' C? G ' #FG' K? ? G' □ ' MAH ' LBC' □C' □ ' NG GDP□H ' A>' ?CCGHC□PG' OAH-□NGD?C□AH' R ' :

6' JN' NHPT' 99' GMT ' H ' NHP!' GHM99' P' GPN' 7 NH' M' GN T' H KH' K !NM !G' A NH' I M!T' L9MKPG' M!O' I M!T' N I PG' ' #!O' O ' NHPT' ! N' U! ' NHMN' M' N MQPOT' G' N PO' N ' NHP' 9M G' 7' - PGT ' M!O' ! N' 7' " GN T ' ! N' A J!O' N ' 7 99 ' NHP' GN T ' AJN' HM !Q' 9 AP NT' P NHP ' N ' 7P Q!' M']J NP' !P ' I MNNP ' ' N ' 7 M I P' NHP' H GN T' N ' NHP' I GN', N MQ KM9' K ! P! P!KP'1 #QM ! ' I M!T' NH !QG' I MT' AP' N 9O' H KH' KM!! N' AP' GH PO' 7' NHPT' U! ' NHP' O 77P P!KP' APN WN' PL N !Q' M!O' PL PGP!N !Q+' #G' 7 ' PWM I L9P 2' I MT' GLPMU ' NH JQH' 2' M I ' HP P ' 7' -P J ' M!O' !' LPPKH' O Q PGG' 7 I ' NHMN' N ' NHP' OPGK LN !' 7' M9PKJN' AJN' !' MKN !' 2' KM!! N' PL PGP!N' N' NH JN' -MK 9PNG' H GP+' #!O' G ' MG' NHP' I M!!P ' NHP' M!K P!NG' N U' AT' G I P' %*' N ' PK J!N' NH !QG' O !P' !'7 I P ' N I P' ' NHP ' L9MKP+

. GCJGGH' CF□ ' HAC□AH' JF□OF' □NHGE' F?N' >AD@GN' A>' CFG' KDAKD□GCE' A>' ?' CD? GNE' JF□OF' FABMN' BHNGD C?HN' =' CFG' N□>>GDGHOG' LGCJ□ C' DGKADC□H ' ?HN' DGKDG GHC□H I' CFGDG' J? ' ?' MAH ' K?OG' CA' LG' CD?PGMMGN' APGD' LG>ADG' JG' FABMN' ?DD□PG' ?C' ?' CD? GNE' JF□OF' FABMN' @?(G' CFG' JFAMG' ?OC□AH' @?H□>G C ' ?HN' (GGK' CFG' □HCGDG C' ?M□PG' >DA@' CFG' >□D C' M□HG' CA' CFG' M? C ' J□CFABC' ?HE' = DGKADC□H I' ?C' ?MM' FGH' ?@MGC' ?HN' CFGMMA' ?HN' $G?D' JGDG' KGD>GOCGN ' CF□ ' OBM@□H?C□H ' KA□HC' A>' CFG' ND?@?C□O' ?DC' F?N' LGGH' DG?OFGN ' . BC' □C' □ ' GP□NGHC' CF?C' □NHGE' NG OD□LGN' ?' C?CG' A>' CF□H ' □H' JF□OF' GPGH' CFG' PGDE' □H?DC□>□O□?M' G KGN□GHC' A>' BH□C□H ' NG OD□K-C□AH' J□CF' DGKDG GHC?C□AH' F?N' HAC' LGGH' CFADAB FME' BHNGD CAAN ' AD' ?C' MG? C' F?N' HAC' LGGH' GHGD?MME' KD?OC□ GN ' #FG' =' CD? GNE JD□CGD ' I' LG □H' J□CF' CFG' NGM□PGDE' A>' CFG' EABH ' AMENADB ' ?HN' CD?PGM' AH' J□CF' F□@' >DA@' KM?OG' CA' KM?OG' C□MM' F□ ' >□H?M' @BDNGD ' C' CF□ ' KA□HC' ! BD□K□NG ' LG □H ' CFG' CADE ' MG?P□H ' A@GCF□H ' CA' LG' CAMN' LE' CFG' K□D□C' A>' AME-NADB ' C' □ ' HAC' N□>>□OBMC' CA' OAHOG□PG' ?' EABH ' ND?@?C□O' KAGC' MAA(□H ' CA' A@GCF□H ' LGEAHN' CFG' = CD? GNE JD□CGD I' A>' F□ ' AJH' N?E ' ?HN ' BKAH' C?(□H ' BK' ?' KAKBM?D' CADE ' □HPGHC□H ' ?' @?OF□HGDE' >AD' =' DGKADC-□H I' JF□OF' FABMN' G@BM?CG' CFG' □H GH□AB ' NG P□OG' A>' !BD□K□NG ' □H' @?(□H ' CFG' FA C' A>' AMENADB ' LD□G>ME' CGMM' CFG' F□ CADE' JF□OF' ?' DBNGD' C? G' JABMN' F?PG' G F□L□CGN' □H' NGC?□M ' #FGDG' J? ' ?' LAA(' HA' NABLC' >?@□M□?D' CA' CF?C' EABH ' KAGC ' □C' J? ' CFG' =' AH>G □A' @?HC□ ' CFG' AH>G EAH' A>' CFG' $ABGD I' A>' OAFH' +AJGD ' KD□HCGN' LE' ? CAH' □H' /13 ' ?HN' LE' . GDCFGMGC' □H' 532' ?HN' 55/ ' #F?C' CFG' LAA(' J? ' KAKBM?D ' CFG' >?OC' A>' CFG' KBLM□O?C□AH' A>' CFDGG' GN□C□AH ' □H' M□CCMG' @ADG CF?H' F?M>' ?' OGHCBDE' J□MM' B>>□O□GHCME' @?H□>G C ' #F?C' □C' J? ' ?' LAA(' CA' + ,

LG' NGPABDGN' LE' ?' EABCF' A>' KAGC□O?M' ? K□D?C□AH ' JFA' O?H' NABLCW' #F?C' ?' F?BOGD' ?HN' ?' +AJGD' JGDG' ?OOG □LMG' CA' ?' EABH ' @?H' GNBO?CGN' ?C' CFG' +D?@@?D' OFAAM' ?C' CD?C>ADN' JG' @?E' DG?N□ME' LGM□GPG ' #F?C' J? ' HAC' ?' N?E' A>' D?DG' OAK□G ' S' CFG' LABHC□>BM' KDG ' A>' CFG' G?DME' !H M□ F' KD□HCGD ' J? ' >AD' CFG' KGAKMG ' ?HN' CFG' KGAKMG' G? GDME' NGPABDGN' CFG' □HCGMMGOCB?M' >AAN' JF□OF' CF?C' KDG ' LG CAJGN' BKAH' CFG@' =' KKAM ' M□HB ' #FG' D□HOG' A>' #ED I' □ ' AHG' A>' CFG' @A C' B C?□HGN ' ?HN ' KGDF?K ' ?MCA GCFGD ' AHG' A>' CFG' @A C' □HCGDG C□H ' A>' CFG' AMN' H?DD?C□PG ' JF□OF' +AJGD' □HCDANBOGN' □HCA' CFG' KAGC□O?M' >AD@ ' F?C' N□N' □C' @?CCGD' CA' CFG' EABH ' ?HN' GHCFB □? C□O' DG?NGD' CF?C' CFGDG' JGDG' $?C□H' @?HB OD□KC ' A>' CF□ ' CADE' ? ' G?DME' ? ' CFG' CGHCF' OGHCBDE' S' CF?C' CFGDG' □ ' ?H' H MA ? AH' PGD □AH' A>' □C ' CF?C' □C' >AD@ ' AHG' A>' CFG' @A C' GM?LAD?CG' CAD□G ' A>' CFG' =' +G C?' "A@?HADB@' W I' F?C' NAG ' ?MM' CF□ ' @?CCGD' GPGH' CA' B ' J□CF' DG ?DN' CA' CFG' KM?E' LG>ADG' B ' W & D ' AMM□GD' ?E ' ,' #FG' □@@GN□?CG' ABDOG' CA' JF□OF' F?(G KG?DG' DG ADCGN' J? ' KDAL?LME' $?BDGHOG' # J□HG8 ' PGD □AH' A>' CFG' HAPGM' A>' < KKAMMAH□B ' □H ' A>' #EDG 8 JF□OF' >□D C' O?@G' ABC' □H' 5 4 ' ?HN' J? ' ?>CGDJ?DN ' GPGD?M' C□@G ' DGKD□HCGN ' ' F?PG' LG>ADG' @G' ?H' GN□C□AH' J□CFABC' N?CG ' < @KD□HCGN' ?C' $AHNAH' LE') ?MGH-C□HG' □@@G ' >AD' CFG' □NAJ' GJ@?H 8 JF□OF' PGDE' M□(GME' J? U' CF?C' B GN' LE' ABD' DG?C' ND?@?C□ C I' U' & D ' AMM□GD' F? ' DGKD□HCGN' ZCF□ ' CADE' A>' $?BDGHOG' # J□HG' J□CF' CFG' C□CMG R = KKAMMAH□B ' D□HOG' A>' #EDG' BKAH' JF□OF' F?(G KG?DG' >ABHNGN' GD□OMG I' G' O?HHAC' BHNGD C?HN' CF□ ' G' F?PG' MAA(GN' □H' P?□H' CFDAB FABC' CF□ ' CADE' CA' >□HN' ?' □H MG' □HO□NGHC' □H' GD□OMG ' B G CGN' LE' # J□HG8 ' DGM?C□AH ' JF□OF' @□ FC' HAC' F?PG' LGGH' GQB?MME' B G CGN' LE' +AJGD8 ' KAG@' G' J□MM' HAC' JG?DE' ABD' DG?NGD ' CFGDG>ADG ' J□CF' ?HE' G CD?OC ' >DA@' CF□ ' H?DD?C□PG ' #F?C' CFG' ?BCFAD' A>' GD□OMG ' F?N' +AJGD' □H' F□ ' CFAB FC ' ?HN ' JF?C' □ ' @ADG' □@KADC?HC ' CF?C' FG' >GMC' CF?C' F□ ' ?BN□GHOG' JGDG' >?@□M□?D' J□CF' +AJGD ' □ ' JG' CF□H(' B>>□O□GHCME' ?KK?DGHC' * KAH' JF?C' ACFGD' KD□HO□KMG' O?H' +AJGD' KGDKGCB?MME' C?(G' BK' CFG' NDAKKGN' CFDG?N ' A>' CFG' ?OC□AH' W * KAH' JF?C' ACFGD' KD□HO□KMG' ?DG' CFG' PGD G ' KA(GH' LE' +AJGD ' ?@ABHC□H ' CA' GPGD?M' FBHNDGN' M□HG ' >AD@GN' BKAH' ?' O?DG>BM' □@□C?C□AH' A>' F□ ' CEMG ' A' ? ' CA' KDG GHC' CA' ?H' ?BN□GHOG' ?C' CFG' M?CCGD' GHN' A>' CFG' □ CGGHCF'

OGHCBDE' A@G' HAC□AH' A>' ?' KAGC' ?LABC' CJL' OGHCBD□G ' AMNGDW' C' □ ' KGD->GOCME' GP□NGHC' CA' B ' CF?C' +AJGD ' ?HN' +AJGD' AHME ' J? ' □H' CFG' CFAB FC ' A>' CFG' ?BCFAD' A>' GD□OMG

G' O?MM' CFG' KM?E' LG>ADG' B ' LE' CFG' H?@G' A>' ' LGO?B G' □C' J? ' A' O?MMGN' □H' CFG' >□D C' DBNGME' KD□HCGN' OAK□G ' ?HN' LGO?B G' CFG' OAH-CG@KAD?D□G ' A>' CFG' JD□CGD ' >AMMAJ□H ' CFG' KD□HCGN' OAK□G ' A' O?MMGN' □C' □H' CFG□D' KD□HCGN' LAA(' . BC' & ?MAHG' F? ' □PGH' B ' ?H' GK□ D?@' A>' " □OF?DN' MGO(HAG' V 4 7 ' 6' H' CFG' M?E' A>' CFG' $□>G' A>' A' #FGDG' O?H' LG' M□CCMG' NABLC ' JG' CF□H(' ? ' CGGPGH ' F? ' PGDE' SB CME' ?D BGN ' CF?C' EDAOMG ' J? ' CFG' H?@G' A>' CFG' FGDA' A>' CF□ ' KM?E' AD' JFA' J? ' EDAOMG ' W #FG' FGDA' A>' □NHGE8 ' =' DO?N□? I' CGGPGH ' ?E ' =' C' □ ' DG@?D(?LMG' CF?C' @?HE' A>' ABD' ?HO□GHC' JD□CGD ' JGDG' ?@L□C□AB ' CA' G F□L□C' □NHGE8 ' JADCF□G ' AH' CFG' C? G ' ?HN' JFGH' F□ ' BLADN□H?CG' ? GHC ' JGDG' ?NP?HOGN' CA' BOF' FAHABD ' FAJ ' F?KKGHGN' □C' CF?C' EDAOMG ' CFG□D' MG?NGD ' FABMN' LG' APGDMAA(GNW I' #A' ?' EABH ' KAGC ' JFA' KDA-L?LME' F?N' ?OOG ' CA' CFG' =' DO?N□?' I' □H' @?HB OD□KC ' LG>ADG' □C ' KBLM□-O?C□AH' □H' 517 ' CFG' H?@G' A>' EDAOMG ' JABMN' H?CBD?MME' KDG GHC' □C GM>' ? ' JADCFE' CA' BOOGGN' CFG' A@GJF?C' BH@?H? G?LMG' KKAMM□HB ' A>' +AJGD ' ?HN' CF?C' H?@G' JABMN' DGOA@@GHN' □C GM>' CA' ?H' ?BN□GHOG' JFA ' □>' CFGE' JGDG' A>' CFG' KD□P□MG GN' O□DOMG ' BOF' ? ' CFG' ?OCAD ' A>' CFG' . M?O(' >D□?D ' A>CGH' ?NNDG GN ' JGDG' >?@□M□?D' J□CF' CFG' =' DO?N□?' I' LG>ADG' □C ' KBLM□O?C□AH' >CGD' 517' CFG' =' DO?N□?I' J? ' CFG' @A C' KAKBM?D' JAD(' A>' CFG' ? G

C' JMM' LG' GGH ' CFGH ' CF?C' JG' ?NPAO?CG' CFG' LGM□G>' CF?C' EDAOMG ' AD' GD□OMG ' J? ' ?' PGDE' G?DME' JAD(' A>' F?(KGDG ' H' A@G' >AD@' FAJGPGD' N□>>GDGHC' >DA@' CF?C' JF□OF' JG' KA G ' #F?C' □C' J? ' ?H' G?DME' JAD(' JG' ?DG' OAH CD?□HGN' CA' LGM□GPG ' HAC' >DA@' CFG' GP□NGHOG' A>' K?DC□OBM?D' K? - ? G ' JF□OF' @?E' LG' NG>□O□GHC' □H' KAJGD' AD' NGPA□N' A>' DG>□HG@GHC ' LBC' >DA@' CFG' GHC□DG' OAH CDBOC□AH' A>' CFG' ND?@?C□O' ?OC□AH ' #FG' KM?E' □ ' G GHC□?MME' AHG' A>' @APG@GHC ' JF□OF' □ ' ?' DG?C' DGQB□ □CG' >AD' ND?@?C□O' BOOG ' LBC' CF?C' @APG@GHC' □ ' HAC' FGMN' □H' BLSGOC□AH' CA' ?' BH□CE' A>' □NG?' #FG' JD□CGD ' □H' OAH CDBOC□H ' CFG' KMAC ' F?N' HAC' ?DD□PGN' CA' ?' C' KGD>GOC' OAHOGKC□AH' A>' CFG' KD□HO□KMG ' =' #F?C' ?' CD? GNE' □ ' C□GN' CA' CFG

' OM NHP ' - M N KJ9M G ' L+' +

' 8 ' 7 ' $

'

'' KM?E J? ' >D C KD HCGN H 43/ ' J CF CFG >AMMAJ H ' C CMG R = #FG #JA ALMG H @GH ' KDG GHCGN ?C CFG .M?O(>HGD ' LE CFG H 8 ' &?SG C G ' GDP?HC ' J CF DG?C ?KKM?B G ' JD CCGH LE CFG @G@AD?LMG ADCF G ' A> CFG D #@G ' &D ' 0AFH MGCOFGD ' ?HN &D ' MM?@ F?(' KG?DG ' +GHC ' D HCGN ?C $AHNAH ' LE #FA ' ACG ' >AD 0AFH ?CGD ' AH ' ?HN ?DG CA LG AMN ?C CFG HG A> CFG DAJHG ' H ?BM8 ' FBDOF ' ,?DN ' 43/ I ' H CFG >D C >AMA GN CAH A> CFG JAD(' A> .G?B@AHC ?HN MGCOFGD ' H 4/ ' CF ' KM?E N HAC ?KKG?D ' H CFG GOAHN >AMA C ' DGKD HCGN ' J CF PGDE M FC ?MCGD?CAH ' >DA@ CFG QB?DCA ' #F?C GOAHN >AMA OAHC?H ' CFG >AMMAJ H ' HAC OG H CF ' GN CAH EAB F?PG CFG ?NN CAH A> HA >GJGD CF?H GPGHCGGH KM?E ' @ADG CF?H JGDG H CFG >AD@GD ' JF OF JG F?PG C?(GH CFG K? H ' ?HN O?DG CA OAMMGOC ' ?HN KD HC ABC A> /CA ' H CF ' PAMB@G ' JF OF >AD N CHOC AH ?(G ?DG @?D(GN

J CF ?' C?D H CFG O?C?MA BG A>' CFG@ >?O H ' CFG >D C K? G A>' CFG LAA(I ' R 7 ' #FG #JA ALMG H @GH ' J F?PG CFAB FC C CFG @A C ?C >?OCADE OABD G CA KD HC CFG KM?E GHC DG ' #FG DG?NGD J MM AP LGCCGD KDGK?DGN >AD GHCGD H ' BKAH CFG G ?@ H?C AH A> CFG ?BCFAD F K ?>CGD C ' KGDB ?M ' ?HN J G CF H(' CF?C H C GM> C J MM ?LBHN?HCME DGK?E F@ ' G F?DNME HGGN ?H ?KAMA E >AD CF ' OABD G ' JFGH AMGD N G F? ' ?N ' =' ' O?H O?DOGME DGC?H ?' NABLC ? ' CA CFG >D C ?OC8 ' F?P H ' LGGH JD CCGH LE F?(KG?DG ' I ' ?HN JFGH F?DMG ' $?@L ?E ' =' #F?C MGCOFGD FABMN F?PG OAK GN F?(KG?DG8 ' @?HHGD H A @?HE GHC DG OGHG ' VJF OF ' CFG CFGADE A> CGGPGH ' ' HAC PGDE KDAL?LMG ' $ ' FG OABMN F?PG NAHG C J CF BOF >?O M CE ' CA @G ' HAC OGDC?H I

J CF ?' C?D H CFG QBG C AH ? ' CA F?(KGDG8 ' K?DC O K?C AH H CFG ?BCFAD F K A> #FG #JA ALMG H @GH ' JG F?PG CFAB FC C CFG @A C ?C >?OCADE OABD G CA KD HC CFG KM?E GHC DG ' #FG DG?NGD J MM AP LGCCGD KDGK?DGN >AD GHCGD H ' BKAH CFG G ?@ H?C AH A> CFG ?BCFAD F K ?>CGD C ' KGDB ?M ' ?HN JG CF H(' CF?C H C GM> C J MM ?LBHN?HCME DGK?E F@ ' G F?DNME HGGN ?H ?KAMA E >AD CF ' OABD G ' JFGH AMGD N G F? ' ?N ' =' ' O?H O?DOGME DGC?H ?' NABLC ? ' CA CFG >D C ?OC8 ' F?P H ' LGGH JD CCGH LE F?(KG?DG ' I ' ?HN JFGH F?DMG ' $?@L ?E ' =' #F?C MGCOFGD FABMN F?PG OAK GN F?(KG?DG8 ' @?HHGD H A @?HE GHC DG OGHG ' VJF OF ' CFG CFGADE A> CGGPGH ' ' HAC PGDE KDAL?LMG ' $ ' FG OABMN F?PG NAHG C J CF BOF >?O M CE ' CA @G ' HAC OGDC?H I

5 I L9PO HP ' KHPPU NH G I 9PG 8 " P KJ9PG J ' U !G I M!'
@ HP!' PMUP ' NHM!' T J ' PTPG ' 9M O AT H G K9JA+
" P NJ I A9PO O !' JL !' H G P I PM!' H OP
! O' G P H G' G !P G NHM %O ' H ' Q P7 M!O N I P+
OPM 7J9 K !GJ I P G ' T J 99 M99 OP J [
' <& ' 1H ' 2' H LP G I P Q O+
I P Q O HMNH LJN H G I P KT !' T J ' I M!H O+
X HP PN ' HP%99 !7JGP L P ' M!O L PGG T J 7 NH
1J ' J!OP NMUP [
-' 1H ' ! ' U!PPG ' ! !P ' O [
!N ' NHP HP9 I PNPO P99 !M JGP NHP I +
! O L MT 7 ' I P ' T J ' G 9O P +SD JA9PO 2' M I +
9 & -' 2 5
%' <& ' " ! J %O " LL 9TNM
GN O PMOPO # I MC ! M!' NHMN HMGN G9M !
HP GK OHP NJGU%O A M 8 NHMN ' NH NHT M I ' MG GN !Q
#G N G H NP ' MGN !PM ' N ' I MUP NHP I M9P
' NHT GPW KMLN P 8 AJN NHMN NH G NHT 9 O
@ !' N ' JLH 9O K PMN !' !' NHMN H ! J
O GN !MNJ P GNT9%O N ! ' GH J!U NHPP !N
HP A J!O NH J MGN %P 79 !Q ' MN !KP GJAOJ !Q
HT 7 KP M!O NHT M77PKN !8 G 9O P PGG+
HMN P]JM99T KM!GN L GP GNP ! !PGG NH L NT+
X H ' ! ' 2' U! ' HMGN I JKH I P L P ' !' H I '
HM!' P P ' HP HMO ' !' NHPP8 H ' %GN H G GN P!QNH+
! O H G 9 P N ' H ' G M GP M!N 7 '
HP NP! ' 7 NHT GLPPKH8 OPM ' Q9MGG 79MO PG+
O H I ' NHMN P ' H I ' 79M I !Q M ' O NH GK KH+
!OP ' NHP GHMO ' 7 H G G O I MT K 9 JG[
&P]J P H I ' HP MO M!KP N %P ' J ' HPMOG8
LPMU%N !' M I M!%G UPT ' 9 UP GJKH M I M!'
#G M!T 7 JG NH PP8 PPL ' P P T J 7M 98
/P!O JG M U!PP8

JN N JKH NHP Q J!O 7 ' JG ! ' 9 !QP ' N I P
HM!' M O P%G I N !' HP!' NHP HPMO%G L9JKU%O 77[
P99 H I ' 7 HP !' NHP A9 O G C%O 7 P9O 9MT G 99%! ' ;
H !Q NHP GJ!' H G NPPNH ' Q ! ! !Q MN NHP I !
X HMN T J J9O O [
. ' - ' 9MOT ' GMT ! ' I P[
2' HMO MG 9 P7 N MKP NH G Q O MKN !' NH T J
#G NHMN HP PN ' 2%I ' Q !Q ' M!O !P P ' TPN
X P!N 2' G ' 99 !Q MT+ T 9 O G NMUP!'
" PM N OPPL NH%T J ' O GN PGG ' 9PN H I ' K !G OP 8
2%99 GLPMU M! !+
R <& ' 1H ' 1' LPN N !' MG + -' !' !
PN O !' !' KP ' H KH 91' H N Q P7 J!KM!O PO
P9NG !N ' O LG8 G ' G ' M!N !Q 7 I '
2G L PGG%O NH OPPLP ' I MNNP +
' - MT GNM!O JL 8
4 J ' Q P7 G NNP!' !' T J ' KHPPU+
)' <& ' 1H ' P[
4 J KM!! N PMO N NHP P8 NHP P NH JQH I T NPM G+
/ UP !U9PO LPAA9PG !' M Q9MGGT GN PM I +
4 J I MT APH 9O NHP I [/MOT ' 9MOT ' M9MKU
" P NHMN 99 M99 NHP N PMGJ P U! ' %NHP PM NH+
JGN U! ' NHP KP!N P N 8 HP NHMN 99 7 GH
O ' I T 9PMGN I !! ' 9PN H I ' 9PMO H G 9 !P
' KMNKH !P MN I T HPM N+ 1H ' LM O !' I P[
3WN P I NT ' NHMN GHM LP!G GJ!O T NG+
MUPG I P M 7 9+
' - MT T J ' GMT ! NH !Q8 L MT T J [
X H ' KM!! N 7PP9 ! ' GPP NHP M ! ' AP !Q ! %N+
! G !P NHP ' PN ! ' O T+ 27 NHMN T J P P
HP Q J!O L PKP 7 G I P LM !NP ' 2' J9O AJT T J
' !GN JKN I P %QM !GN M KML NM9 Q P7 !OPPO 8
@ JKH HPM N L P K%O OP I !GN MN !' [' AJN ' M9MG+
P !Q M !MNJ M9 G GNP ' 7 J ' GPW+
4 J ' G ' APMNG ' G ' M OP!N9T JL !' I P

/ B 7 7 O7O;MN >3 I HJ 2' T
R' B=7H B; ' Q B A=3J7.' @ I CH7.' J3; K7.' >3HA > ; I AH S
H 3HAH CH (%* 4 (* ;7 PH I CH A;7H7 '- (- 7 '
M

HMN N GHM99 I MUP M K J!NP P79PKN %QM !GN
T A NHP %G HPM N ' M!O M I ' N ' G I P L NT
H JQH N P P I MOP 7 GN !P ' L MT HM P Q O K I 7 N %
-' O M O N ' NHP NP I L9P[9PM P ! N J M E N
17 NHP GMK PO KP P I !T+
' <& ' 1H ' NH G KP9PA MN !
X 99 9 !QP ' 9MGN ' M!O AP I P K GN9T ' NHM!
4 J ' GJLL9 M!NG% M [&P I P I AP ' NHMN T J ' 7M I P
! 99G !' NHP PM ' %NHP 9O ' HMN T J O ']J KU9T
2G ! N O !P MGH9T8 T J ' 7 GN NH JQHN G I P
HM!' NHP G%9MA J %O I PO NM!KP8 T J ' L P I PO NMN !Q
P NHM!' NHP ' MKN !G8 AJN @ H ' ? P[' T J ' MKN !G
!' MG NHPT I P MG GL PTG O ' NHP 7 GH+
JAOJP AP7 P NHPT N JKH ' NH !U ' OPM ' OJUP ' NH !U
X HMN APOG J ' G9M !' U !QG HM P[
%' <& ' X HMN Q P7G J ' APOG+
HMN J ' OPM ' 9 OG HM P ! !P[
)' <& ' !P 7 N7 ' NHP OPMO [
H GP NHMN NH K OG%' U! PG%' O M I G% L PK L NM!KP D
X PM T 7 NH G 9O%G 9 QHN ' HM P N ' NHP I GP9 PG
PP!' OPMNH%G I GN H O MQP!NG ' HJ I M!' Q MKP
#77 OG NHP I ' OJGN M!O GHMO +
2 <& ' JN J ' 9 OG
/ P A9 GNP !Q %7 P NHP G NMN !Q GJ!+
#!O P P Q O U !QG HP!' 9 !Q+
-' 2N G N JP ' M!O 2' 99 Q P T J K ! 7 N
' Q P T J ' OPMO 9 OG Q M PG
HP H KH N ' O ' I JGN I MUP G I P U NH P !+
' < ' #!O NHMN U ! ' L PGP!NG NGP97 N ' NHP
O !Q
' %N 99 NMUP 7 I 8 NHP HPMNG M P Q !P N I 8
HP!' A N9PGG N 9 I JGN PK I LP!GP NGP97
X NH NG !' G PMN8 ! ' HP G GPKJ P+

N O PM I G P GNM!O AP7 P T J ' LJ GGM!KP+
& !G !Q J ' H 9T APQQ !Q !' J ' TPG
' I MUP LPN N !' K9PM +
%' <& ' ' T J I MT NMUP H I +
5 J!U NH H G KN T+
)' <& ' #!O H G M I T 7J99
17 A PMO M!O G9 NH+
-' # NPG JG ' NHMN APGN U! %GN
" ' N ' O M ' JN ' 7 N N ' NH G P!NP L GP
HP L I %GN 7 ' NH G L KPPO !Q ' M!O NHP ! J I AP '
' KM T GJKH M AJG !PGG8 7 NH M!O 9P T
1J ' NH PGN !GN J I P!NG 8 H 9GN P OPGLMNKH
H G Q M!O MKN 7 J ' 9 7P ' NH G OM !Q OPPO
17 7MNP !' PO9 KU[
' <& ' 5 MQP G ' NMUP HM!OG [
/PN JG AP O G N ' J ' PG[5P9MT
I I P!OG JG N ' M 7M I GH !Q H LP+
' OM P P99[
%' <& ' X P K I P J!GPMG !MA9T8 AJN HP!' K J9O Q P7
J99 7 NH ' MG J!LM!Q%O EJOQ I P!N KM!' 7 NN%GN N I P
0 ' APGN G 9 K NMN !' \
-' X HT ' Q O 9MO PG+
H G G M GP KP ' HP PN ' 2' M I ' Q !Q+
: PMNP ' NHM!' M!T M 8D N I P I L NG I P
HM!' M9N NHP MKN !G NHMN 2' HM P 7 PQ !P+
1 ' 7JNJ P9T KM!' K LP+
2 <& ' HP I P L K9M I !Q
1J ' GJ N GHM99 AP !PQ9PKNPO ' HP!' HP ' M I G+
#A9P N ' 9 KU ? P 7 I M GT! O ' GHM99
T M M!N !Q I !9 QHN K G9PN NHPP ' H ' HP!'
" P ' N !! !Q KHP PG GHM99 NHP ' G PPN!PGG 7M99 %
L !' NHT NMGNP7J9 9 LG ' HMN 9N NH J NH !U
17 NNP!' U !QG ' A9JAAP %O]JPP!G \ HMN KM P
0 ' HMN NH J 7PP9%GN ! N ' HMN NH J 7PP9%GN AP !Q MA9P
' I MUP M G GLJ !' H G O J I ' \ 1H ' 7 NH J K JKH
JN !P ! QHN NH HP ' P P T H J ' !%N 99

F & ' HP PM 9T K L PG ' M8 %
FF ''SM!' MKN P P A+

MUP H GNMQP 7 NHPP 7 ' M HJ!O PO ' M!O
H J GHM9N P I P I AP ' ! NH !Q I P NHM!' HMN
HMN AM!]JPN A OG NHPP N +
, H JQH I JKH J!9 UP
4 J GH J9O AP G ' N M!GL NPO ' MG I JKH G T
2' GH J9O AP GJKH M' GJ N 8 TPN 2' NH !U
5 O'2'! N ' AT NHP MAGNM ! !Q 7 I T E T+
X H KH A PPOG M' OPPLP '9 !Q !Q ' KJ P NHP ' GJ 7P N
HMN K M PG M' L PGP!N I PO K !P ' 2' GH J9O L9JKU
#99 9MO PG% GKM!OM9 !' I P ' NHP P7 P ' G
#G 2' GHM99 HP P I MUP N M9 7 I T L MTP G+
3 NHP ' L PGJ I !Q NHP I ' N ' HM P G I P 7 KP+
1 ' GP!NP!K !Q 7 ' MTP NHP ' Q J ' OJ I A+
- QJP NH G AJG !PGG P M P Q !Q MA JN ' M!O HM!Q
4 J ' GH P9O M7 P T J ' HPM N ' MA JN NHMN !PKU
X H KH G I T 7PP ' M!O H KH 2' 7 PP9T 9P!O
' O ' NHPGP L ']JPP!G GP KP[
' <& -' 1H ' HP9L' ! [
1J ' KMJGP K PG 7 ' T J ' U!PP+ 9 !'
' 27' T J Q M!N ! N
T G GNP ' HP ' LPN N ! ' !' NHMN 7 KP+
X NH NHMN KP9P NT M!O !MNJ P ' H KH
HP I MUPG N ! ' 7 I ' HP!KP7 NH 2999 ! N OM P
' MGU T J M!TNH !Q ' ! ' AP G ' HM OT
3 P ' N ' NMUP M' HJGAM!O+
- ' - MT' GNM!O ' JL' 2
2' M I ' P!N PMN !Q 7 I TGP97 N ' O '
HMN H KH T J U!PP9 N ' HM P I P+ -P NH JG
/PMO !' NHP A OP+ : PN T J M!O L MT' NHP Q OG
0 ' GJKKPGG M!O PNJ !8 I N ! N M!TNH !Q
2!' NHP L PNP!OPO' KP9PA MN !+ >JPP!G
0 99 ' T J ' G 9O P ' MG AP7 P8 HP!KP T J
#!O MN NHP AM!UG 7 #J9 G I PPN JG NH
HP 7 KPG T J KM!' M GP ' HP P P GHM99 7 !O
HP I PNT 7 M !J I AP ' 7 ' M AJG !PGG
P A QQP ' 9 U%O+S !KP NHMN J ' NHP I P G HMGNP
2' GNM I L' NH G U GG JL !' NHT' KJ M!N 9 L' 8
PPN ' UPPL' N MG I T N UP!+ PN T J 7 M O 8
0 ' ' 99 GPP T J Q !P+ 9: 4 ' 1 *8
OM P P99 ' I T APMJNP JG G GNP [-P NH JG
PPL' NHP 7PMGN 7J 8 AMNP ! N M!' H J ' !%N [
2%99 7 99 ' T J MN HPP9G 8 NHP 7PMGN%G G 9P I ! NT
HM99 M!N N 99 T J ' PNJ !+
-' JG !' 2' KHM QP T J+
JOQP ! N 7 I ' #NHP!G 8 P GHM99 AP PNJ ! !Q
3 P T J KM!' P!O NH G 7PMGN ' 7 H KH ' 2' L MT' T J+
MUP ! ' MAMNP I P!N+ 1!KP I P ' 7M P P99 M99
' <& ' HJG O GN NH J GN 99 I MUP Q O NHP N !QJP %
NHP 9O+
%' <& ' #!O PM !%GN M OP NT' P]JM9 NH M G+
)' <& ' 27' ! N MA P H I ' 8 7 +
H J ' AP !Q AJN I NM9 ' I MU%GN M77PKN !G AP!O
' Q O9 UP H ! J G 8 NHPT NHP I GP9 PG ' G I P GMT+
: M!' J!OP ' GJKH M I MGNP T+
-' #G P M P I P!+
HJG GH J9O P O 8 AP !Q GP!GJM99T GJAOJPO+
X P 9 GP J ' HJ I M!' N N9P+ : O KHPP ' 9MO PG[=> !& - '
' NJ !' P N M OG T J ' K I 7 NG+ = 4 &

3 3' 22+

' - ' "' ! 1

' 5PM ' -M9M I !' OPM P ' !' 9 P NHM!' A9 O '
#!O J ' L I P K JG !' TPN J!HM OP!%O !'
HP K I PG 7 !MNJ P8 9PN JG 9PM P NHP K NT '
HPAPG ' M!O NHP NP I LN !QG !%N ' AP7 P P 7J NHP '
J99T J ' Q9 GG 7 T JNH
#!O HP P N ' UPPL' !' MAGN !P!KM P GHM I P

= SDEJGN' PWMKN9T+

#G !' !K !N !P!KP 8 7 ' ! N N ' G I
2!' NHP M O 7 NHP KJ P!N ' P P M9 I GN N ' G !U
#N 9PMGN N ' 7 JGN MNP GN !Q 8 M!O N ' 7 99 '
HP K I I !' GN PM I ' %N J9O A !Q JG N ' M!' POOT
X HP P P GH J9O NJ !' ' O !' 8 7 9MA J ' NH JQH+
1J ' QM !' AJN 9 7P M!O PMU!PGG+
' 4 J ' MO KP
2G K PO JL' NH PWM I L9P ' HMN GN M!QP J !G+
!KP 7 GN P P!N N ' GKH 9 ' I MT' P LP KP P
X M9U !Q !' HPAPG[KM G ' M!O AM P PPOG+
HP QM !' %NHP I M N M9 GN ' H ' O O L L J!O
' H G A 9O P!OG ' H ! J ' M!O Q 9OP!' !Q NG
X H KH ' NH JQH HP ' HP HMO ! N8 M!O ! ' 79J NPO
T LPMKP ' 7 ' H I ' HP 7 JQHN[X H ' NHP!' GHM99 77P '
' M G%G G ' GK !%O M9NM ' \ 2' O ' A9PPO
X HP!' GJKH 2' I PPN ' M!O GH Q PMN ?J! ' J9O ;
&PGJ I P HP ' M!K P!N 7 N 7EPM9 JGT+
' QPN NHP G 9O P ' U ' NHMN LPMKP I QHN LJ QP
0 ' HP ' PL9PN !' M!O PNM !' M!P '
" P ' KHM NMA9P HPM N ' ! ' HM O ' M!O HM GHP '
HM!' GN 7P ' M ' K J9O AP+
' # P T J ! N JN \
PPN T J ! ' J !' AJN NHP G 9O P ' !
HP K M!UG M!O NJ !G 7 HPAPG \ 4 J O O APQ !
#G 7 T J I PN OPKMTG 7 I M!T U !OG 8
-P KP P T J ! !P NHMN O ' M JGP T J ' L NT+
JN NH% J!K !G OP %O G 9O P ' \
' 4 PG8 2' L NT
5PKMTG HP P%P ' 2' 7 !O NHP I ' 8 AJN GJKH I GN+
HMN ' G PMN !Q !' M!' H ! J MA9P N 9+
P LM O NH KP N ' K g %P I +
' % G ! N NH G
2' O O APQ !' N ' GLPMU 78 NH G G NJP
17 ! ' PGLPKN !' HPAPG ' 2' GLMUP 7 HPAPG
" ' OM!QP JG ' 7 P 99 UPPL' J ' H ! J G+
2N G 7 Z J ' PG O !Q8 HP P P P T P 9
" MNH M Q O P 9 J 8 HP P P P T GPP I !Q Q O%G
#' KP NM !' P 98 HP P ! N N ' AP P P!' EJ I L$
#G NHPT M P ' HP P P P N ' AP GN M!QP G ' M!O
JKH NH !QG N ' AP I P P I !GNP G+
' 2N G !' J ' L P
@ !9PGG P 7PM ' NHMN MLPG KM!' NJN %G ' N '
P I MGNP G 7 J ' I M!!P G ' HMN !PPO 2'
#77PKN M! NHP %G QM N ' H KH G ! N KMNKH !Q
X HP P NHP P G 7M NH ' ' N ' AP 7 !O JL !'
#! NHP %G MT 7 GLPPKH ' HP!' AT I !P !'
2' I MT AP PMG !MA9T K !KP %O 8 GM %O N
LPMU !Q N N J9T \ X HT M I ' 2' A J!O
T M!T QP!P JG A !O N ' 7 99 ' H I '
0 99 G H G NM 9 ' HML9T G ' 9 !Q J!N 9
HP 7 99 %O I MUP LJ GJ N \ 1 ' 9PN I P U!
X HT I !P !' AM AP ' G J!A9PGG%O ' NH H I '
T L ' KH !' N ' 7 ' %N G ! N GK GGM %O EJGN
' GJKH M 7M J NP%G Q9MGG \ X HMN KM! !' G NHP P
HMN O PG K I I M!O I T ML P ' 7 I ' I T H L+
' OM!Q9P%N !' I T HM!O ' ' N ' Q ' N LN P
P7 P NHP GN PPN AP 7 J9 \ 3 NHP ' 2' M I
HP 7 P H GP !' NHP NPM I ' ' 2' M I ' ! !P
HMN O M ' %NHP GP]JP!N N MKP 2 HPGP L ' G9 QHN G PG
PPO ! N M L9M!NM !8 NHMN H KH LG I T A G I
#9 I GN N ' NHP HPM N%G S
' 1J ' J!K9P P !+
' " P
#' I GN J!A J!OPKD NT M!N ' H GP GJKKPGG
MUPG " PM P!' J!7PM %O ' M!O 99M !T MGGJ %O
PT !O NG L P ' NHP P%G ! NH !Q ' M9 I GN LJNG D

' H G LMGGMQP G O !M 9T L !NPO S
6' #' I GN J!A J!OPO NT M!N ' H GP % ((%% %
) ' " PM P!' J!7PM %O ' M!O 99M !T MGGJ %O
PT !O NG L P '8 NHP P%G ! NH !Q M9 I GN LJNG R BK+
P M O GJQQPGNPO NHP LJ!KNJMN !' H KH P HM P MO LNPO !' NHP NH O 9 !P8 AJN '
AT 9PM !Q NHP L9J M9 ! I !MN P % ((%% %" HP 9P7N NHP P I M !OP ' 7 NHP GP!NP!KP
J! !NP99 Q A9P S MN 9PMGN N ' I OP I ' PMOP G ' H ' P]J P GN KN Q M I I MN KM9 K !_
GN JKN !+
1/+ 22+ ' ')

OM NH' !' M' 7P P ' M ! O' OP 7 PG' M9 !P
9JA9P' KHM ! KP S H ' !9T' MNN AJNPG
HP' 7MKJ9N PG' 7' NHP ' !GN J I P ! NG
' H G' !' !P PG' M ! O' MKN8 K I I M ! OG' I P ! %G' GP $ KP
! O' HMN' NHPT' !' ! %N ' A N' M ! O' Q9 T' N
HMN' 7PM G' ! N' N ' O ' HM I ' # Q O' OM PG' ! N ' 9PN'
HP' A9 O' 7' I !P' NHMN%G' G A' %,N ' H I ' AP' GJKU%O'
0 I ' I P' NH' 9PPKHPG' ' 9PN' NHP I ' A PMU' M ! O' 7M99'
177' I P' NH' NHMN' K JLN !' [
9PM GL NPO' K JG !
/ PN%G' 9PM P' H G' K J N ' NHMN' P' I MT' ! NH ! Q' GHM P'
17' NH G' 9 JO' !7M I T' 8 7 ' J ' I 9U'
X 99' P9 GH' 7' NHP' LMGNJ P ' M ! O' P' I JGN'
P' 9P' ' O G APO P ! N8 ! N' H G' U ! G I P !'
2 !' A9 O ' J ! 9PGG' !'] JM9 NT+
E-M +' ' NH ! Q' N JP +
2' NH ! U' NHP' PKH PG' 7' H G' GHM I PG' HM P' OPM7%O'
HP' PM G' 7' HPM %! 9T' EJGN KP' ' O G%K PG'
5PGKP ! O' MQM !' ! N ' NHP ' NH MNG ' M ! O' HM P' ! N'
5JP' MJO P ! KP' 7' NHP' Q OG+ SD M9P JG[

#

OM +' HP' U ! Q' KM99G' 7 ' T J8 TPN' AP' 9PMOP ! 7 NPO+
99' H G' Q PMN' MQP' AP' 77' H I +' -H PAJG ' HP !'
" P' A UP' H G' H LGN KU ' M ! O' PWK9M I %O' MQM ! GN'
HP' H GPG' 7' NHP' GJ ! ' AJN' H GLP %O ' N '
HP' 9 JO ! PGG' 7' H G' 7J T+
' I M99' ! OG' GHMUP' H I '
JN' HMN%G' NHP' I MNNP ' \
' HPGPJG' @ H ' HP P' HP' NH PMNG' MLLM9G ' HMNH' GP ! N'
5PMO9T' OP7 M ! KP' N ' H I ' M ! O' L ! J ! KPG'
&J !' N ' HPAPG' 8 H ' G' MN' HM ! O' N ' GPM9'
HP' L I GP' 7' H G' MNH+
' / PN' H I ' MLL MKH' [
JN' NHMN' P' 7PM ' NHP' Q OG' !' H I ' HP' A ! QG' ! N
#' E N' 7' NP ' N ' JG' ‡ TPN' HMN' I M !
H OG' H G' !' NH' @NHP' KMGP' G' PMKH' 7' J G +
X HP !' NHMN' H G' MKN !%G' O PQQ%O' NH' I ! O' MGGJ %O'
% G' AMO' HP' Q PG' MA JN' \
' / PM P' CF?C' BHDG? AH8N [
1J ' GP KPG' GNM ! O' ! ' 7 ' HPAPG ' ! N' P !+
4PN ' N ' AP' ! PJN M9' N ' H I ' P P' O GH ! J +
&PAP99 JG' N ' LL GP8 NHP P7 P' P' I JGN'
X NH' H I ' GNM ! O' N ' NHP' I P KT' 7' J ' 7MNP+
XH ' HMNH' A J ! OPO' J ' 9MGN' I ! JNP+
' P' I JGN+
2G %N' GM O' NH G' M %G' M7 N' \ ' N' GHM99' AP+
1 !' 7M 9' 7' G I P' K ! O N !' \
' % G' !' I N !8
2 P' ! NP99 QP ! KP' 7' GNMNP' KM I P' !' NHP' ! GNM ! N'
X NH' NHP' OP7 P +
' / PN%G' N ' NHP' U ! Q8' H ' P P' HP
#'] JM NP ' KM P ' 7' NHMN' H ! J ' H KH'
" G' P ! P I T' K I PG' !' NHP' A9 O' P' P ! NJ P'
H J9O' AP' MG' 7 ' J ' HPM9NH8 H KH' P P' ! N' GLP ! N+
&MNHP ' 9M O' JN' 7 ' LJ KHMGP' AJN ' M9MG+
1J ' HM ! OG' MO M ! K%O' AP7 P' J ' HPM NG ' HMN' 99'
HP' 7M99' % NHP' GN UP' O ' OM I MQP' \
' / PN' NH% P P ! N+
HMN' ! P P P ! Q' M A N MN ' NP99' JG
X HP !' P' U ! ' M99' J GP9 PG8 M ! O' 9PN' JG' 7 99
HP' APKU ! Q' 7' J ' KHM ! KP' [9 4 &

3 3' 222+

' - 1 ' + ' ' 1 ' "' '
' ' 7J NHP [
, ' ' 7M P P99' &PLPMN' I T' GHPG

' 4 " SDU !+
+, '

' J ' Q PMN' 9 O' 7' H GP' GJKKPGG' 2' OM P' ! N'
MUP' M ! T' N I JG'] JPGN !' 8 TPN' 2' GH' H I '
3WKPGG' M ! O' P 79 ' 7' L P ' M ! %N' I QHN' AP
' OJ PD' 99 OPM9 ! Q' 7 NJ ! P+' LPPO' N ' H I ' 2
N P' ! P P ' HJ NG' Q O' Q P ! G+
' H JQH' 2' U !
" G' KPM !' ! PPOG' ! N' I T' L ' O LG ' TPN' NHPT'
JGN' T P9O' NHP ' N AJNP' NHP P+' T' L PK JG' I M O+
H GP' APGN' M77PKN !G' NHMN' NHP' " PM %! G' ! 7JGP'
2 !' NHP ' APGN NP I LP %O' L PKPG ' UPPL' P ! NH !%O'
2 !' T J ' OPM ' HPM N[
' HM ! UG ' G +' &P I P I AP ' I P
' J ' M99 TM9' A NHP 8' 7 ' H GP' GLPPO'
HP' Q PMN' P99 ! M' 2%99' G 9 K N ' M ! O'
! KP ' !' J ' NP P ! P' GNMNP ' LPN N !G' M P' ! N'
X NH J N' Q 7NG' J ! OP GN O+' 2%99' 77P ' N ' HP '
X HMN' 2' GHM99' AP' MO G%O' GHP' 9 UPG+' 1J ' HPM NG'
P' !' H G' M I T' !' H G' NP ! N+
' 2 ! %G' A G I +
X P' HM P' APP !' G 9O P G ' M ! O' P' KM ! ! N' PPL'
X HP !' J ' 7 P ! OG' O !' NHP ' HP9 I G' ' LJN' N ' GPM+
1 ' NP99' 7' AMAPG' A MKH%O' !' NHP' 9M ! KP ' ' I P !'
HMN' HM P' G O' NHP ' !7M ! NG' !' @M ! O' M7NP ' PMN' NHP I
HP' A ! P' NHPT' PLN' MN' U 99 ! Q' %P ! 98 NHP !' 7'
4 J' GNMT' N ' GPP' 7' JG' GJKH' GL ! GNP G ' P'
H J9O' H 9O' T J' HP P' 7 ' P P +
' - PMKP' AP' N ' T J+
#G' 2' LJ GJP' NH G' M [H KH' GHM99' AP' NHP !
PT ! O' 7J NHP ' P] J ! Q+' 9 4
' " ' H G' 9 ! Q ! Q
0 99 G' H G' 7 P ! O$+' ! KP' H G' OPLM N ' H G' GL NG+
H JQH' K M ! Q' GP JG ! PGG' M ! O' GU 99 ' LMGN' G9 QHN9T'
" G' KM P9PGG' PWPKJN ! ' HP P' ! ' QM !'
MOP' H I ' POM O ' ' 9 GG' K ! G OP 8 AJN'
-9MT ! Q' ! PD' AJG ! PGG' !' H G' HM ! O ' M ! NHP '
5 PKN ! Q' !' H G' HPMO ' H G' I ! O' ! J GP' P] JM9'
' NHPGP' G ' O 77% ! Q' N ! G+' -9M P' T J' AGP %O' H I '
! KP' J ' Q PMN' 9 O' OPLM NPO' \
' X NH' I JKH' 9MA J +
! O' 2' O O' 9 P' H I ' 7 %N+' HPT' N ' HM P' KMA ! %O'
2 !' I M ! T' MG' OM ! QP JG ' MG' L ' M' K !P +
-P 9' M ! O' M ! N' K ! NP ! O ! Q' 8 NHPT' HM P' GU 77%O'
P ! NG ' H GP' M ! Q' NT M ! ! T' M ! O' L P '
2% NH% 9PMGN' 7' NHPGP' MG' O PMO7J9' M ! O' NHPT' HM P'
0 JQH' JN' N QPNHP ' HP P' OPMNH%G' GP97' MG' 9 OQ%O+
4PN' 7MNP' HMNH' A JQHN' NHP I ' 77+' HP ' U ! N' 7'9 P'
PO ' PM %O ' P ! NM ! Q9PO ' NH' G ' N JP ' G ' 9 ! Q+
! O' NH' M' 7 ! QP ' 7' G ' OPPL' M' KJ ! ! ! Q+
MT' AP' JN ! ' ! P P ' J ! O ! P+' 2' NH ! U'
HPGPJG' KM ! ! N' AP' J I L P' N ' H I GP97+
9PM ! Q' H G' K ! GK P ! KP' ! NA' N M ! ' M ! O' " ! 3'
3MKH' G OP' 9 UP' 6&- $' 2 ' ' !1 -' (-
!&(--
HP P' G' M' (- $ '" -! ' -' !' -'
' GMT' ' G' ! N' T J+' 2' MG' N& '"
' NH' M' N I P' HP ! ' 2' P ! E T%O' M' , 5. ! 2#
4 J' P P' MN' M G' HP ! ' GHP' NHP' Q M P' P ! KH%O+
XH ' I MOP' N ' L JO' NHP' APO ' N U' 9PM P' % NH% I !'
@XH KH' NHP ! ' 9 U%O' LM9P' MN' LM N ! Q ' HP !' J ' K J ! N'
X MG' PMKH' P9P P ! +
' % MG' O9M ! M+
' 4PG+
4 J' NM9U' 7' -P NH JG% M ! O' HPGPJG% 9 P8
HP G' HMG' I P' Q J ! O' G' I P' I MNJ P9T' GPMG ! %O
P' AJKU9PO' NH' GN ! Q' EJOQ I P ! N ' M ! O' NHP ' ! PPOG
HP' ! P' 7' NH% NHP ' I MT' AP' GM O' N ' MNP
HP ' ! NP NM ! Q9PO' NG' 7' 9 P' 8 AJN' 2
! O' GHP' @Z' G QH' M ! O' GL UP' 7' P P' NH ! QG' ! ! KP ! N+
/ %O' 7 ' P' O O ' M ! O' 9 UP' NHP' P9P I P ! NG'
HMN' U ! ' ! N' HMN ' ! ' HT ' TPN' O ' P77PKN

' ' NHP' Q ! M9' 7 ' ' I P' PMO' (;' NHP G' *
' ' G GJQQPGNPO' AT' ' MG ! ' HP' Q ! M9' HMG' # $

&M P' GGJPG'AT'NHP ' LP MiKP8 J'G JGG'
5 O'G'N' ' iP'Mi NHP ' HMN'GHP'9 U%O
XMG'NHPi' 7'IP'ML %O8' HMN'i N'K iOPli%O+
'I P'M M QI1PIN8 NHP'79 P'NHMN'2' J9O'L9JKU'
#iO'LJN'APN PPi'IT'A PMGNG'@ H'NHPi'AJN'APQ ii iQ'
'G P99'MA JN'NHP'A9 GGAI 'GHP' J9O'9 iQ'
99'GHP'HMO'GJKH'Mi NHP 'MiO'K I I N' N'
'NHP'9 UP' ii KPiN'K MO9P' HP P'LHKPiW 9 UP'
HPT'O PO' i'LP 7J1P' i'IT'HPMO'i 'N T'
JN' MG'HP'LMNNP i8 HP 'M77PKN iGD'@L PNNT+
H JQH'HMLL 9T'HP 'KM P9PGG' PM '2'7 99 %O'
O 'IT'I GN'GP JG'OPKU iQ8 HMO'I IP'PM'
N 9%i'G I P'IP 'M ' 'MN'MO piNJ P'HJ1 I %O' IP'
O I'I JG KM9'K iMQP' HT' N' MG M'i NP'
XHP P i'HP'GL NG' J9O'G E J i'@ MNHP'O P99' i +
#iO'G iQ' N' i'HP 'G9J1 AP G' NH G' PHPM GM9+
XH KH'P P T' ii KPiN' NG' P99'K I PG' i'
/ UP' 9O' IL N IPi%G AMGNM O'HMC'NH G'PiO+
HMN'NHP'N JP'9 P'%N PPi'I M O'MiO'I M O'I MT'AP'
P'NHMI'i'GPW'O OJM9+
'
4 J%P' JN' 7A PMNH8
#iO'NH G'H QH GLPPOPO'LMKP' G'AJN'N 'GMT+
HPT'M P'G GNP G%KH 9O piPLHP G'N 'NHP'U iQ+
T'NHP 'MLL iNIPiN8 G I P' 7 HPAPG'HM P'N 9O'JG'
T'NH%HP9I' 7 M G'2'GM 'NHPI' i'NHP' M +
-' / UP'N 'M'LM ' 7'9 iG'GIPM %O' NH'L PT+
MUP'9MIPG' i'N LG'MQHMGN'2'7 W%O' IT' i NP'
iGNMiN9T' i'NHPI 8 7 'NHPT' P P'M I M U
'
;' (%S HMN'GHP' (*??PPO+
D X,T SIMUP'P pi+
F H G G ' 5TKP%GEJO K JG PMO iQ+
@ H JQH' i%N'2'UI 'NH J'O GN'AP9 P P'NHTGP97
HMI'2' 99'N JGN'M'G KU9T'MLLPN NP+
HMN'9 MNHPG'P pi'MG N'9 iQG+ JN'GJ P' IT G GNP +
27'2' P P' LP'7 'T J'LP GJMG i'T J'
"M P'GM O'pi JQH'N 'GHMUP' IP'7 I'NHP'M I'
1 7'NHP'D i A9P' HPGPJG8 7 ' H GP'7 NJ1PG
2' 99'i ' i'MiO'UIPP9' NH'Q PM'MGGJ MiKP+
HMN' P'I P'NHMI'H G -P NH JG'L GGPGG'

3 3' +

X NH'M'Q O%G P +' XHMN' MG%N'NHMN'L G ip'N 9O' IPF
XHPi'2' i]J %O'NHP 'iMIPG\
"; X NH'9PM P'NHPT%P'KM99%O
K NP'MiO'-M9MI i+
-' % G QHN8 NH GP'NH GP+
HPT'M P'i N'OPMO'\
"; ' i'M GNMN'P' 79 7P' HMO'NHPT'APPi'NMUPi'
XHPi'NHP '9MGN'HJ NG' P P'Q pi'%N MG'L GG A9P'
HPT'I QHN'HM P'APPi' PK P %O'8 TPN'NHPT'A PMNHP+
#iO'HM P'NHP'iMIP' 7 IPi+
-' HPi'9 UP' IPi'JGP'%PI+
HP' P T'9PPG' 7GJKH'I 99 iG' 7 MNPG'
3WKPPO'NHP' iP' 7 NHP G8 M99' J'GJ QP iG'
i piN' i'NHP 'APH 78 J' KHPGN'AM9 IG+
&MNHP'NHMI'i QQM O' MGNP[NHP '9 PG K iKP i'JG
JKH' I P'NHMI' HPAPG' G NH+' &MNHP'NHMI'HM P'NHPI'
O PPO' 7NH G'L9 QHN'MiO' i'NHP 'I i iQ'GNMNP
JiO'MiO'MN'9 AP NT'2' J9O'NHPI'OPMO8
JN'7 NT'NH JGMiO'7 9O' P'HMO' MNHP'HM P'NHPI'
- G ip G'N 'JG'NHMI'OPMNH+ PM'%PI'GLPPO 9T'
O I' J'U iO'M '@N'NHPI'JiU iO 'MiO'I i GNP'
X HMN'IMi'N 'IMi'IMT'O 8 7 ' J'GMUP' I p
+ iKP'2'HM P'Ui i'7 QHN%G'7J T'7 piOG%APHPGNG
/ P%G'L KMN iG'CPM9 i'M I GN PGG%MMGU+
5PG P' 79 AP NT'M'7P P ' IMOipGG
% 'HMNH'GPN'M' IM U' H KH' MNJ P'K J9O'i N' PMKH'N '
X NH JN'G IP' IL G N i'G KUipGG' i' 99
1 ' PGN9 iQ'GN piQNH' i' PMG i+' O ' J'9 P
#iO'Q PMN'#L 99 %G IP KT'M99' J'APGN'
HP 'APGN'GU 99'NpiOP [DS/PMO' iN 'NHP'K NT
XHP P'HM iQ'A JiO'NH iQG'GKMNNP %O' P' 99'L GN'
'#NHpiG%7 P' J'M IT+' 9 4 &

' >JPPiG 2 ' ' - -'i' '"JGAMiOG' ' '
.& 'i- 5$'X
iG'MiO' O J G'A iQ'M MT+
ML J G'G QHG'OM UPi'NHP'OMT[
1J'O 9P'I P'OPMO9T'9 UG'NMMI'OT iQ[
M9 I G'MiO'QJ1 G'MiO'HPM T'KHPP G+
MK PO' M9G'7 99%O' NH'NPM G+
#iO'K9MI J G'NH JQH'NHP' 9O'M '79T iQ
IP'M99'GMO'MiO'G 9P I'GH G+
HMN'M P']J KU pTPO'-9PMGJ P%G 7 PG[
XP'K i piN'iMJQHN'P9GP'AJN' PG+
XP'K i piN' BK+
)' <& ' H G'7JIP M9'LMNH'A iQG'N 'T J'H JGPH 9O%G
Q M P F
? T'GP CP' i'T J'MQM i[-PMKP'G9PPL' NH'H I [
%' <& ' #iO'NH G'N 'T J G[
2 <& ' 4 J G'NH G' MT["PM piG'9piO
#'NH JGMiO'O 77P iQ' MTGN ' ip'GJ P'piO[
)' <& ' H G 9O%G'M'K NT'7J99' 7GN MT iQ'GN PPNG8
#iO'OPMNH%G'NHP'I M UPN L9MKP' HP P'PMKH' iP' IPPNG+
= 4 & '- 1 5

UPPL'NH JQH' N'AP7 'Q PMN' IPG'TPN'NHPT'GP9O I'K I P' AP7 P' IP'GM9I I'T J'GHM99'NMUP'M'IJ1AP' % I II G‡ 2' M I'Q PI' JN'N 'AP'APNNP'9 IPO'NHMI'N'KMI'ML LPM'N ' IP PL N' G'M'N 'JP'GLPMUP '2' J9O2‡' P P' PM99T'NHMN' 2' MI' OP9 P PO'N 'AP[MIT' HMN'2'HM P'@AP$N' HMN' N' 99'2' 99'MGGJ P'JL I'T'OMJQHNP'MN'NHP'OMT' % I T'OPMNH+ 8II ' '2'OPIMIO'I'I P'NHMI'T J' I' 77P 8 MIO' 2%99'PGNMNP'T J'OMJQHNP ' I' HMN'2'HM P'L I GPO+ 7 I ' XP99' P%99' NM9U I P' 7NH G HPI'NHP'G 9PI I NT' GLMGN+' JN'HM P'T J'M'7J99'L I GP' 7HP'\ XHPI'NHMN' GHM99'AP'GPPI'2'NPIOP'I'T K IGPIN+ 8II '2'HM P'G ‡' "P P'GHP'K IPG+ '5MJQHNP + I '4 J'7 PIO'MIO'2'HM P'KHMIKPO'N 'IMI P'T J' HP P' I'NHP' 9O'AJG IP%GS ASN'I'I P' % NHMN' I ‡' ' G I'MG'NHP'K J N HJ T'G %P ' P%9' HM P'MI'PIO' 7%N8' I' 7NHP'N M I'T J'IMT'LP KP P'ML M' 7H I+ NHP'IPMI'N I P'9 U'NPIOP 9T'N 'NHP'N 'L G IP G8 2'KMI' NP99'T J'NHPT%P'L IKPG+ &3 ' HPGP'GN P IQG'M P'7 'NHP 'KHMIAP ‡' 2N' G L'NT'NHPT'M P' I'L G I'MIO'% P P'L NT'NHPT'GH J9O'AP' JN‡ 2' O ' NH IU' NHPT' HM P' LMN PIKP'N ' IMUP' MIT'MO P G NT' MGHMIPO' NHP'L G I' NGP97' G'L JO' 7'NHPI ' MIO' NHPT' HM P'M99'NHP' 9O' I'NHP 'KHMIAP + I ' HPT%P'P7MIPO'N 'AP'M'LM ' 7MAG 9JNP'IPI+ &3 ' T'IT'N NH'2'NH IU'7MIP'AJN'GNMI IP G' %PI8 NHPT'GNMIO'M'Q KPD'MA P'NHP' PMKH' 7' PL N+ I ' 2' HPM O'NHPI' PL NPO' I' NHP' AMNN9P'N ' AP' NHP' I9T'O P G+ &3 ' MT' I GN'9 UP9T8' 7 ' NHPT'M P' I AP9P' GJ77P P G+ 2' IM P9'H 'NHPT%O' HM P'9 UPO'HMO'NHPT'APPI' KN G' NHMN' NH'GJKH'M'K IGNMIN' I A 9 NT'PI7 KP'M'7 PPO I' JN' 7 A IOMQP' IMU I'Q' I GP T'NHP ' I NH'MIO'M7 KN I'M'N T'N ' EPGN'MN+' + I ' 5 'NHPT'G '\ &3 ' 2N'GPPIG'N ' IP'NHPT% P' I ' P' GPIGP' 7'NHP ' UPPL'NH JQH' N'AP'7 'Q PMN' IPG'TPN'NHPT'GP9O I'K I P' AP7 P' IP'GM9I I'T J'GHM99'NMUP'M'IJ1AP' % I II G‡ 2' M I'Q PI' JN'N 'AP'APNNP'9 IPO'NHMI'N'KMI'ML LPM'N ' IP PL N' G'M'N 'JP'GLPMUP '2' J9O2‡' P P' PM99T'NHMN' 2' MI' OP9 P PO'N 'AP[MIT' HMN'2'HM P'@AP$N' HMN' N' 99'2' 99'MGGJ P'JL I'T'OMJQHNP'MN'NHP'OMT' % I T'OPMNH+ 8II ' '2'OPIMIO'I'I P'NHMI'T J' I' 77P 8 MIO' 2%99'PGNMNP'T J'OMJQHNP ' I' HMN'2'HM P'L I GPO+ 7 I ' XP99' P%99' NM9U I P' 7NH G HPI'NHP'G 9PI I NT' GLMGN+' JN'HM P'T J'M'7J99'L I GP' 7HP'\ XHPI'NHMN' GHM99'AP'GPPI'2'NPIOP'I'T K IGPIN+ 8II '2'HM P'G ‡' "P P'GHP'K IPG+ 'SMJQHNP + I '4 J'7 PIO'MIO'2'HM P'KHMIKPO'N 'IMI P'T J' HP P' I'NHP' 9O'AJG IP%GS ASN'I'I P' % NHMN' I ‡' ' G I'MG'NHP'K J N HJ T'G %P ' P%9' HM P'MI'PIO' 7%N8' I' 7NHP'N M I'T J'IMT'LP KP P'ML M' 7H I+ NHP'IPMI'N I P'9 U'NPIOP 9T'N 'NHP'N 'L G IP G8 2'KMI' NP99'T J'NHPT%P'L IKPG+ &3 ' HPGP'GN P IQG'M P'7 'NHP 'KHMIAP ‡' 2N' G L'NT'NHPT'M P' I'L G I'MIO'% P P'L NT'NHPT'GH J9O'AP' JN‡ 2' O ' NH IU' NHPT' HM P' LMN PIKP'N ' IMUP' MIT'MO P G NT' MGHMIPO' NHP'L G I' NGP97' G'L JO' 7'NHPI ' MIO' NHPT' HM P'M99'NHP' 9O' I'NHP 'KHMIAP + HPGP'HMIOG'GHM99'IP P'O M 'NHPI' JN'9 UP'9 QHNI IQ+ 'AGMG' H 9P'M I PG' I P['-M9MI I H GP'H LPG'M P'L G IP G' NH'JH' HP P' P'M P+ #IO'HP P'NHP'Q MKPG' 7 J'T JNHG' I JGN' NHP + / UP'M'N N IP9T'GL IQ8 HP P'MQP' I JGN'7 IO' JG+ #IO' H K H' G'HPM PGN'-M9MI I'JIIM PO8 HP'G PPN'PIA MKPG' 7M'9 IQ' 7P / MOPI' NH'U GCPC'M I%O' NH'NH JGMIO' JL OG HM99'IP P'K9MGL' J'IPKUG8 I ' GGJP'UI 'JG8 '7QJ PG' 7 J GP9 PG'GHM99' P'P%P'GPP'J 'Q9MO' J'MQP'MIO'9 UP'T JIQ'PMQ9PG'NPMKH'NHPI' 9O9T'N 'QMCP'MQM IGN'A QHN'M I G'MIO'GMT+ &PIPIAP' HMN'T J'7MNHP G' P P'MIO'K I]JP [HP'7M PTPO'I M OG'GHM99' PPL' J'AMI GH1PING+ #IO' I'NHP 'G IQG'KJ GP'P P A9IOPO'O NJIP 99'GHP'7 'GHM1P'GPP' HMN'M' IQ'GHP'HMG'O IP' 'T JNH'MIO'IMNJ P' NH G'M99' J' 9O8 XP'GHM99'UI 'I NH IQ'HP P'AJN' IP'MI NHP 8 "PM'I NH IQ'AJN'NHP'K9 KU'NHMN'NP99G' J' PG8 HP' IP'GHM99'Q 'AJN' P'GHM99'IP P'GPP' N8 J1 I P'GHM99'K IP'MIO' NH'HP'M99'OP9 QHNG JN'OPMO'K 9O' INP'1JGN' IHMA N'HP P'GN 99['% G'N 'N JP'# K NP+ ' J' HPAMI'H JIOG+ HMN'GH U'NHP'MQPO'7 PGN' JNH'NHP 'PKH PG+ 'I P'I 'IJGN' P'HM99 8 I'I P'GHMUP' 1J'L INPO'EM P9 IG' H 9GN'NHP'MIQ T'G IP' O9 PG'9 UP'M' -M NH MI']J P'7 I' J' MQPG+ NJKU' NH' J' P99 GNPP%O'OM NG‡ #99' M9 MIN'JGPG' @ HP'7 O'MIO'I J GHIPIN' 7I A9P'I IOG 2I'JGN 'HP P'GHM99'LP GH8 P'GHM99'O P @XHKH' G'NHP'KJ GP' 7H I J'2'9MGN9T' H 9O PI' 7Q P7'MIO' QI MIKP+ 4PN'K JG I+ 3 PI'7 I'NHP'A NN I' 7'NHPGP' I GP PG+ O I'M99'NHMN'7 NJIP'KMI' I79 KN'JL I'JG 2'GPP'N 'K I7 NG G IQ'N 'IPP'A9PGG IQG+ 27'NHP'Q OG'L9PMGP'N 'H 9O'HP P SM'A M P'LMN PIKP+ #IO'NHP'PIE T IQ' 7 J'Q P7G'N QPNHP + XH 9GN'-M9MI I'G NH'IP'9PN'IP'LP GH' 27'2'NH IU'NH G' J'L G I[P NM I9T ' '-M9MI I H GP'H LPG'M P'L G IP G' NH'JH' HP P' P'M P+ #IO'HP P'NHP'Q MKPG' 7 J'T JNHG' I JGN' NHP + / UP'M'N N IP9T'GL IQ8 HP P'MQP' I JGN'7 IO' JG+ #IO' H K H' G'HPM PGN'-M9MI I'JIIM PO8 HP'G PPN'PIA MKPG' 7M'9 IQ' 7P / MOPI' NH'U GCPC'M I%O' NH'NH JGMIO' JL OG HM99'IP P'K9MGL' J'IPKUG8 I ' GGJP'UI 'JG8 '7QJ PG' 7 J GP9 PG'GHM99' P'P%P'GPP'J 'Q9MO' J'MQP'MIO'9 UP'T JIQ'PMQ9PG'NPMKH'NHPI' 9O9T'N 'QMCP'MQM IGN'A QHN'M I G'MIO'GMT+ &PIPIAP' HMN'T J'7MNHP G' P P'MIO'K I]JP [HP'7M PTPO'I M OG'GHM99' PPL' J'AMI GH1PING+ #IO' I'NHP 'G IQG'KJ GP'P P A9IOPO'O NJIP ' 2'AP9 P P' N8 #IO'N 'NHMN'OPGN IT'HM P'LMN PIN9T' /M O'JL'I1'H J'N 'K IP+ ' 1H'K JG I'# K NP XHP P'M P' J'7 PIOG'MIO'U IO POG'\ P P'I P XHP P' G HPAPG I '' HP P' G' J'I A9P'K JIN T'\ 'T JNH'MIO'IMNJ P' NH G' G M99' J' 9O8 XP'GHM99'UI 'I NH IQ'HP P'AJN' IP'MI NHP 8 "PM'I NH IQ'AJN'NHP'K9 KU'NHMN'NP99G' J' PG8 HP' IP'GHM99'Q 'AJN' P'GHM99'IP P'GPP' N8 J1 I P'GHM99'K IP'MIO' NH'HP'M99'OP9 QHNG JN'OPMO'K 9O' INP'1JGN' IHMA N'HP P'GN 99['% G'N 'N JP'# K NP+ ' J' HPAMI'H JIOG+ HMN'GH U'NHP'MQPO'7 PGN' JNH'NHP 'PKH PG+ 'I P'I 'IJGN' P'HM99 8 I'I P'GHMUP' 1J'L INPO'EM P9 IG' H 9GN'NHP'MIQ T'G IP' O9 PG'9 UP'M' -M NH MI']J P'7 I' J' MQPG+ NJKU' NH' J' P99 GNPP%O'OM NG‡ #99' M9 MIN'JGPG' @ HP'7 O'MIO'I J GHIPIN' 7I A9P'I IOG 2I'JGN 'HP P'GHM99'LP GH8 P'GHM99'O P @XHKH' G'NHP'KJ GP' 7H I J'2'9MGN9T' H 9O PI' 7Q P7'MIO' QI MIKP+ 4PN'K JG I+ 3 PI'7 I'NHP'A NN I' 7'NHPGP' I GP PG+ O I'M99'NHMN'7 NJIP'KMI' I79 KN'JL I'JG 2'GPP'N 'K I7 NG G IQ'N 'IPP'A9PGG IQG+ 27'NHP'Q OG'L9PMGP'N 'H 9O'HP P SM'A M P'LMN PIKP+ #IO'NHP'PIE T IQ' 7 J'Q P7G'N QPNHP + XH 9GN'-M9MI I'G NH'IP'9PN'IP'LP GH' 27'2'NH IU'NH G' J'L G I[P NM I9T ' '-M9MI I H GP'H LPG'M P'L G IP G' NH'JH' HP P' P'M P+ #IO'HP P'NHP'Q MKPG' 7 J'T JNHG' I JGN' NHP + / UP'M'N N IP9T'GL IQ8 HP P'MQP' I JGN'7 IO' JG+ #IO' H K H' G'HPM PGN'-M9MI I'JIIM PO8 HP'G PPN'PIA MKPG' 7M'9 IQ' 7P / MOPI' NH'U GCPC'M I%O' NH'NH JGMIO' JL OG HM99'IP P'K9MGL' J'IPKUG8 I ' GGJP'UI 'JG8 '7QJ PG' 7 J GP9 PG'GHM99' P'P%P'GPP'J 'Q9MO' J'MQP'MIO'9 UP'T JIQ'PMQ9PG'NPMKH'NHPI' 9O9T'N 'QMCP'MQM IGN'A QHN'M I G'MIO'GMT+ &PIPIAP' HMN'T J'7MNHP G' P P'MIO'K I]JP [HP'7M PTPO'I M OG'GHM99' PPL' J'AMI GH1PING+ #IO' I'NHP 'G IQG'KJ GP'P P A9IOPO'O NJIP ' 2'AP9 P P' N8

' HM99' P' I MUP' NHT' JGPG' 7' NH G' L9MKP
HMN' M99' I P!' HMNP' G ' I JKH' \
' " 'QP! N9P' K JG !' \
' ' / PN%G' NH !U' NH G' L G !' H 9T' GM! KNJM T
'UPPL' JG' 7 I' K JLN !' 7' GP' I P!+
X P' M P' T J!Q' M!O' TPN' OPG P' NHP' MTG' 7' H ! J 8
HMN' 9 AP NT' M!O' K I I !' K ! P GMN !+
HP' L G !' 7' LJ P' GL NG' I QHN' 9 UP' I P!
X 'JG' N ' M!OP '7 I+' X HMN' NHT' A9PGG !Q
M!' AP' AJN' J ' I MQ !MN !G
MT' I MUP' N' J G' \ M!O' HP P' AP !Q' NHJG' N QPNHP +
X P' M P' M!' P!O9PGG' I !P' N ' !P' M! NHP 8
X P' M P' !P' M! NHP %G' 7P' P P' APQPNN !Q
P 'A NHG' 7' 9 P8 P' M P' 7MNHP '7 P!OG' MK]JM !NM! KP' 8
X P' M P' ' !' !P' M! NHP '7M I 9 PG' 8
2' M I' T J' HP 'M!O' T J' M P' I !P8 NH G' L9MKP
2G' J' !HP NM! KP8 ! 'HM O' LL PGG
5M P' NMUP' NH G' 7 I' JG' HP P' NH' M' 9 NN9P' LMN P! KP+
X P' GHM99' 9 P' 9 !Q' M!O' 9 !Q8 ! 'GJ 7P NG' GPPU' JG8
HP' HM!O' 7' M 'HJ NG' ! !P' HP P' ! 'NHP' GPMG'
M99 'NHP 'T JNH8 P P' P' MN' 9 AP NT
#' 7P' I QHN' LM N' JG' 9M 7J99T' 'AJG !PGG8
>JM P9G' K !GJ I P' JG' 8 P! T' 7' 99' I P!
: M PD' J 'MK]JM !NM! KP' # 2' I QHN' G KUP! 'K JG !+
X HP P' T J' GH J9O' !P P 'U! ' N' M!O' G 'LP GH'
X NH JN' T J' ! A9P' HM!O' N 'K9 GP' I !P' PTPG+
1 'L MTP G' N 'NHP' Q OG' M' NH JGM!O' KHM! KPG+
X P P' P' 7 I' HP! KP' J9O' GP P 'JG+
' 4 J' HM P' I MOP' I P
@2' NHM!U' T J' K JG !' # K NP 'M9 I GN' M!N !'
X NH' I T' KMLN NT' HMN' M' I GP T'
2N' G' N '9 P' MA MO' M!O' P P T HP P[
% G' 9 UP' M' APMGN % I PNH !UG+' 2' 7 !O' NHP' K J N' HP P
2% I' GJ P' M' I P' K !NP! N8 M!O' M99' NH GP' L9PMGJ PG+
HMN' 'NHP' 99G' 7' I P!' N ' M! NT
2' GPP' NH JQH' ! 8 M!O' M I' GJ77 K P!N'
'NP99' NHP' 9O' %N G' AJN' M' QMJOT' GHMO +
HMN' L9O' I P' MG+HP' LMGGPG' AT' NMUPG' NH' H I +
X HMN' HMO' P' APP! ' 9O' !' NHP' K J N' 7' P !
X HP P' G !' G' EJGN KP' 9JGN' M!O' Q! M!KP'
HP' NJPG' 7' NHP' Q PMN' !PG' 2 JG !' # K NP
" MO' ! N' NHP' 9 !Q' Q OG' 7 J!O' NH G' L9MKP' 7 'JG +
X P' HMO' O PO' MG' NHPT' O ' 99' 9O' I P!' J! PLN+
!O' HMO' NHP 'PL NMLHG 'NHP' LP L9P%G' KJ GPG+
HM99' 2' GMT' I P' \
' 2' J9O' HPM 'T J' GN 99+
' 4 J' GHM99+
2G' NHP P' PK O' 7' M!T' N 'NHMN' 9 %O'
PNNP 'NHM!' P' O ' # K NP' \
' J P' NHP P' KM!! N+
' 2' O ' ! N' NH !U' N' L GG A9P' J '7 P!OGH L'
H J9O' P P '9PM P' JG+
' ; 99' J 'OPMNHG' N' KM!! N8

' ' ' " ' P M!N+' +

!O' M7NP 'OPMNH' J 'GL NG' GHM99' AP' 9PO'
'NH GP' NHMN' 9 P' PNP !M99T+' LPMU' !'G [
' H G' QM OP!' HMG' M' 9O' 7' L9PMGJ PG' ! %N+
X HMN' 79 P ' G' NH G' \
7 1' % G' KM99%O' M K GGJG ' I MOM I +
' HMN' MG' M' 7M 'A T' KP NM !' AJN' M' 7 9'
'9 P' H I GP97' P P' NHP P' ! N' I M OG' P! JQH' \
' - MT '7 M O+
' 4PG+
' 1' P P' NHPT' M99' HM O HPM NPO' \
7 1' HPT' K J9O' ! N' AP' N ' !P' G '7M +
' H J' J9OGN' ! N' \
7 1' 2' NH !U' 2' GH J9O' ! N' I MOM I +

' HMN%G' M' Q O' P! KH[
JN' NMUP' HPPO' N 'T J 'U !O! PGG' NH JQH[
7 1' X HT' I MOM I' \
' P!' M P' I MO' NH !QG+
' X 99' T J' Q '7 M O' K JG !' \
' M! GN' ! N' NH J' U' GJKH' 79 P G' !' G 9U' P! KH' \
7 1' 4PG+
' 2%99' HM P' M' Q !' 7J99' 7' NHP I' 8 M!O' 7' NHPGP8
H G' G' M' L PNNT' K 9 J ' 99%N' ! N' O '
&M P9T' JL !' M' GU N' P! KH' \
7 1' ' 5M !NT' I MOM I +
' JG ![JG !' 2 " 'O 'T J 'G '\ X HT' - M9M '
I ![
' P P 'N 99' ! '2' MG' !' L G !' # K NP+
' X HT' HMN%G' NHP' I MNNP ' I M!' \
' PH 9O' M!O' !OP [
T' " PM %!' GHP' G' M' Q OOPGG' [
' " M [
' 5 ' P P P! KP+
HP' G' M' Q OOPGG' # K NP[
' 17' M99' 79 P G
PNH !UG' M' GP' G' APGN+
7 1' X HT' QP! N9P' I MOM I' \
' 2N' G' NHP' P T' P I A9P I' 7' M' I M O'
L ' HP!' NHP' PGN' !O' K J NG' HP 'QP! N9T+
" ' I OPGN9T' GHP' A9 G' M!O' LM !NG' NHP' GJ!
X NH' HP 'KHMGNP' A9JGHPG[HP!' NHP' ! NH' K I PG' !PM 'HP +
&JOP' M!O' I LMN P! N' NHP! '9 UP' KHMGN NT+
HP' 9 KUG' HP 'APMJN PG' !' HP 'AJO' MQM !
!O' 9PM PG' H I' N 'AMGP' A P G+
7 1' 4PN' Q O' I MOM I +
I PN I PG' HP ' I OPGNT' 99' A9 'G '7M '
HP' 7M99G' 7 ' N' M' I M O+
27' GHP' HM P' M! T' H ! J ' J9O' AP' 9 MNH'
'NMUP' PWM I L9P' AT' HP +
H J' M N' M! N !+
' HP%G' !O JG' 7M [
HP%G' M99' NHP' APMJNT' PWNM! N'
', ' HP' GJ!' Q G' H QH8 %G' M9U' !+' PPL' NHPGP'
79 P G8
X P%99' GPP' H '! PM 'M N' KM!' K I P' ! PM 'NHP 'K 9 J G+
2% I' !O JG' I P T HPM NPO8 2' K J9O' 9MJQH' ! +
7 1' 2' K J9O' 9 P' O !+' 2% I' GJ P+
'' # !O' NMUP' !P' NH' T J' \
7 1' HMN%G' MG' P' AM QM !' I MOM I +
X P99' MQ PP' NHP! +
= 4 'I! ' P
' X HMN' NH !U' T J' 7' NH G' APMJNT' \
% G' M' H P' !P+
' 2G%N' AJN' M' M P' !P' \
4PG' M' I MNKH9PGG' APMJNT+
' QHN' ! N' M' I M!' P99' 9 GP' H I GP97' M!O' 9 P' HP ' '
' 2' KM!! N' NP99' HMN' T J' HM P' O !P8 2' HM P
PGH P ' I !P' PTPG' 7 %N' 2 ' 2' 7PP9' I T' GHMKU9PG+
' 4 J' 9 P' HP 'NHP!' \
' X H ' J9O' ! N\
' # !O' OPG P' HP ' \
' P7 P' I T' 9 AP NT+
' 2' GM 'HP '7 GN+
' HMN%G' ! NH !Q+
' JN' N' GHM99' AP+
' 2' GM 'HP 'N +
' 4PG8 AJN' T J' I JGN' ! N' 9 P' HP +
' 2' 99' ! N' MG' T J' O 8' N ' GH L' HP +
#G' GHP' G' HPM P!9T' M!O' M' A9PGGPO' Q OOPGG
2' 9 P' HP 'MG' M' I M!' N ' P!E T' HP 8
'A NH' I MT' 9 P+
' 4 J' GHM99' ! N' 9 P' MN' M99+
' N' 9 P' MN' M99' 2 H 'GHM99' OP! T' I P' \

R ' G' NHP', O 7' NHP' PM 9T' K L PG+ +' MG !' L L GPG' N ' PMO' (' S'
NHMN' G' GPLM MNP SNHP' (> (' 7' N% '7 P!OG+' +' 5TKP%G' PMO !Q' 7' 5

SNHP' G I L9P' GJAGN NJN !' 7' M' 7 'M' SQ PG' M' K9PM 'M!O' I L PO' I PM! !Q'
H KH' P' Q9MO9T' MO LN+
1/+' 22+' ' /')

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#iO'5 'H G G iQG'M P'GMO' ipG‡ OM p'GL UPi'
XMG'ip p'QPiN9PlMi8 HPi'2'K lP i'
'A iQ'H l' MNP'i'M l iQ'7 GN
"P'A G'H G'i A9P'A OT'NHPi'GM9JNPG lP'NHJG'
6OM 'QPiN9P'lM O'Q O'l 8 lMT'NHT'Q OipGG
:PN'NHPP'M'HMLLT'HJGAMiO[R 1ikP'HP'U GG%O' lP8
2'9 %O' lT'9LG'NHP'APNNP'Np1'OMTG'M7NP
%X J9O'HP'2i&"i'-i' 1G5" 5["P'Q p pG lJKH‡
#iO'lp'MG'lJKH'N 'GPP'H G l GP T
X HMN'GH J9O'2'O 'N 'lMUP&'H l'Ui '2'9 P'H l'\
O '2' J9O'7M i'PiE T'H l'; GMT'2' piNJ %O'
'GPN'H l'7 PP'\ HMN'GMTG'NHP'9M 'NHPi'\
HJG'lJKH'7 '9M ' 'U i o PO[2' 9O ' N+
#iO'NH G'i QHN' 'N l 'HP'GHM99'9 P'lP+

3 3' +S '- i ';i& - 'i. i O -$ "- i&-'2
' ' + ·· 1 '- 1 ' ' ' ,
i 1 '2 ' "$ X

-' 4 J'HM P'O ip' NH 9T8 2'HM P'i N'GPPi+
ikP' "P KJ9PG'M' lMi' 7N JQHP'G ip G
XHMNP%P'T J'M p'T J' Ji'NHP'APGN'MiO' PGN9P+
HMN'NHPGP'N lPG'KMi'M99 +
2'M l'L JO'N 'L9PMGP'T J

-' X HMN'K JiN T'A PO'T J'\
$ H G8 AJN'7M ' 77'L iKP+
-' # P'T J'M'QPiN9PlMi'\
' ‡ T7MNHP'GM O'G 8
#iO'N 'NH GP'QPiN9P'JGPG'QM P'lP'9 7P+
4 J%P'Hi J%O'HP'7M'A NHOMT' NH'T J' NJPG+
#iO'MGT J'OJP'T J%P'HP G' U GG'HP'7M 'HMiO'G +
' 'T J%P'M'i A9P'Q p +SD5PM PGN'APMJNT
)=

' 8 ' %? ' 7E : ' #*

HJG 9PN'lP'GPM9 lT %O'7M NH' HPi'T J'GP MiN'
@4 J'l GN'Jl NHT'K PMNJ p'AJN'77piOG T J+
llMiO'H l'O P'HP'GHM99+
' HMN' p P'N 'K JP9+
27'T J'OPGP P p99'G '2'GHM99'G i'GPP%
4 J%P'l lP8 MiO'G lP HMN'APNNP'NHMi'T J' Mi U'2%9' JGP'
T J+
' 2%9GPP'T J'7J i GH%O' MiO'APKMJGP'T J'GMT'
4 J'M P'M'H GPlMi'2'lJGN'ippOG'piN PMN'T J'
H G M7NPi i'N' OP8 AJN'%'G'M' JQH' ip+
2'9 UP'H l'APNNP'L ikP8 2'GHM99'i N'NHPi'
O PPC'i'lT'GMOO9P+
-' ppN'T J'lJGN'AP'PMOT8
#iO'T J'3l 9M8'MiO'T J'7 piO8'MiO'M998
l 'AT'NHP'GJi'N'O' AGP MiK'
'79 %T' MT' i'5 Mi%G O+' X M N' p99'G +
L i'T J'l GN PGG+ 3l 9T'2'H LP'
"P'GHM99'i N'Q'M7 N+
HMN' P P'M'GHM lP'G +
XH 9P'2'HM P'H GPG+ MUP'T J'KH KP8 MiO' HMN'
4 J' MiN'MN'MiT'N lP'9PN' lP'AJN'Ui ' N
27'T J'GP P'7M NH7J99T'2'OM P'MGGJ P'T J'
4 J%99'7 iO'M'9 iQ' l GN PGG+
' 27'2'O 'i N+
/PN' lP'7 iO'NHMN' lT'7MNHP'P P'HMNPO+
5 GQ MKP'MiO'A9 G+
-' '9PMO'NHP' MT'8 T J%' P' i' N8 +
2N'GHM99'AP'G ' T J'GHM99' PKP P'M99'OJPG'
O N'7 'NHP'H i J'T J'HM P' i8 %' P P' iQ'P9GP+
GNP 'APGH P ' lT'HPM N'T J'HM P'M'GP MiN+
HMN' '7' P P'M' lMi' J9O'AP' lMGNP 8
JN'T J'M P' GP+ => i& -
' 2'H LP'N ' GP'7 'NHMN'G +' ‡ = 4 &
' J'7MNHP
-' 4 J'7MNHP
J P' G'M'HMLLT'G P'NHPi+' XHMN'L pG'T J'\
' #'9 NN9P' 7'M99'i A9P']JM9 N PG'

2%9P P'O P99+ X NH I'NH G'H J'NHP'HJAAJA'
X 99'AP'M99' %P'NHP'L G I';'2'M1'NHPI'
GG IQ'NHP'1MI'NHPT'9 U7 +' OM P P99'7MNHP [
:PN'1MIT'I P'GJKH'L G IP G'MIO'GJKH'OMJQHNP G'
#IO'GH N9T'T J'1MT'UPPL'T J GP97+' 'N','H I[
9: 4

3 3'2 F I -' ';-& " 5', -', I -', "' II 3$
-'I;' I,' B 5 3

' HP'OJUP'HMG'9 GN " LL 9TM8 PMKH'N U
#'GP P M9'9MIO+' H G G'M G 9PI' NP'
HPT' P'A9 1%O' MT'MIO'NHP'#NHPI MIG'LMT' N'
'NHP'HPM N' 7KP PI I+' 1H']JPPI'3I 9 M
O PGHP'NHMI' MT'G PPNP
HMI'HP'Q 9O'AJNN IG' I'NHP'A JQHG' 'M99
H%PIM1P99%O'UIMKUG' %NHP'1PMO' 'QM OPI[TPM+
X P'KHM99PIQP'N 'NHP'AMIU' 7MIT'IT1LH
HMN'P'NH P7'I'9 P';M'KHM77T'9 O+
#' P'T'NH P7'I'9 P';M'KHM77T'9 O+
' NH'NHP'IM1P' 7' 99M I'["MO'2'M'G O+
#IO'NHPGP'H JGP K9 QG'M MTS
' 5PM'K JG I'-M9M1 I S
' CPIP'# K NP'Q P'IP'9MIQJMQP'GJKH'
#G'NH J'HMGN'GH %O'IP'7PMN[

' X NH JN'L PLM MN I' 7M I J' ' PML I+
;' HP' Q IN9'HMG'6'3INP'T J' % (B' P M O' PMOG' % '> ()*'PWL9M I

' HM'N3I 9T'G'NH IP'2' 99'7 Q P
HP'N PGLMGG'NH J'HMGN'O IP'IP'TPM'I'T'9 7P+
27'NHPI'NH J'KM T%N 8 MLO'A M P'G J9G'I'GHMOPG+
HMN'HM P'O PO'IMI9T' H KH' 99'GPPU' 7'IP'
IP'IP G7 I'PM NH'NHPT'GHM99'QPN'I IP'AJN'NH G+
HMN'NH J'M N'A M P'MIO'I A9P+
' P'K INPIN8
#QM I'APNMUP'T J'N'T J'HM NH I H JGP+.
X NH'K J1GPg' 7NHP'I QHN'2' 99'AP'HP P'
X NH' H 9PG IP' MIOG8 NHPGP' ILPO IPING'
X 99'2'7 9P' 778 T J'GHM99'HM P'QM IPING'MIO'
-P 7J1PG'N 'U 99'NHP'GIP99' %NHP'L G I8 M7NP +
XHPI'T J'GHM99'GN PNKH'T1J GP97'MIO'GMT'AJN'6'# K NP
2'MI' I'L9 QHN[R'NHP P'GHM99'AP'MN'T J'KH KP'
NH'G ' O'MIO'M I J +
1H'T J'HPM %IG'OM P'MIT
'I AP'APM'M'QJ 9NT'AJG IPGG\ IP'
JN' I9T'# K NP8 NHP P7 P'I IP'AJN'# K NP'
2I'NH G'U IO' G G'A 9O+
' PPN'-M9M I S
'2'O'PIA MKP'T J'MIO'T J' 77P'7'
4 J' 77P'O %N'2' I9T'G 8 T J'LP G I+
X NH JN'HTL K GT'2'IMT'I N' GH'
P'NHMI'IT'G O%G'POQP' I%N+
' "8 "' I -'I;'I -
4 J'HPM'NHP'H IG'
3INP'T J'IJG N D'9PGN'NH G'IMNK'H'APN PPI'JG'
P'K GG%O'P'P IPN+' P'IP'T J'HMIO'8 7M P P99
2%9'A I'QT J'P P T'IPPO7J9'NH IQ' 2'L MT'T J+
MUP'K I7 N'MIO'AP'GN IQ+
' MT'H 9O'T J'L I GP+
#IO'O'NHP'OPPO' NH'M'APIN'A 8 I GN'KP NM I'
4 J'9 P'IP'I N' AP' JQH' NH'IP'MIO'L J'
H G' 9 JN' 7T J'9MIQJMQP'AT'NH G'M

' NH'L I%GN' 7M99'NHP'TPM'L PGPING'IP' NH'
#'A MKP' 7H GPG' N 'GJKH'GNPPOG'I QHN' P99'
P'AT'M'LM ' 7'U IQG'AMKU%O'I'M'7 P9O'
HMN'NHP 'K IG%N N9PG'N PO+' #9MG'M9MG+
- 'K JG I'-M9M I I'L ;L G IP [NH J'
'9 NN9P'O PM I%GN'JL I'IT7 NJIP'NHMN'
H J'NH IU%GN'NHTGP97'NHP'HMLL P'NH IQ'N 'AP'
'IPM'3I 9 M8 IP'NH J'OPPI%GN'MN' HPAPG
#IO'NHP P I' PNKPO'M9NH JQH'7 PP' 'AJN' 7'
H J'UIP $GN'IT'I GN PGG'A PMNH%O' I'IP'MIO'NHMN'
2'PM %O'HP'9MIQJMQP'9 %O' I'HP'PTP' H'K C+
XHMN'LMGG I' J9O'PIK9 GP'NHPP'[

' $ & ' -'I&'I;',(&- $2 ' -'- ' -# ("-'
-'. - ', '

' $ M N 'U I G I MI[
H J'GH J9OGN'LP KP P'IT'LMGG I' 7'NHPGP'G QIG'
17L G I1PIN' P P' 77 IP'MIO'NH G'HMIO'
JN' IP' 7'M G O+' T'M99' MNHG' I' IP
2'MIO'NHP'EJGN KP' 7'IT'9 P' J9O' I MUP'NHPP'
#'K I7PGG%O'N M N [1H'NH J'I GN'LP 7O JG'
HMN'P P'QPIN9T'9 U%O'NHP' O%GN' 7H I J'
HMN'P%P'A P'QPIN9P'N UPI'[7M9GPGN'K JG I'
HMN'P P'A9 O' I MOP'U I'[KM99%GN'NH J'HP'NH IP'\
2%99'L P'N' I'IT'GHMKU9PG' NH'NHPGP'HMIOG'
O 7MLL INIPIN D'NHMN'NH J'APGN'MIO'M N'
#' P'T'NH P7'I'9 P';M'KHM77T'9 O+
' NH'NHP'IM1P' 7' 99M I'["MO'2'M'G O+
#IO'NHPGP'H JGP K9 QG'M MTS
' 5PM'K JG I'-M9M I S
' CPIP'# K NP'Q P'IP'9MIQJMQP'GJKH'
#G'NH J'HMGN'GH %O'IP'7PMN[

' X NH JN'L PLM MN I' 7M I J' ' PML I+
;' HP' Q IN9'HMG'6'3INP'T J' % (B' P M O' PMOG' % '> ()*'PWL9M I

' HM'N3I 9T'G'NH IP'2' 99'7 Q P
HP'N PGLMGG'NH J'HMGN'O IP'IP'TPM'I'T'9 7P+
27'NHPI'NH J'KM T%N 8 MLO'A M P'G J9G'I'GHMOPG+
HMN'HM P'O PO'IMI9T' H KH' 99'GPPU' 7'IP'
IP'IP G7 I'PM NH'NHPT'GHM99'QPN'I IP'AJN'NH G+
HMN'NH J'M N'A M P'MIO'I A9P+
' P'K INPIN8
#QM I'APNMUP'T J'N'T J'HM NH I H JGP+.
X NH'K J1GPg' 7'NHP'I QHN'2' 99'AP'HP P'
X NH' H 9PG IP' MIOG8 NHPGP' ILPO IPING'
X 99'2'7 9P' 778 T J'GHM99'HM P'QM IPING'MIO'
-P 7J1PG'N 'U 99'NHP'GIP99' %NHP'L G I8 M7NP +
XHPI'T J'GHM99'GN PNKH'T1J GP97'MIO'GMT'AJN'6'# K NP
2'MI' I'L9 QHN[R'NHP P'GHM99'AP'MN'T J'KH KP'
NH'G ' O'MIO'M I J +
1H'T J'HPM %IG'OM P'MIT
'I AP'APM'M'QJ 9NT'AJG IPGG\ IP'
JN' I9T'# K NP8 NHP P7 P'I IP'AJN'# K NP'
2I'NH G'U IO' G G'A 9O+
' PPN'-M9M I S
'2'O'PIA MKP'T J'MIO'T J' 77P'7'
4 J' 77P'O %N'2' I9T'G 8 T J'LP G I+
X NH JN'HTL K GT'2'IMT'I N' GH'
P'NHMI'IT'G O%G'POQP' I%N+
' "8 "' I -'I;'I -
4 J'HPM'NHP'H IG'
3INP'T J'IJG N D'9PGN'NH G'IMNK'H'APN PPI'JG'
P'K GG%O'P'P IPN+' P'IP'T J'HMIO'8 7M P P99
2%9'A I'QT J'P P T'IPPO7J9'NH IQ' 2'L MT'T J+
MUP'K I7 N'MIO'AP'GN IQ+
' MT'H 9O'T J'L I GP+
#IO'O'NHP'OPPO' NH'M'APIN'A 8 I GN'KP NM I'
4 J'9 P'IP'I N' AP' JQH' NH'IP'MIO'L J'
H G' 9 JN' 7T J'9MIQJMQP'AT'NH G'M

2 K J9O 7 PMKH O Q P M KJ778 I T GN I MKH
N PK !K 9%O AT PMG !
-9M !9T GL UP!+
4 PN LM O !' I P HM O 9M!QJMQP HP!' 2 GLJ
T H GP' 2 KH OP H I' ! N8 K !NP!N M!O M!QP
^ X I O ! -
2!' I P HM P AJN !P 7MKP# " M U ' G [NHPT KM99
HP GKMNNP %O N 'NHP#AM!] JPN' T J I JGN QJPGG +
2 HM P M!' 77 KP NHP P+
'T J 'MNNP!OM!KP
M!! N L9PMGP " PM P!8 M!O 2 U! 'T J ' 77 KP
!EJGN9T G MKH P %O+
2% P M Q O N N9P
2 M I ' LP GJMOPO8 NH G] JPGN ! ' G KU APN PP!' JG+
T A9PPO !Q I JGN AP KJ %O# 2 M I ' M GJ N
HMN NA T J ' G O T J 99 AP] JPMNH NH G L9PM+
#!O NM9U 7 N ! ' I P+
JN NH G !P O
4 J M P Q !Q ! 'N 'QMCP JL !' I T I GN PGG8
0 ' ! NP T J ' I !P GHP G S
MT 'NHP! S
MT 'L MT T J[S
4 J NM9U 77PPO !Q I P N 'A PPO I P GN P!QNH
4 J M P Q !Q ! 'N '9 U JL !' M GJ!
HMN GN P!QNHP!G HMN N 9 UG !8 NHP P T J HM P
#' M!NMQP %P ' I P8 AJN P!E T N N 99
2 I MT P!7 KP I T P I POT# OM P P99# 9 4 &

3 3 22+

' : M 9P %G 5MJQHNP +

&3 " P HMG I GN U NHP A MUP$ 2 I PM!N8 G Q !P
#7NP 'H G 7M!KT# % G ! P99 ! QH I ! !Q8
I MNNP [% J9O N $P P LP LPNJM9 ! QHN+
#!O OM U!PGG 9 O %NHP 9O[S " M U[%N G M 97
2!' I P HMNH Q P7 G9M !' 7PM 'M!O 'AJN 7 ' !P NH !Q
2 KM P 7 ' ! NH !Q 'M!O NHMN%G -M9M I !'
2 PKU ! N 7 NHP 9 PG J9O EM ' I P 'G '
" P HMO NH G 7 9P# X HMN 7 2 HM99 %O 7 'H I' \
2 KM!! N HM99 ' 7 2 H L%O ' HMN NHP!' \
27 HP ! N M!G P %O 2 GH J9O KM99 M 97+
#!O O 'H I 'AJN NHMN GP KP# 2 HM P HPM O
N M!QP H 9G NH G 9 P 9 !Q ! QHN# HT I MT%N ! N AP
HPT HM P I MOP L PT 7 H L ' \ " P HMG ! ' PML !G8
" P KM!! N J!'8 NHP E !Q9 !Q 7 H G QT PG
QHN KM99 7P99 NH !QG N '9 GNP!' H 'HM P !' NHP I '
#' GP!GP N 'U! 'M I M!' J!M I %O 'M!O KM!'
I P99 HP P PG GNM!KP G# 2%99 GPN N O !'
" P%G N !' N 'L PKPG# NHPT H 9%O I M!T N QPNHP +
#!O NHP!' NHPT 7PO !' H I ' ' G ' I JKH 7 'NHMN[
P A 9O N ' !Q NHP AP998 H 'GNM!O 2 NHP!' \
#99%G KHM POD HP!' HP G Q !P# ' ! ' 2 9 P8
T 7MNHP %G N ' AP HM!Q%O 7 'H G PGKMLP 8
TGP97 N 'APQ ' 7 2 L C%O 9 7P G ' I JKH
#G N ' OP!T I T MKN8 AJN NHMN 2 J9O ! N+
H J9O 2 N T OPMNH AT O CP!G+S2 M I ' I L%O
0 O N U 2 ! !P NHPGP N 'OMTG 8
LL%O G I P MNP 8 2 HM P ! N K9 G%O I !P PTPG+
M P HP!' I T 9 OG GK P %O 77 NHP 'A !P# #9MG '
5 GG 9 P ' I T 9 7P[9PN ! N I T GP!GP J!GPNN9P+
/ PGN 2 GH J9O O !' 'GNMA ' 'HM!Q I TGP97[
1H 'GNMNP 7 !MNJ P '7M 9 N QPNHP ' !' I P+
!KP NHT APGN L LG M P M L%O [S ' H KH MT ! ' \
HP APGN MT G NHP !PWN MT N 'M Q M P
3MKH P M!N GNPL APG OP G N I P!N# /
HP I !' G O !' NHP K KUPNG KH L 'NHP GK PPKH 9

M99G !' NHP OM !' [M99 77 KPG M P O !P '
M P HMN 2 7M 9 !' ' AJN NHP L !N G NH G '
!' P!O 'M!O NHMN G M99+ 9: 4

3 3 " 2+

' ! 1 '2 ' $ 2 $ ". -

' 2 GH J9O AP !PM 'NHP L9MKP# " 'K JG !' -M9M I !' 2

' $ &

' # K NP\
' HP GM I P ' 2% P A JQHN T J 7 O M!O 7 9PG+
I P 7 NH 'M!O 7PM ' ! N8 HP P%G ! ' HPGPJG+
' ' ! !P G 'H !PGN '# K NP+
' HMN%G ! ' I MNNP 8
X P%99 M QJP NHMN HP PM7NP +' I P 'NMUP K J MQP 8
4 J GHM99 ! N O P NHJG APMGN9T 8 HP P 'G 'O !U 2
2 U! 'T J%P 7M !N8 NHP!' 2%99 NM9U 7J NHP ' NH T J+
' # K NP 'NH J I QHN%GN ! 'L G !' I P+
' 2 I QHN8
JN 2 I JGN 7PM 'T J 7 GN# N O !8 M!O 'Q O ! +
' I P 7 NHPGP M !' LM 9PTG ' /PN JG ! N
" M !Q J 'M!K P!N PLJNMN !' NH JG
MUP NM9U 7 '7 9G M!O K M OG# 'T J 'HPM9NH '
5 +
- MT G N O !' NHP!8 M!O 9PN I P P!N PMN T J+
T M99 NHP H !PGNT M!O H ! J ' !' T J+
' I P!N !' 7 NH G I M!['%N 99 O GNJ A JG8
X P GHM99 HM P N I P P! JQH+
X P99 'G '2%99 L9POQP T J+
5 !U M Q O HPM NT O MJQHN8 N A PPOG Q O
A9 O ' I M!+
5 '! N T J 7PP9 N NHM 'T J \
NMT8 2%99 NP99 T J M7NP 'M O MJQHN D 'N ' I P+
LM P N ! N8 NHP OJUP HMG I P 'K C# 3MN ! ''
4PG+
2 M I 'Q9MO T J HM P G 'Q O M GN L MKH+
2 M I 'Q9MOOP '2 HM P G 'Q O I PMN N %N+
2G%N ! N I MO 9 OQ !Q HP P !' NHP 9O OG
K JG !' \
4PG '7 'NHP I 'NHMN HM P 9O K !GK P!KPG+
" 'C? CG 'T J 'P OCB?M '\ 4 J 'HJ!QP 'HGGN '! '
?BOG '2 GG
N I JKH8
JN 7 N O O 'T J G G N 'NM N 'G PPN K JG !+
X HMN G NH G \
P! G !+
% G M 9JGNT I PMN+
: P I P I P !P ' HP P '# K NP 'N 'NHP P!KHPG
X P HM P U! !' !' J 'OMTG ' HP 9 O GNP M O%G OMJQHNP 8
5 'T J P I P I AP 'HP '\
#7NP 'T J 'K C+
HP 9 %O M A9MKU HM %O I M!+
HP O O G P99 'G '\
!O 2 HM P HPM O G I P KM99 H I '# K NP8 M!O S
K+ 1JN NH N '7M NH ' %
-M9+ HP I PN H I ' !' M!' M A J
X HMN O O GHP NHP P 'K C \ -9MT %NHP Q !M9G \
K+ I PNH !Q GHP O O 'G +
-M9+ MOP HP 'Q M!' M I !NH 7 %N 8
1 'N ' 'NH PP ' 'NP!+
K+ HP I M GHM9%G G GNP
" MO HP 'GHM P 'N 'MG 2 P I P I AP 'K JG !+
39GP NHP P AP NM9PG MA MO 'T J%99 L9POQP HP '\
-M9+ 4PG
K+ #' L PNNT A !' P!KH %N G 2 HP P MG M N I P

X P9g HM 9%O ' P9g HM 9%O ' T J'E 99T' QM99M ! NG' #
! O' H NHP ' ! ' M P' T J'A J ! O M' \
1H ' 9PN' I P' HM P' T J ' K I LM ! T
9g 2 ' K I P' N ' NHP' J ! O M[

HP P' MG' NH PP' 7 9G' 7P9g JN' MA JN' M ! ' H 9PN
HP' ! P' GM O' %N MG' M ! ' 9
+' HP' NHP ' HP' GM O' ! MT
HP' NH O' HP' GM O' N' MG' M' HM U+
! O' HP ' AP99G' P P' KJN' M MT+

)' ! ' HP P' G' M' OM ! NT' I MO' I M ! ' I MGNP +
I PG' %NH% ! KU8 MG' I MO' MG' M' M KH' HM P[
27' P' KM ! ' QPN' HP ' OM ! KP ' P% P' I MOP' MQM !
2' M M ! N' HP ' GHP%9g' O ' NHP' M PGN' QM I A 9G[
' ! ' #' I MO' I M ! ' \ X P' M P' I MOP ' A TG[
' # ! O' M P' T J' I MO ' Q O' I M ! ' \
&3 ' 2' J9O' AP' G T' P9GP8
: P' I P' T J ' HM ! O+
' X HT' \
&3 ' 2' KM ! ' NP9g T J ' 7 NJ ! P
4 J' M P' M' 7 9+ P9g NP ! ' 2% P' L G%O' H I+ JC[
O P ! O ' T J' I JGN' PMN' ! ' H NP' A PMO' 8 7' T J' O
4 J ' NPPNH' 9g A9PPO' PWN P I P9T+ HM99 P' OM ! KP ' H ' \
2' U ! ' T J8 T J% P' M' N ! UP ' G MH' N ! UP +
N L' ! ' I P' H 9PG ' AJN' HMN' T J' GH J9O+
' ! W' #' N ! UP ' OM I GP9g \
&3 ' 1 ' M' K !EJ P '
&M GP' I P' M' OP g' ! ' M ! O' 9PN' H I ' L9MT'
<& , -- ' %NH% AP99G' M ! O' A ! PG[
' : ' NMUP' HP
! O' 79JP ! N9T' LP GJMOP' HP ' N ' M' LPMKP+
N& ' ! ,&-' 4 3 $ N&! '" ' J ! 1 -' $ ' 3 - S
N UP' JL ' M ! O' 9PMO' HP ' !+
%' !& ' I P ' 9MGG ' 9P N%G' N L' N+
&3 ' 2%9g' 9PMO+' ^' 8 '" ! -
)' !& ' 5 ' O +

HP' A OT' 7' J ' GL N' 7' ! ' G I M99g GNJOT+
2' 7 GN' MLLPM ' NH JQH' JOP ' M ! O' M ' M ! O' I JOOT+
' GLPMU' AP7 P' NHT' ! A9P' Q MKP ' NH G' NP !
N' H GP' Q PMN' 7PPN' 2' 77P ' JL' I T' LP ! ! P +D
HP' ! PWN ' NHP' 9 O' 7' MT ' M ! O' 9MOT' A QHN+
HP' KHM I AP I M O ' M ! O' GP ! Q I M ! ' AT' ! QHN'
HMN' GPPU' JN' G 9P ! N' HM ! Q ! Q ' NHP ! ' I ! P' H GN+
! O' H G' 7MN' GL JGP ' NHMN' P9K I P' N ' NHP ' K GN'
HP' QM99PO' N M P99P ' M ! O' NH' M' APKU%! ! Q'
2 ! 7 I ' NHP' NMLGNP ' N ' ! 79M I P' NHP' PKU%! ! Q
HP ! ' NHP' APMGN PMN ! Q' K9 ! ' M ! O' ! PWN' NHP' 7 9+
HP' M M ! ' NH' 9 ! Q' NM 9 ' M ! O' PUP' 9 ! Q' N 98
& ' & -' -$ NHMN' I MUP' M' OM ! KP' 8
MT' 6' MT R' M ! O' M99g GHM99g L PGP ! N9T' MO M ! KP+
-' #T ' MT ' AT' M ! T' I PM ! G ' OPM ' O I ! P[
' - OJKP+
' '. 'W I P' 7 NH ' M ! O' 7 N' N+

' J ! N T I P ! ' BK+ 5 "
/ MO PG ' 7' P' HM P' APP ! ' I P T+
! O' HM P' L9PMG%O' TP' NH' M' OP T+
! O' M' OP T ' M ! O' M' O !+
MT' NHP' GKH 9 I MGNP %G' ! ' K9 !'
5 JUP ' 7' P' HM P' L9PMG%O' NHPP' N '
! O' HM P' O ! P' MG' Q O' A TG' GH J9O' O +
: P' JG' AJN' M' N PP' ' N M ! '
O ' M' MTL 9P ' M ! O' MQM !+
3 P' M ! NHP ' TPM ' J ! ' JN+
X P%9g I MUP' NHPP' 9MJQH ' M ! O' M99g NH G' JN+
-' MUP' N P ! NT ' O I ! P+ S " ' O PG' I T' G PPNHPM N\
, ' P P ' G ' L9PMG%O ' G +
' % MG' M ! ' PWKP99P ! N' OM ! KP8
! O ' 7 ' M' L P7MKP ' 2' ! P P ' HPM O' M' APNNP +
-' KH 9 I MGNP ' 2' NHM ! U' T J+ 1 ! P' GPP' NHP I ' M99g
P M OPO' 2
' # ! O' HP P%G' G I PNH ! Q' N ' LM E N' T J ' L 9P' NHM9+
-' ' N ' J ' GL NG' MQM ! [
' MT' NHP' GNMQ' NH J' HJ ! N%GN' GNM ! O' 9 ! Q
! O' NHT' O QG' AP' G 7N' M ! O' GN ! Q' '
MT' NHPT' U 99g H I ' NH JN' 9PNNG
! O' NHP' 9MO PG' P M N%G' O GPNG' '
I P ' P' M P' M99g I MOP[^' 8 '" ! -
' N& ' ! -' W TP' HM P' OM ! K%O' M P9T ' P ! KHPG+
+ 4 &

3 3' 2+

' - '. ! ' '(&-

' #A JN' NH G' H J ' I T' K JG ! ' QM P' H G' 7M NH'
' G N' I P' MQM ! ' M ! O' NH' H I ' A ! Q'
' G OG' M ! O' N ' Q O' M I J G' 8 7' HP' 7M 9g
" P%G' ! P NHP ' I M ! ' ! ' G 9O P +' X HP ! ' HP' 9P7N' I P
2' O O' ! N' NH ! U' M' PPU' K J9O' HM P' PGN %O'
T' 9 GN' GN P ! QNH' N ' I P ' 2' MG' Q ! ' G ' 9 '
$ # ! O' K PGN 7M99%!' NH' I T' M ! NG ' 2' NHM ! U' NHPP ' # K NP '
H J% N' TPN' M' 7M ' 7 P' 8 M ! O' 2' 7PP9g I TGP97+
X NH' NH G' P7 PGH ! Q ' MA9P' ! KP' MQM !
' JN OJ P' OM ! QP +' ' OP9MT' N' 9 ! QP
X J9O' I MUP' NHP' 9O' NH ! U ' HP ! ' N' K I PG' N ' HPM ! Q+
HMN' 2' 9MT' 7MNN ! Q ' 9 UP' M' G ! P ' N ' 7 QHN+
! O' ! N' M' G 9O P ' ' NHP P7 P' NH G' A9PGG%O' I ! ! Q'
HM99g AP' NHP' 9MGN8 M ! O' NHMN' G O' HP' P7JGPG+
27' N' AJN' H 9O ' 2' U 99g H I ' NH ' %N G' EJGN KP
' / P' M ! O' O NJ ! P' 7 ' I P' ' 1H ' Q O' I '

' ! 1 ' 2 ' !& -' "' -2! "-
' : O ' I ' ! A9P' U ! G I M ! [
' 2' HM P' LJN' T J
' N ' I JKH' LM ! G ' G +

#9 !P' !8 M!O' HMN'N 'K IP'GHM99'NH PMNP!' IP
2'7PM '9PGG'NHM!' IT'7 NJ!P+' ! ' PMU'K JG !
2'9 P'3I 9M8 M!O' !'NHMN'2%99'AJ T'
HPP 'M!O'M99'K GGPG'P9GP+
' HP!'K IP' HMN'KM!'K IP+
H J'GHM9N'U! '-M9M I !'2'OM P'MG' P99'
5 P'MG'O GK J GP' 'G9PPL' !9T'NH G'7PM G' IP+
HP'9M ' 99'HM P'NHP'H ! J' 7' J'P!OG+
"M P'MN'NHT'9 7P[
' / U'N 'NH !P' !' P99'# K NP[
+> 3 ' 3 ' ! -

' ' + ' ' 1 ' ' - 1 '
"

-' XHMN' Q! M!N'M!O' IMO' IM9 K JG'N M N G'
P'T J'NHMN'%QM !GN'NHP'NP! ' 7' IT'9M G
P' IMU !Q'AMNN9P'NHJG'9 UP'U! QHNG'MLL !NPO
$X NH JN' IT'9PM P'M!O' 77 KP G' 7'M IG'\
T' MGN 'A NH'GHM99'O P[
' " 9O'NHT' O' HPGPJG+
XP%P'KP NM !9T'A NH'N M N G'A NH'OPGL GP G'
17'NHPP'M!O' 7'NHT'Q O!PGG'2'M I'-M9M I !
HMN'KM!! N'9 P'NHPP'HP'NHMN'A UP'NHT'L G !'8
H !U' P99' HMN'NHMN'OPGP PG[M!O'NH G' G'# K NP8
#'A 9OP'N M N '!P P'N O'NHT'Q J!O
#'7M9GP'!P%P'GPP I%O'7 P!O'+YNH G' G'NHP' IM!'
XMG'APQQ%O'M!O'AM! GH%O8 NH G' G'HP'K !NP I !G'NHPP+
#!O' HMN'NH J'OM %GN'O '8 M!O' !'NH G'O GQJ GP+
#QM !GN'NHT' !'PO KN'7 99 G'NHT'G GNP +
HMN'7 NJ!MNP'A QHN'GNM 'NHP'7M '3I 9M
@XH GP'GP M!N' 7'NHP P'AP'M' QHN' !'GPP !Q+
#!O'7 GN'AP]JPMNH !Q' 7'NHP'G J9'N 'EJGN9T'
2'M I8' M!O' H KH' G' I P'OM PG'NH !U'HP 'H G+
H G'N PMKHP T'9 UP'M' I GN'N JGNT'9 P
2'KM99%O'H I'! 'N 'M!G P ' 7'NH J'AP%GN+
#G'NH J'M N'GL UP!'Q PMN'M!O' NJ JG+
HP'N JP'OPK OP ' 7'M99' !EJ PG+
MT'6'O QHN'MQM ![M!O'NH J'GHM9N'GPP' IP' HPGPJG
5 'GJKH'M'EJGN KP'NH J'NHTGP97' 9N'P! T8
HP!'NMUP' IT'9 7P'8 2%99' 'NHPP'N %N+
' 1H' "PM P!
XHMN' I P'NHMH' IM!' G'NH G[
-' 3 P'G !+
' XP'GPPU'! N
HT'A PMNH' 7' IP KT' HPGPJG+' % G'N ' IP'
#'NH !Q'MG'G !'N 'O P'MG'NHPP'N 'GMT' N+
#!O'! ' I P' I %O+' XHP P'NH G' IM!'KM99G' IP'N M N +
/PN' IP'GMT'NHJG' IJKH' ' 7' !'9 P'AP'N PMG !+
2!'GP KP' 7'G 'PWKP99P!N'M'APMJNT+
#G'2'9 P' I GN'M!O' !'NHMN'7M NH' 99'LP GH8
#G'2'HM P'A JQHN+ IT'9 7P'HP P'N 'K !7 I' N8
#G'2'HM P'GP %O'HP 'N JPGN' NH PGN8
#G'2'OM P'U 99'NH G'K JG ! 'NHMN'OP! PG' N8
'9PN' IP'AP' I GN'N M N 'M!O'T J'L9PMGP' IP+
0 'GK ! !Q'NHT'PO KN'OJUP'MGU'NHMN'9MOT'
XHT'GHP' G'7M 'M!O' HT'HP 'PTPG'K I IM!O' IP'
NMT'HP P'N '9 P'HP 8 M!O' 7'GHP'GMT'N M N
2'M I'M' 99M !'7 N'N '9 P'J!AJ PO+
' H J'GHM9N'HM P'L NT' 7'JG'A NH' H' HPGPJG
27'J!N ' !P NHP 'NH J'GH ' IP KT# GN L+
#G'NH J'M N'EJGN'NHT' ! A9P'PM 'MQM !GN'JG8
#G'NH J'M N' M9 M!N'7 'NHT'K JG !%G' G J9+
XH GP'N P9 P'GN !Q'9MA J G'K !'H G' IP I T+
/PN%G'O P'N QPNHP 'MN' !P' !GNM!N'OJUP'[
1!9T'M'9 NN9P'9PN'H I'7M99'AP7 P' IP+
HMN'2' IMT'NP99' IT'G J9'HP'GHM99'! N'HM P+'HP +
-' 2'Q M!N'T J' GH8 7 'N 'GMT'N JP'T J'K JG !'
O9MG'NP!'N IPG' I P' 77P!OPO'7 '2'QM P'H I'
P' IP KT'NHM!'T J'7 J!O'G 'T J' 77P!KPG'
P !Q'! ' I P'NHM!'H G+' !P'HP P'GLPMU'7 'NHP I [
0 'P P'NHP'GJ!'GPN'A NH'GHM99'G9PPL'7 'P P +
=

,' #9MG'NHP'L NT[! ' '!P P 'G GNP +
LPMU'! N'N 'AP'OP! PO' 'NHMN'7MKP' 7'T J G'
$X 99'APM 'NHP'KJ GPG'P9GP' 7'M7NP MQPG+
0 'NHPGP'9 GN'K JG !G+
' 2!' IT'7MKP 'OPM 'G GNP
2'7 !O'! 'M!QP 'N 'NHP I ' ! '! ' J !8
HP' I GMO P!NJ P' 7'NHP ' !'PTPG'U 99G'NHP I
4PN'NHMN'2' 99'AP' IM! 'M!O'HM P'L NT+
T'U!PPG'GHM99'Q 'N 'NHP'Q J!O'AJN'2%99'QPN' IP KT+'
"P9L' IP'OPM 'G GNP [!'M'OPPO'G ' NJ JG+
HP'L P G' 7'M99' IP!' 99'AP' NH'JG+
GN' TM9'A NHP %S
' 'AT' J 'N P' 7' IM MQPS
' T'T J' !'GL N9PGG'H ! J S
' T'NHMN'7M NH+
HMN'7M 'HM!O 'M!O'NHMN'H !PGN'HPM N'T J'QM P' IPS
' T'NHMN'T J' J9O'HM P'L NT' !'M! NHP +
T'T J' !' NJPG' !7 ! NPS
' B T' M9 J +
T'M99'NHP'KHMGNP' ! QHNG'2'HM P'P P 'L9PMG%O'T JS
-' HPGP'M P'GN M!QP'K !EJ !QG[
' MT 'NHP!'2%99' !'N '
T'M99' J '7 P!OGH L 'G 'AT'M99' J 'OM!QP G+
T'M99'T J'9 P' GN' M G'M!O'NH G'G PPN'9MOTS
' T'NHMN'T J' J9O'HM P'N P I A9PO'N 'OP!T'
+#A9JGH !Q' IMOS
' T'T J' !'PTPG'AT' GN P!QNH+
2!' H KH'T J'G P'2' P!N'APT !O'M99' IP!+
#9I GN'M99' IP! 'M!O'TPN'2'T P9OPO' HPGPJGS
' 'K !'M99'NH G'AT'T J' I GN'! A9P'G J9+
XH KH'KM!! N' M!N'OJP' IP KT[2'APQ'7 GN+
' PWN'HPM ' IT'L MTP G[
/MGN'9PN' IP'P!N PMN'G [
'O$ ' IP KT'2
' P KT[
P KT' !'NHPGP'L !KPG'
-' 4 J' IMUP' IT'7M NH' PP9' GMT'2'7P9N'
ILMGG !'N 'NHP I'A NH'H ' J9O'T J'L9MKP' N' '
' L !'NHP '9 PG8 AJN' NH'NHP 'AM! GH IP!NG+'
-' 4 J% P'M' QHN' IM!'G GNP 8 T J'HM P'L NT+
JN' M!N'NHP'J!OP GNM!O !Q' HP P'N 'JGP' N+
27'T J'OPG P'NHP '9 PG' ! P!N'M' MT'
M7P 'NHM!'AM! GH I P!N' KM!'NHPGP'N '9 P+
#!O'HM P'NHP'MQ !T' 7'9 P'MA JN'NHP I +
#!O'! N'U 99' !P'M! NHP '\ 3 P T'OMT
HPT%O'7 QHN'MA JN'T J8 H J 9T'7 !Q'T J 'H ! J
2!'LJ7 9 K'] JPGN !' NH'NH$P 'G OG' AP' GP'NHP!+
#!O'HP P'7 QPN'NHP I [N'K !KP !G'T J 'K PO N+
#!O' IT' MNH'P] JM99T' '2'HM P'GM O 'NHPT'O P+
PNNP 'NHPT'7M99'AT'NHP'9M 'NHM!' !P'M! NHP +
'! N' IT'H ! J +
' 1H' IT'! A9P'A NHP +
HMN' MNH' MG' MGH9T' IMOP 'M!O' !'T J 'M!QP 8
4 J ' PMG !' 99' ! N'H 9O' N ' 7'GJKH' G'
NM!O'7 'PWL PGG' 99 'M99'NHP' 9O' I JGN'LP GH+
PG OP '2'HM P'M! NHP ' MNH'%QM !GN'T J G+
17' I P'MJNH NT+'2%I'GJ P' I P'9 P8
N' IMOP' !'LMGG !'!P NHP 'AJN'Q O'HPPO+
-' XHMN' G' N 'G GNP '\
' QP' N'H IP'A M P'9MOT[
' HMN'T J' J9O'!P%P 'OP!T' IP'M!TNH !Q'
+O N'7 ' IT' I OPGN'GJ N 'M!O'T J '7 PP'Q M!N !Q
2'N P'T J'N 'T J' O'! 8 7'T J'7M 9' ! %N+
H !U'H 'T J' IM I'T J 'H ! J 8
@O '! '2%I'GPN'M APQQ !Q'G '2$I'OPM7'
'M99'AJN'T J 'K ILMGG !8'H 'NHP '9 PG'
QHN'A PPO'NHP' J !' 7' IT' !M IP%G 1L ! !'[
HM99'M!TNH !Q'NHMN'9 PG' IP'LP GH'7 ' IPO
HMN' P P'M'K JP9' GO I'[O ' IP!'L J!P

D X P'MO LN'M' GJQOPGN !' 7' +' MG !+' HP' Q !M9'HMG'YY!M IP' L ! !+ '
- ' G'JGPO' !'NHP'GP!GP' 7' - =

HP GN M QHN T J!Q A JQHG NHMN A9JGH NH NH JGM!O A9 G_
G IG
PKMJGP NHPT I MT AP NNP!\ 1H OJUP HPGPJG
HP Q O9T I NHP G NHMN HM P Q M!%O7 NHPGP+
#!O M99 NHP 9 !Q !Q I M OG NHMN P P 9 %O+
27T J GNM!O GHM99 KJ GP I P M!O I T APMJNT+
#!O !NHP 7J!P M9 G !QG 7 NHPGP N K JG !G+
5PGL GP I T K JP9NT M!O K T P NH IP+
99 2 M I ! NH !Q AJN NHP GK ! 7 IP!
0 " PM P!%G GMUP GM P NHP 9 PG M!O AM! GH NHP I [
-1! HMN K !O N !G\
PM NHP I !P P I P
I MUP I P NHP K !NP!N ! N U! IP+
N PMO JL ! NHT OJUPO I M!O N AP+
X HP P P NHPT GHM99 N M P9 P P GN M!QP G
!P M! NHP +
2%99 AP KJN M L PKPG
P7 P 2 NMUP NH G MNH[O QPN 2 9 P HP \
1H M99 TP Q OG OPGL GP I P NHP![HT AM! GH I P!N
2 ! N I G9 UP G P I MT 7M 9T KM T
1J G OG M!O KMJGP M9 !Q8 P9GP !P P N 79P+
JN NMUP J 9 PG OJUP+ 2 I JGN 9 P M!O 998
#!O 7 NHMN 9 P I JGN M!O OM P U 99 NH G K JG !+
1! M!T L PKP NHP PM NH HMG+
-X 99 T J # K NP
MUP NHPGP K !O N !G\
" P%G M 99M !NHP![
HPGP M P I P![
!P P OJUP8 %N G GP N I P NHM! APQQ !Q+
NMUP I T 9 7P G AMGP9T+ H JQH 2 NH !U
2 !P P GHM99 P!E T HP TPN 2%99 L PGP P
HP H ! J 7M77PKN ! M!O O P 7 HP +
MUP OPMNH M OP 9+
-X HMN I MT AP O !P\ 7 ! 2 7PP9 K I LMG_
G !+
/ PN N ! N 7M99 MQM ! G +
-MT 3 I 9 M
27 !P 7 NHP I P P OPMO MG !P I JGN M P T J
!NP!N NMUP NHP NHP N T J HJGAM!O\
HPT KM!! N A NH P!E T T J8 NHPT M P L !KPG
#G Q O9T MG T J !PTPG M!O MG ! A9P
#G P P OM I P TPN GL UP 78 9 U JL ! NHP I +
#!O 7T J KM! 9 P P!O NH G O 77P P!KP
2 Q P K !GP!N8 M P T J K !NP!N L !KPG\
%! X NH M99 J G J9G+
-" P CF?C FG P7JGPG
JGN N G CFGH
%! # !T OPMNH NH J KM!GN ! P!N OJUP++
27 2 7M99 7 I NHMN I JNH 2 7M99 NH 7M J +
#!O 9 P G TPN J!A !GHM99 A9PGG I T MGHPG+
27 GHP P7JGP I P TPN I T Q M P 99 PO I P+
#!O G 9O P G G !Q I T PL NMLH+
-MUP KH KP NHP!+
2 KM!! N G 8 NHPT% P A NH N PWKP99P!N
0 I P M HM GHM99 !P P 7M99 7 NHPGP I P!+
, X HMN 99 APK I P 7 NHP I \
-HJG 2 OM ! N
#!O AT I !P H ! J !KP MQM ! N GNM!OG
1 A NH GHM99 O P[SD4 JGHM99 A NH N T J K J!N T
#!O PMKH NH !NH G I !NH MKK I LM! PO
X NH NH PP 7M U! QHNG MLLPM MQM ! !NH G L9MKP+
2!' H KH 2%99 L9M!N M LT M I OM!O HPNHP +
P7 P JG NHMN M P HP P KM!7 KP H G K JG !
T 7M M!O U! QHN9T GN P!QNH N N JKH NHP L 99M +
" P GHM99 P!E T HP 8 NHP NHP 9 GP H G HPMO+
#!O M99 H G 7 P!OG8 ! GHM99 HP Q JOQP N 7M99+
NH !U HP O PG NH !NP PGN !NH G 9MOT
X 99 NH G K !NP!N TP\
4PG " P P K JG !# K NP
2%I 7 P!OG MQM !N 99 NHMN H J +
2 P I A MKP T J+
-# P T J K !NP!N G GNP \

4PG 2 I JGN G 8
39GP A NH I GKM T+
-I P GHMUP HM!OG MQM !NHP![
#!O NMUP HPPO MG T J%P QP!N9P I P! NH G]JM P
9PPL N 99 NHP H J L P7 W%O M!O H 9O T J K J GP+
X P OM P! N 7M 9 NHPP HPGPJG+
-I P 2%99 Q P TP
JGMQP 9 UP N L !KPG M!O N 7 P!OG+
X HP!TP PNJ ! H !G 2%99 GPNN9P HP P8
X H 9 GPG TPN 2%99 PPL JL !H G A P = 4 &

3 3 2+
: M 9P '" O P!O+
! " PM T J! I P\ X MG ! NH !Q GM O 7 I P
!KP ! !Q NHP PGKMLP 7 -M9M I !\
: O G P I P I AP [
> "NH !Q NHMN 2 HPM O8
0 2 KM I P H I P AP7 P NHP AJG !PGG
X MG 7J99T P!OPO TPN 2 I QHN LP KP P+
3 P 2 OPLM NPO M Q PMN 9 UP9 H O
17A NH NHP LM O !G8 7 " LL 9TNM
#!O 7M PTPO 3 I 9T JL !NHP U!PPG
PQQ%O NH GJKH HM!OG I P L NT NHMN NHP OJUP
PNH JQHN GN O GNMQQP !Q HPNHP HP GH J9O 7 99
" G MGH MNH NHP G PPN K I LMGG !
17NH GP N 9MO PG8 M!O N GPK !O NHP I +
HMN N J9T ! A9P L !KP -P NH JG
" M97H G !HPM N GPN !N NHMN 2 H LP
#99 GHM99 AP P998 !P NHP HPM O 2 !P]JPGN !
17T J !M I P H G %GKMLP+

PK !O O P!O+
! - MT " PM %! +N H 9O G [
%> " P 7Q O K I7 N I M![2 A !Q T J !P G+
: O !P G+
! HPT% P P9K IP+
%> " -M9M I !HMG K9PM %O T J+
#!O Q N T J LM O ! M!O O GK P %O H
#!O AT H GP I PM!G HP %GKML%O H KH MG T J OMJQHNP $G+
X H GP LM O !G L KJ %O N 8 M!O NHP L G !P
@ N N AP HP9O J!Q MNP7J9 N HP Q O!PGG
" MG Q P!M GJ I 7 I !PT N HP I M MQP
#9M QP !P+ 2%99 MGGJ P T J+
! 4 J% P M Q O I M!+
#!O P P A !Q Q O !P G+
> " " MG N P!OPO\
%> " X HT MG N GH J9O AP 8 NHPT NHMN !P P APQQ%O
JN NHPT L P M 9%O HMO NHP GJ NG 7M 9T Q M!NPO+
HP L G !P G HM P NHP 9 PG+
> " 2 U!P %N J9O AP G +
%> " JN NHP P AP !P K !O N !G H KH T J%99
HPM 7
#N APNNP N I P+
! 2 H LP NHPT% P Q O+
%> " HPT% P H ! J MA9P8
" Q O NHPT%99 L P 2 U! ! N+

X P +
2 > " % 99 AP U! !+
8!! #9MG G HP P%G T J OMJQHNP \
! X HT O T J MGU\
8!! 1H G HP!O O T J GPP HP \

)=

/ PG 9 !Q !Q 7 ' IP 8 7 ' NHP NMKU9 !Q
/ PN IP M9 !P ' K IP ' P QH ' IT HPM NG ' KHKP 9T[
' 1 QH ' QH ' QH [%N G JL ' NHP !O G 7M +
L ' NHP A 9 !Q 8 JN NH NHP I M !GM 9[
+XHP P G T J ' H GN9P ' I MGNP ' '
% ! ' / PN%G QPN HP ' !+
! ' L ' N ' NHP N L ' A T+
% ! ' X HP P%G NHP L 9 N \
2 > " ' " P P+
&3 ' X HMN UP ! !%GN NH J
Y > " ' #' 7M ' O+
&3 ' PM '7 ' N ' I MGNP 8 NMKU MA JN[;;7 3-

6 X HP !' T!NH M NH HP ' A %O 9 QHN R BK+

= 4 .

3 3' 22+

' ' 2 ' 2!', & -

' 4PN 2' IMT A !O NH GP J!OG JL ' NHMN I JGN LP!+
#!O A9PPO N ' OPMNH 7 ' IT GMUP P9GP ' 2%9G KH GP+
#!O P!D NHP ' GN 7P8 N ' GJKH T J!Q HM!OG IP IP!'
HM9G !P P ' 7M99 7 ' IP ' NHP ' PPL !Q I NHP G+
O 99 !Q NHP OPMO K 9O MGHPG 7 NHP ' G !G+
HM9G !P P ' KJ GP IT K JP9NT+ : O " PM %!
X HMN M G PPN 7MKP HMG # K NP[27 GP MNJ P
X NH M99 HP ' APGN P!O IP!NG ' M99 NH GP APMJN PG
HP G G !NL ' NHP A NHG 7 ! A9P A O PG+
XP P HP P M I NM9 IM! ' M!O HMO !' HP '
HP K T OP! M9G 7 T J!Q IM OG ' TPN O JAN9PGG
HP J9O J!' IMO 7 ' NH G IM!' 8 HMN M!' PTP [
17 HMN M 7 P T GLM U9P ' M!O]J KU G PPN!PGG+
" MG NH G T J!Q L !KP [HP P / P H IGP97 G NG G I 9 !Q8
?JGN GJKH M! NHP ' M!N !' : M!T I POP
PN ? P M7 P ' M!O P!7 K%O NHP Q O
!MNKH JL ' NHP Q O9T A T ' M!O GPN H I ' AT H I
#' GH ! !Q K !GNP99MN ![HMN M A +
17 HMN M GLMK JG IMEPGNT ' HP KM PG
KH%O 9 UP NHP Q PMN PTPO ?J! %G ' AJN 7M ' G PPNP '
+ I NHP ' NHM!' -P9 LG% GH J9OP ' [OM I P M!O " ! J '
'c2PNH !UG ' 7 I ' HP!KP ' MG 7 I ' M L I !N T
- !NPO !' HPM %! ' GH J9O K9ML ' NHP ' !QG ' M!O G !Q
' M99 NHP J!OP 9O ' NHP 9 PG M!O 7 QHNG
17 Q OG M!O GJKH IP!' !PM ' %P I + -M9M I !'
2G AJN H G 7 98 N ' H I ' M IP P OJ99 GHMO $8
" P%G G M NH M!O IPMQ P ' 7 M!' PTP MG HPM T
#G 7 HP%O 9 GN H G I NHP ' ' M GN 99 NP I LP
' GN !Q !' H I ' ! ' M9MK NT8
17 M99 NH G GL QHN9T GHM L!PGG ' ! N M G I 9P+
4PN NHPGP NHMN P K J!N P G IMT APK IP H I ' '
M K GGJG MG M GMO A T ' AJN M HPM P!9T+
1H ' H ' KM!' 7 !O NHP AP!N 7 IM!%G 7M!KT \
S ' M I ' M 7 9 ' IT PMG !' G 9 GN !' IP 8
2' HM P ! ' KH KP ' M!O 2' HM P 9 PO G ' 9P O9T+
HMN IP!' JQHN N ' APMN IP+ 1!' IT U!PPG
2' MGU NHT LM O !' -M9M I ![H J M N M9 !P
#!O !9T APMJN 7J98 M!O NHPGP NHT PTPG+
HPGP NHP A QHN 9M I LG 7 APMJNT ' NHMN K I I M!O
#!O NH PMNP!' 9 P ' M!O HMN T J!Q IMO OM P K GG %P I' '
X HMN M A 9O Q M NT ' M!O TPN ! N !Q+
" MG NH G A !' IM!9T 7MKP[1H ' / P ' NH G !9T
O I ' NH G H J ' G K IL9PW !'8 9 P NHP P ' # K NP 7
H J' M N M KHM!QP9 !Q N ' H I ' M IP P Q LGT+
#!O NH G NHP ! A9P A OT S2' M I ' G NNPO
NNP 9T 9 GN[IT Q !%G 7M NH HMG 79PO IP
O ' 7 IT A NHP ' AJN P%P!' ! ' HMO MGU%O IP
X HPNHP ' 2' 9 %O ' 2' HMO J!' IMO 7 ' # K NP8 '
' 7 IT G GNP ' I P 7 ' -M9M I !+S
NM!O A NH N QPNHP [' K IP ' MGU IP A NHP SD

$ F ' F ' !' NHP D!M9 #' I OP I ' PMO !Q G **' IL9T !Q OPPL GPMNPO
PTPG F ' I QHN AP PKP PO !' NHP GP!GP 7 (' ;' AJN NHP PWL PGG !' YY NH !

#9MG ' 2' U! ' ! N[MGU IP ! ' G PPN G GNP 8
2' I MT Q ' 9 U [X HMN M I P P KH 9O G 7M!KT+
HMN ' HM !Q N ' 7M ' QM OG 7 P]JM G PPN!PGG+
M!! N O GN !QJ GH ' AJN I JGN K T 7 ' A NH

' ' : P!N9P I M!+

" ' ! ' G ' \
0 ' 0 I ' NHP ! A9P OJUP ' T J ' A NHP
MOM I ' 2' A !Q T J !P G ' NHP U! QHNG M P K IP[
' ' P!O NHP]JM P9 \
' 4PG+
' %X J9O 2' I QHN P!O 7 GN[
X HMN G !G HM P 2' K I I NNPO ' KHMGNP 5 M!M
HMN I T J!GL NNPO T JNH I JGN ! ' AP G 9%O
X NH A9 O 7 L !KPG \ M!O I T KHMGN NT
P I MOP NHP M9NM ' HP P NHP 9 PG 7 9 P G
@ ' Q PMNP ' M!O N ' APNNP ' !P P ' TPN
MOP I NHP G%E T ' I JGN AP NHP GMK 7 KP
' I T J!HMLLT APMJNT \

' ' + ' ' 1 ' - 1 ' "' CCGHN?HC
-' !Q NHP I ' !
>J KU9T AT M!T I PM!G+ 2' 9 !Q N ' GPP NHP I +S
4 J ' N ' K !NP!O !Q 9 P G M P PNJ !%O+
#!O NH NHP I ' NHP ' 7M ' U! QHNG ' ! ' I T 7M ' G GNP +
4 J I JGN 9 P !P 7 NHP I +
' 2' HMO MNHP ' A NH
' !P NHP ' 7 ' I T GMUP GH J9O 7M99 J!N I P9T+

' PGGP!QP +
-' X H ' GM ' NHP I ' \
' 2' M H 9P+
' #!O 2+
; -' O I ' !P!KP K IP T J ' G ' \
E --' O I ' NHP U! QHNG+
-' - MT GLPMU+
4 J ' NHMN HM P GPP!' NHP I ' HMN NHPT M P+
E --' 2' 99 ' G +
#!O N J9T HMN 2' NH !U ' ' G W A M P ' GL NG
HM!' NHPGP NHPT% P A JQHN ' @ 7 P EJOQD AT NHP JNG OP '
2' !P P ' GM ' ! ' PMO 7+ " P ' NHMN GNM!OG
2!' NHP 7 GN L9MKP NH # K NP ' AT H G GPP I !Q
H J9O AP M GN JN I M!' AT H G 7MKP M L !KP
@" G P T 9 UG G ' GMT H I '8 H G K IL9PW !'
PM P ' M A !' NHM!' A9MKU8 GNP !' M!O TPN ! A9P+
X H KH GH G H I ' HM OT ' 7PM 9PGG ' L JO 7 OM!QP G 8
HP K K9PG 7 H G PTPG GH ' 7 P D NH !' H I
#!O MG M HPMNPO 9 !' G ' HP 9 UG 8
" G HM ' HM!QG 9 !Q APH !O H I ' A9MKU M!O GH ! !Q
/ UP M P!G% !QG8 H G GH J9OP G A MO M!O GN !Q 8
I %O 9 !Q M!O J!O ' M!O !' H G NH QH M G O
" J!Q AT M KJ JG AM9O KU ' HP!' HP 7 !G
' GPM H G 9 NH8 APNNP ' % IT K !GK P!KP+
X MG !P P ' G 9O P %G 7 P!O+
-' H J HMGN P9 OPGK A%O H I +
' 4PN M Q PMN OPM9 GH N
PNH !UG ' 7 H I ' NHMN%G 7 GN NH -M9M I !+
-' - MT GLPMU H I ' 7 P!O+
' 2' QJPGG ' HP G M L !KP N +
#!O 7 N IMT AP ' Q PMNP 8 7 ' H G GH '
" MG M99 NHP !M IP!N 7 H ! J ' !%N+
" P%G G IP HMN A QQP ' NHM!' NHP U! QHN HP GL UP 7+
JN 7 M 7MKP 7M ' G PPNP 8 H G K IL9PW !'
2G @MG M LP Q MLP ' JOOT 8 HP HMG 7P9N
X NH JN O JAN ' HMN HP 7 QHNG 7 ' M!O G ' MLNP '
' I MUP NH G KMJGP H G !8 ! %G 7MKP MLLPM G

H I R IL9 PG G I PNH !Q I P+ + 5TKP GJQQPGNG NHP J!PWKPLN !MA9P PMO !Q
7
) $ ' ' ' '

#99' NHP' 7M 'H LPG' 7' HMN' HP' J!OP NMUPG'#
#!O' HP!'HP%G'M!Q T'NHP!'M'GPNN9PO' M9 J'
@ N'NM !NPO' NH'PWN P I PG' J!G'NH JQH'H G'A OT+
#!O'QJ OPG'H G'M I'N'A M P'NH !QG'8 7PM'HP'KM!! N+
"P'GH G'!'GJKH'G 7N'NP I LP 8 H G'HPMO%G'TP99 '
"M O HM %O'M!O'KJ 9%O'NH KU'N !%O'9 UP' T'N LG
N'N 'J!O ' NH'NHJ!OP 8 !'H G'7MKP'
HP'9 P T' 7'NHP' M 9 UP' I M O'MLLPM G+
-J P' PO'M!O' H NP'7 'TPN'! 'APM O'HMG'A9PGG%O'H I'8
#!O' !'H G' 99 !Q'PTP'G NG' KN T
#G' 7'GHP'P P' I PM!N'N 'K !'H G' M9 J 8
"G'! GP'GNM!OG'H QH'M'KHM MKNP' 7'H ! J +
"G' PO'9 LG'M7NP '7 QHNG'M P'7 N'7 '9MO PG+
' JGN'NHPGP' I P!'O P'N '9
' X HP!'HP'GLPMUG'H G'N !QJP
J!OG'9 UP'M'N J I LPN8 M99'H G'9 !PM I P!NG'
P'MG'M' I M!' J9O' GH'NHP I 'GN !Q'M!O'K9PM!8
"P' PM G'M' P99 GNPP9%O'MWP'NHP'GNM77' 7'Q 9O'8
"G'MQP'G I P'7 P M!O N P!NT+
E --' HP P%G'M! NHP
#'9 NN9P' I M!'AJN' 7'M'N JQH'G J9'GPP I !Q'
#G'Q PMN'MG'M!T8 7M P'L I GPG'
2!'GJKH'M'A OT'TPN'2'!P P'9 U%O' !+
' 1H'HP'NHMN%G'7 PKU9P 7MK%O'\
E --' HP'GM I P' I T'9 O'
P'NHPT'! N'G PPN' !PG'\
' 4PG'NHPT% P' P99+
E --' PNH !UG
P !Q'G '7P 'M!O' P99'O GL G%O'NHPT'GH '
: PMN'M!O'7 !P'M N' !' MNJ P+' "P%G' H NP HM %O+
N' M!N ! H NP'AJN'GJKH'M' I M!9T'K 9 J'
PWN'N'M!'MJAJ !8 N JQH'M!O'! I A9P'GPN+
XH KH'GH G'M!'MKN P'G J98 H G'M I G'M P'A M !T+
/ !%O' NH'GN !Q'G !P G8 N 'NHP'GH J9OP L PKP'
: P!N9T'NHPT'G P99'9 UP' I P!'!P K !KP %O+
XH KH'GLPMUG'H I'L !P'N '9MA J '!P P '7M !N !Q'
!OP 'NHP' P QHN' 7'M I G8 GN JN HPM NPO'GN 99
LN' HP!'HP'GN G'M'N QP '8 HP%G'Q PT PTPO+
XH KH'T P9OG'K I LMGG !' HP P'HP'K]JP G'8 GHM L'
'GLT'MO M!NMQPG'M!O' HP P'HP'7 !OG'%P I +
"P%G'G 7N'N ' I MUP'%P I'H G8 HP'O PG'! ' !QG+
'NMUPG'! !P8 HP$G' J!O 7MK%O'M!O' HP!'HP'G I 9PG'
"P'GH G'M'9 P ' HP!'HP'7 !G'M'G 9O P 8
#A JN'H G'HPMO'HP' PM G'NHP' !!P %G' MU+
#!O' !' N'GNJKU'NHP'7M J ' 7'H G'9MOT8
"G'MQP'G I P'G W M!O NH NT+' 2!'H G'HM!O'
"P'APM G'M'KHM Q !Q GNM7 7'P I A GG%O' NH'G 9 P +
-' # P'NHPT'M99'NHJG'\
' HPT% P'M99'NHP'G !G' 7'H ! J +
-' 'MG'2'HM P'M'G J9'2'9 !Q'N 'GPP'NHP I [
/MOT'T J'GHM99'GPP' I P!'7 QHN'! +
. ' 2' GH'N+
JN'! N'NHP'KMJGP' I T'9 O'NHPT' J9O'GH '
M P9T'MA JN'NHP'N N9PG' 7'N 'U !QO I G8
% G'L NT'9 P'GH J9O'AP'G 'NT M!! JG+
1H' I T'G 7N HPM NPO'G GNP ' HMN'NH !U'T J'\
XPPL'! N'N 99'NHPT' PPL'A9 O' P!KH[N' I JGN'AP+
-' 4 J% P' GNPP9%O' %P I' NH' T J 'APMJNT+' " ! J %O'
7 P!O+
'T J'2'Q P'NHP'7 P9O8 L MT' OP ' N'
O NN !Q'NHP'LP G !G'NHMN' I JGN'JGP' N[
' 4PG'G +
-' I P'2%99'Q ' G N'NHP I ' ' 2'KM!! N'GNMT'
@ HP '7M I P'HMG'7 %O I P'G 'N 99'NHPT'MLLPM [
: O'7 P!O'AP' TMG'

' HP P'GHM99' M!N'! 'A M P T+
' - ' P!KH'Q ' PPL'8 7 ' H G P P' !G
/ GPG'M'! A9P'K JG !'7 'NHT'G !G+ 9 4 &

3 3' 222+

': M 9P 'X P ' "'5 KN +

! ! ' "P 'O GN MKN !' G' I P' MN' G I P' N I P' 7' NHP'
I !'NHM!'MN' NHP 'G IP ' G' N'! N'\
! ' HP' G' K !N !JM99T' !' M' HM I 9PGG' O GNP I LP 8
G9PPLG'9 NN9P 'M9N QPNHP ' NH JN'MLLPN NP 'GM P' 7NP!'O !U_
!Q'8 O PM I !Q' 7'M! NHP ' 9O'M!O'M' APNNP 8 M!O' HMN'
A UP!'L PKP' 7' I MNNP 'G P%P 'GHP%G' MA JN 'NHP' !M I P' -M9M '
I !'9M OG' N8 NHMN' GHP' 7M KPG'P P T'AJG !PGG' NHM9 '7 NG' N'
N 'P P T']JPGN !+

'5MJQHNP +

/ U' HP P'GHP'K I PG'2 T J'GHM99'LP KP P'HP 'APHM J +
&3 '2'HM P'7 Q N' N']J NP8' NHP' AJ OP!' !%N' MG'
6'O ! M' O ! MM!O'LP!!PO' AT' ! ' GP' I M!' NHM!'
: M9O '3 I 9 M%G'GKH 9 I MGNP 'HP%G' MG'7M!NMGN KM9'N 'MG'
P P 'HP' I MT' Q ' JL !%G'9PQG8 7 ' !'NHP' !PWN' 9O' 99'
5 O 'GPP' -M9M I !'M!O'NHP!' 99'GHP' AP' JN' 7'9 P' NH'
3!PMG+
! ! ' X HMN'GNJ77%G' HP P'\ L 'G J9'
! ' 3 P!'NHJG'M99'OMT'9 !Q+
&3 ' '7 'NH G'KHM I'NHMN'2'N 9O'T J' 78 T J' I JGN'
A !Q'M' L PKP' 7'G 9 P ' !'NHP' N L' 7'T J 'N !QJP' ' ! '
7P T8 NHP!' 7' N'AP'T J 'KHM!KP'N 'K I P' HP P'NHP'A9PGGPO'
GL NG' @MG' NHP P%G' M' G QHN' ! ' P' I M OG' NHMN' HM P' J'
9 P G'LP GHPO'K MKUPO'N 'L PKPG' NH'9 P' P'GHM99'K I P'
NHP P'M!O'O ' ! NH !Q'M99'OMT'9 !Q'AJN' L KU'79 P G' NH'
- GP L !P8 NHP!' X 99' 2' I MUP' -M9M I !'M' ! GPQMT8 NHP!'
9PN'H I S I M U' I PSNHP!'2
! ! ' "1 ' L PNN 9T' GHP%G' M I GG[! NP' HP ' M' 9 NN9P'
7J NHP [
&3 $ OM NH' 2%99' NP99' T J8 G I PN I P' P'Q 'N 'AM 9PT'
A PMU' P' 7'NHP' A9PGGPO' M9MG'%N G'M' G P'9 7P'NHPT'HM P' %
NH% NHP 'L9MKP'2 27' !P' AP' I MO' 'HM!Q' 'O !'NHP I _
GP9 PG'NH NHP 'NHPT'Q 8 ?JL NP 'A9PGG' JG'
! ! ' " 'GHP' K !N !JPG' NH G' 7M!KT[' % G' ! N' M!'
P!Q M7NPO' I MO!PGG'AJN'M' I GN'NH KU' M!O'L 7 J!O' I P9M!_
KH 9T+
&3 ' 'HPM 'NHP P' M' L JO' 9MOT'M!O' M' L JO' K NT'
7P H 9'N QPNHP '2 2' P P' M' APMGN' M!' 2%O' KM99' N'Q O'
GL N[(97 3-

X' 7 '9%'+2'%'2-1'(+-2(' 1' -+% O' N

= 4 '5MJQHNP +

! 'X HMN'NH !U'T J' 7'HP 'G '\
! ! '2' NH !U' GHP' HMG' M' LP NJ APO' I !O' H KH'2'KM!_
! N' I ! GNP 'N +
! '#9MG' HMN'NHP!'\
! ! ' !OP GNMLO'T J'GHP' P P 'M77PKNPO'M!T' I M!' P P'
GHP'APHP9O'-M9M I !'\
! '2' MG' !KP 'G ' !'Q PMN' H LP' GHP' HMO' 7 WPO' HP '
9 U !Q' !'NH G'QP!N9P I M!' I T'7 P!O+
8!! '2'O O' NH !U'G 'N 8 M!O' J9O' MKK J!N'2'HMO' M'
Q PMN' LP!!T NH' !%N' N 'Q P' HM97' I T' GNMNP 'NHMN' A NH'
GHP' M!O'2' MN' NH G'L PGP!N' GN O' J!7P Q!PO9T' !' NHP' GM I P'
NP IG+
! ! ' HMN' !NP I LP MNP' GJ 7P N' 7' HP ' PTP' HMNH' O G_
NP I LP PO' NHP' NHP ' GP!GPG8 NHPT' I MT' PNJ !' M!O' GPNN9P'
MQM !'N 'PWPKJNP'NHP 'L P OM !PO'7MKJ9N PG'8 AJN' NHPT'M P

±) %' :-7% -<- ,'9%%,'@* B% %O'+*' % B *1'+:%B2', ,<C, %' '2'%O+*,' (
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! ' !' M' I GN' PWN M MQM!N' MQM T+' H G' T J' IJGN' O 8
K !7 !P' HP ' N ' M' L9MKP' HP P' NHP' 9 QHN' I MT' MNHP ' GPP I'
N ' GNPM9' !' NHM!' AP' LP I NNPO+' MUP' JL !' T J' @T J!Q'
G ' HP ' 7 P!O ' NHP' !M I P' 7' - M9M I !8 GMT' T J' K I P' N ' PMN'
NH' HP ' M!O' N ' K I I J!P' 79 P' 8 NH G' 99' KMNKH' HP ' MNNP! _
N !' 7 ' NH G' HP ' I !O' APMNG' JL !# NHP ' AEPKNG ' NHMN' M P'
!GP NPO' %N PP!' HP ' I !O' M!O' PTP ' APK I P' NHP' L M!UG' M!O'
7 GU !QG' 7' HP ' I MO! PGG# G !Q' N ' HP ' GJKH' Q PP!' G !QG' 7'
9 P ' MG' GHP' GMTG' - M9M I !' HMNH' GJ!Q' !' L G !8 K I P' N '
HP ' GNJKU' !' MG' G PPN' 79 P G' MG' NHP' GPMG !' G' I GN PGG' 7'
M!O' NHP PN ' I MUP' M!' MOO N !' 7' G I P' NHP ' K I L J!OPO'
O J G ' H KH' M P' Q MNP7J9' N ' NHP' GP!GP ' M99' NH G' GHM99'
APK I P' - M9M I !' 7 ' - M9M I !' KM!' G !Q ' M!O' - M9M I !' G'
G PPN ' M!O' P P T' Q O' NH !Q8 OPG P' N ' PMN' NH' HP ' KM P'
HP ' O !U' N ' HP ' M!O' GN 99' M I !Q' !NP I !Q9P' T J ' LPN N !'
7' Q MKP' M!O' MKKPLNM!KP' !N ' HP ' 7M J 8 9PM !' HMN' I M OG'
HM P' APP!' HP ' K I LM! !G' M!O' L9MT LHPP G8Đ M!O' 9PN' NHP I '
PLM ' N ' HP ' NH' - M9M I !' !' NHP ' I JNHG ' M!O' MLLPM '
NH' N UP!G ' MG' 7' NHPT' GJQQPGNPO' 7 ' H I '8 N' G M' 7M9GPH O'
GHP' G' !' H KH' G' NH' 7M9GPH OG' N ' AP' K I AMNPO+' H G'
I MT' A !Q' HP ' N *' PMN ' N ' G9PPL ' M!O' POJKP' HMN' M P' ! '
JN' 7' G] JM P' !' HP ' !N ' NHP ' 7 I P ' 9M ' M!O' PQ I P!N ' 2'
HM P' GPP!' N' MLL PO ' H ' I M!T' N I PG' 2' U! ' ! N8 AJN'
N ' I MUP' NHP' !J I AP ' I P' 2' HM P' Q PMN' H LP' !' NH G+' 2'
99 ' APN PP!' NHP' LMGGMQPG' 7' NH G' L EPKN ' K I P' !' NH'
I T' MLL9 M!KP+' / PN' JG' LJN' N' !' PWPKJN !8 M!O' HMGNP!' NHP'
GJKKPGG ' XH KH ' O JAN' ! N ' 99' A !Q' 7 NH' K I 7 N+

= 4 &

! " ' # $

3 3' 2+

') 6 ' (' % "" ' "' # NNP! OM! NG+

-' ' 9PN' NHP I ' P! NP ' M!O' AP7 P' NHP' Q OG'
P! OP ' NHP ' H 9T' L MTP G' [/ PN' NHP' NP I L9PG'
J !' A QHN' NH' GMK PO' 7 PG ' M!O' NHP' M9NM G'
2!' HM99 %O' K9 JOG' K I I P!O' NHP ' G P99 !Q' !KP!GPD
' NH GP' MA P' JG' [/ PN' ! ' OJP' AP' M!N !Q[
' => !& - ' !.' ! -
HPT' HM P' M' ! A9P' U' !' HM!O ' 99' H ! J '
HP' P T' L P G' NHMN' 9 P' NHP I +

' , 2' F' ' "' ' ! QHNG+

' ' NHPT' P! NP +
-' 4 J' M9 M!N' M!O' GN !Q HPM NPO' P!P I PG+
4 J' TM9' QP I M!P' 7 PG ' NHMN' NH G' OMT' K I P'
' A9 ' NHMN' ! PM ! PGG' JN' NHMN' 79M I PG' APN PP!' TP+
/ MT' AT' T J ' M!QP ' 7 ' M!' H J ' M!O' O P 9 UP
P7 P' NHP' H 9T' M9NM G' 7' T J ' HP9LP G
@ HP' M99 7PM %O' Q OG ' A ' O !' T J ' GNJAA !' A O PG[
4 J ' P' G' I P' NHM!' I NM98 G ' T J ' HP9L' AP' [
!O' MG' NHP' Q OG' PQM O' TP ' 7 QHN' NH' EJGN KP[
2%99' 9PM P' T J' N ' T J ' L MTP G ' M!O' APN WN' TP'
2' LM N' I T' GHPG+
' " ! J ' K !' NHP' NH PGN[
= 4 & ') ' "' '
' HP' Q9MGG' G' J!! !Q' ! ' NHMN' KM!! N' 7 ! GH'
99' !P' 7' JG' PWL P ' NH !U' T J' AJN' NHJG8
HMN' P P' NHP P' MJQHN' !' I P' H KH' GN P' N ' GH '
!P' P!P I T' !' NH G' AJG !PGG' ' P P%N' !P' PTP'
#QM !GN' M! NHP ' M I ' LL PGG%O' AT' M I
2' J9O' OPGN T' NH% 77P! OP 8 K C ' 2' J9O+

' 7 J $ AB -1 % * ; (
' :%' ; *20(' ,' 92-@C%+(' -2%' , *+' ,' + : %' *2 < , - ' @*B %(' 9 '+' ; %2%' -00%O' 91'
% ; -20' (' (* %+ : , <' (' %7 0%, + 1' ; - , + , <' + : %' -00 + * ,' (' . ' 0 @ * ' (

H JQH' LM KP9' 7' I TGP978 NHP!' 7 I ' NH G' QMNHP '
" ' 2' GH J9O' NP! OP ' T J+
' 2' M I ' !' 9MA J
' LJGH' T J ' ! M I P ' T J ' M! K P! N' 9 P' J ' U ! O PO+
1JN' 7' I T' I P I T8 M!O' %NHP' GP97 GM I P' L9MKP'
' GPMN' G I PNH !Q' 2' J9O' K !7 J!O' ' G ' H GN' P'
HP' GM 9G' NHMN' I JGN' NHPGP' PGGP9G' L N' P %!' HP P'
HP' HPM P! 9T' / I NP ' L9PMGPG+
' 4 J' GLPMU' P99
P7 P' 2' NJ ! ' 9PN' I P' P I A MKP' NHPP ' K JG !+
H G' 2' GHM99' !P P ' O ' MQM !+
5 ' 1 !P' 7M P P99[
' X HT ' 9PN' N' AP' G ' 7M P P99 ' K C[
' OM P P99 ' G [
= 4 & ' ' "' -' ! QHNG+'
! QHNG ' U ! G I P! ' 9 P G ' TPM ' I T' GMK 7 KPG+
JP' GH LLP G' 7' M G ' H GP' GL N' !' T J' ;
3WLP9G' NHP' GPPOG' 7' 7PM ' M!O' NH% MLL PHP! G !+
X H KH' GN 99' G' 7J NHP ' 77' N ' Q ' NH' I P'
P7 P' NHP' Q O' 7' J ' L 7PGG !+' HP P'
&P]J P' 7' H I ' NHP' HPM NG' 7' 9 !G ' M!O'
HP' A PMNH' 7' N QP G ' TPM ' NHP' 7 P KP! PGG' N +
4PM ' NHP' GLPPO' M9G SN ' Q ' !' 2' I PM!+
39GP' GH' P' N ' AP' G! M 9G' ' T J' U! ' I T' L CP'
JGN' AP' O MQQ%O' JN' 7' A9 O' 8 7 KP' M!O' Q PMN' 7PMN'
JGN' LJN' I T' QM 9M!O' ! ' HP P' GHP' GN KUG'
HP']JPP!' 7' 79 P G8 J ' !NP KPGG !' NHP!'
JGN' AP' N ' H I ' NHMN' I MUPG' NHP' KM I L' M' KPGN !'
I I %O' NH' NHP' A9 O' 7' I P! 8 Q P' I P' T J ' M O+
! O' AP! O' T J ' GL NG' N M OG' H I S' = 5 '
H J' I QHNT' !P ' NHMN' NH' NHT' L P ' HMGN' NJ !%O'
: PP!' PLNJ! P' !N ' LJ L9P' 8 ^ H GP' MLL MKH'D
I PNG' L P M !' 8 H GP' HM K' !' MGN' 7 P9O'
! PM NHPO' GUJ99G' L K9M I 8 %H GP' A PMNH' A9 G' O !'
HP' NPP I !Q' P PG% 7 G !' 8 H ' O GN' L9JKU'
X NH' HM! O' M I L NP!N' 7 I ' 7 NH' A9JP' K9 JOG'
HP' I MG !%O' NJ PNG8 NHMN' A NH' I MU%GN' M! O' A PMU%GN'
HP' GN !T' Q NHG' 7' K N PG' 8 I P ' NHT' LJL 9+
4 J! QPGN' 7 99 P ' 7' NHT' O J I ' !GN JKN' NH G' OMT'
X NH' I 9 NM T' GU 99 ' NHMN' N ' NHT' 9MJO'
2' I MT' MO M! KP' I T' GN PM I P ' M!O' AT' NHPP'
P' GNT9%O' NHP' 9 O' %NHP' OMT[: P' I P ' Q PMN' M G
I P' N UP!' 7' NHT' L9PMGJ P[;
= ' 5' . ' ! ' ' . -' -' .! 5$ "' ' -'
"' 3 3' ! .' !& $ 2 ' ' - ! ' & " $
-' ' (& -' ! .' ' ($ 2 &, ! ' 5' ' - $
"' (! 2' !' '
1H ' Q PMN' K PKN ' 7' P! I JG' N I PG+
HMUP ' 7' %P M! U' GNMNPG ' NH J' Q M!O' OPK OP '
17' OJGNT' M!O' 9O' N N9PG ' NHMN' HPM9%GN' NH' A9 O'
HP' PM NH' HP!' N' G' G KU ' M!O' KJ %GN' NHP' 9O'
17' NHP' L9J GT' F 7' LP L9P8 2' O ' NMUP' $
HT' G Q! G' MJGL K JG9T ' M!O' !' NHT' ! M I P
' I T' OPG Q!' I M KH' A 9O9T+' / PN' JG' Q +' = 4 &

' ' "' -' ! QHNG ' 2 ' '.! '
! (- 1

' 1J ' GNM G' I JGN' Q9 GNP ' NH' ! P ' 7 P' ' AP'
OMT' PWN ! KN' J ' M QJ I P! N' G' 9 P' +
X H KH' 7' NHP' Q OOPGG' 7' N' Q M! N ' GHP' Q PG'
KN T' N ' ' NHP!' A9P! O' T J ' GL NG' NH' I ! P+
4 J' H GP' 7 PP' ! A9P! PGG' O ' I MUP' I T' KMJGP
4 J ' LP G ! M9' HMCM O+' ' NHP' Q OOPGG' P! JG
I I P! O' P' J ' L KPPO ! Q ' M!O' I L9 P
" P ' L P ' J! N ' LJ ' LM NT$ = ' 5 '
" M 9 ' G P P Q!'] JPP!' 7' GPK PNG' ' H ' HMGN' L P
' KM99' NHP' 7 P KPGN' NT M! N' 7 I ' H G' MQP+
' PPL' J! N ' M' Q 98 NHMN' HMGN' NHP' I QHN'
3 %!' NH' M!' PTP Q9M! KP' N ' KH UP' M G%G' O J I

7 ' (%O' 91' + : %' * O' B*%+(' *2'
Y*

#iO' NJ i'%NH M9M I'N ' H GLP G8 NHMN' KMiGN' IMUP$
#'K LL9P'79 J GH' NH' H G K JNKH'MiO'KJ P'H I'
P7 P' #L 99 '8 NHM' IMT%N'7 KP'NHP' U iQ'
'AP'H G'GJAEPKNG% MGGM9'MiO' iOJKP'
NM9P'Q M NT'N 'OMiKP8 NHP'L 99PO'AMKHP9 '
@XH GP'T JNH'9 UP' MiN i'A TG'NH JQH'A i7 PG+
"M P'GU LL%O'NHT'79MIP'MN'GP piNT'NH J'KMiGN'KMNKH+
#iO'IMUP'H I'N 'NHP'GK i' 7H G'H M GP'NH MN+
#AJGP'T JiQ'9MTG' 79 P+ XHM'Q O9 UP'L P'
"MGN'NHLJ'i N'L P'JL i'\ -H PAJG'NH J'
#OO%N'79MIPG'H NNP'NHMi'H G8 NHP'HPM piQT'7 PG
5 O'GK KH'H G I NM9'G i'NH iP'H I8 NHP'HJiN PGG+
#9'I GN'MiO'K 9O'G IP'GMT'APQMi'N 'NH '
"P'A 'M MT'MiO'G QH8 NMUP'N 'NHT'Q MKP'
#9P'NHT' %O'G 9O P[H 'O 'APM'NHT'T UP'
#G%N P P'M PMNF' 7 GPG'TPN'G HPM P'
#iO' P'ip'NHP'OG'NHT'QMIP'2'Q P'NHPP'NHMiUG
O 'NH G'7M 'N UPi'[H KH'AP iQ'9M O'JiN
iP'ii KPiN'N JP'HPM N'M IG'i'MGGJ MiKP' = 5 i2
T'A OT'N 'NH G'AJG ipGG+ /PN'JG GP
#iO'A 'AP7 P'NHP'Q OOPGG'[IP'K IPG' i+' = 4 &
=7 ' &- 'i.' i"-
' ' ' 2 $ ' ' (i&' '-i&" -$ '
2 '2 '# i ' '2 ' i " 3'&,' ' $ '
'-&"2 'i2 -'8 i '(.i ' ' 5 3' '-1 '
"$ O'2 ' -' i 15"' -' "' -2 'i"i&-$
2 '(3- '&,KO' ' $ 'E "-'- " 3' ii.$
- '-.-'.'' i' # ' 5 & -5 "',

6 ' 1H'GMK PO'GHMO T'K 9O'MiO'K iGNMiN']JPPi'
#AMiO ip' 7 p PGG'IJNP'K iNPIL9MN p+
ppN'G 9 NM T' H NP'MG'KHMGNP'MiO'LJ P'
#G iO 7MiI%O'Gi ' H 'N 'NHT'7PIM9P'Ui QHNG
*$%

3 3' 22+
. i i $:M 9P' "8ii '9 ' ('i.' 6 -i5/
i i ' "MG'NH G'MO KP'2'N 9O'T J'O ip'MiT'Q O'JL i'
HP'\
8ii '1H' p T' IJKH' 'NHP' IM OG'NHMN'UPLN'HP'K I_
LMiT
"M P'HM97'LP GJMOPO'HP'NHMN'2'MI'-M9MI i8
X NH i'NH G'HM97 H J'GHP'KMI*'G I 9 iQ'N 'IP+
#iO'MGU%O'IP' HMN'2%O'PMN'MiO' HPi'2'O U GG'HP
2'N 9O'HP'L PGPiN9T'MiO'U GG%O'HP'N KP+
i i '% MG' P99' O ip[N piNT'N IPG'HMO'APPi'7M'
APNNP 8
O 'NHP P'NHP'KJ P'9 PG'IM i9T+
8ii ' HPi'GHP'N 9O'IP
HP' J9O' MNK' NH'IP'N iQHN'7 ' P99'GHP'UiP '
XHMN'H J'I7'7N' J9O'NMU'P+
i i ' /PN'HP'O'G +
8ii ' HP' J9O'HM P'IP'G iQ+
i i ' 4 J'O O'G'\ +
8ii '
i i '% MG' P T' 99'O ip'NHPi'
4 J'GH J9O' AGP P'HP'P %T' MT+
8ii ' #9MG[
2'HM P'i ' KP'G 'N'K i7 I'HP'NHMN' MT+
i i ' HMN%G'M99' ip' 7T J'IMUP'M'i GP
- MT'A iQ'HP' i'MiO'9PN%G'GPP'H 'GHP' G+
i ' 2' 99'MiO'NP99'HP'HP'-M9MI i'GNMTG'7 'HP+
= 4
i i ' " ' 9O' G'GHP'\
8ii ' HP%G'P'QHNPPi+

HP'79 P' G'7M99%i'NHP'N PP'OPGKPiOG'[1H'I GN PGG+
H J'HP P'O GKHM QPGN' I P8 2'GHM99'AP'QMNHP %O
2'NH iU'G 8 AJN'2'UI 'i N'NH ip' i' 99
iK9MGL'NHT'I TGNP T[2'H LP'GHP%G'L9PMG%O #
"P'G QIG' P P'Q MK JG' ‡ = 5 & -5$ " 4

! ! ' HP' I MT' AP8
JN' NHMN%G' M99' !P' %N G' ! NH !Q' N ' J 'LJ L GP+

' : M 9P ' 5MJQHNP ' "' M O+

! ' IP'8 T J '9 P' -M9M I !' GNMTG' 7 ' T J ' KH 9O'8
#!O' HMG' O !P' NH G' 9 !Q' H J ' N ' G N' T J+
3 ' 2' NHM!U' H I '7 ' H G' QP!N9P' LMN P!KP'8
"P%G' M' U !O' QP!N9P I M!' M!O' 2%I' I JKH' A J!O' N ' H I+
5 O' T J' !P%P ' GPP' NHP' H GP' HP' QM P' IP' \
! ' 4PG+
&3 ' " ' O ' T J' 9 UP' H I ' \
! ' "P%G' M' P T' 7M ' !P+
3 ' 4 J' !P P ' GM ' H I ' OM!KP' \
! ' +
&3 ' 2' HM P' 7NP!'
"P' OM!KPG' P T' 7 !P9T' P T' K I P9T8
#!O' 7 ' M' E Q ' K IP' KJN' M!O' 9 !Q' NM 9' N ' H I ' [
"P' NJ !G' T J' 9 UP' M' N L+
! ' HMN%G' 7 !P' !OPPO+
&3 ' "P%9' OM!KP' NHP' I G' N P!NT' I 9P' M!' H J +
#!O' NHMN' 99' 7 J!OP ' NHP' APGN' H AAT H GP'
@27'2' HM P' M!T' GU 99 ' !' M99' NHP' LM GH'
#!O' QM99 LG' N ' NHP' NJ!P' 7'6' / QHN' %9 P' 'R
X HMN' NH !U' T J' 7'NH G' H GP' \
! ' " M !Q' NHPGP' NJPG
2' NH !U' HP' I QHN' AP' A JQHN' N ' L9MT' MN' NP!! G+
&3 ' #9MG ' NHMN%G' ! NH !Q' [
! ' M!' HP' NP' M!O' PMO' N ' \
&3 ' #' P T' 7M ' HM!O8 M!O' KMGNG' H I GP97'NH%MKK J!NG'
17'M99' H G' HMT' M!O' L P!OP ' NHMN' GN9P '
JGN' GP' APN I P' NHMN' K CP!G' H I +' 4 J' U! '
HP' KHPGN!JN' I M P' NHP' OJUP' HMG' 7
! ' P T' P99+
&3 ' HP%G' H A9T' !'9 P' NH' H I ' L ' APMGN8
JN' HP' G' 9 UP' H G' I MGNP ' K T' M!O' GK !7J9+
! ' X HMN' O T' HMG' GHP' \
&3 ' I P' N ' HJ!O PO' A NN9PG
#!O' N P!NT' GN UP' 7' MNG ' AJN' HP%9' !P%P ' HM P' HP 8
"P' 9 GLG' !%G' !P QH !Q ' MA9P' N ' P!N KP'
#' I 99P %G' I M P'8 HP%9' AP' NHP' OPMNH' 7'HP +' +
! ! ' X HMN' GNJ77'GHP' JNNP G' [
! ' MUP' KJ NGT'8 HP P' T J ' 9 P' K I PG' [
8!! ' - PNNT' G J9+
" ' O ' T J' \ HMN%G' M' 7 !P' I M O' [NHP P%G' M' KJ NGT' [
&3 ' 4 J G' N ' K I I M!O' %NHP' MT' 7'H !PGNT+
" ' 7M ' G%N' ! ' N ' NHP' P!O' %NHP' 9O' I T' I MGNP G' \
! ! ' X HT ' M' OMT%G' E J !PT ' P!KH+
&3 ' X 99' T J' Q1' NH' I P' \
8!! ' X HMN' GHM99' P' O ' NHP P ' P!KH' \
&3 ' X HT ' L9MT' MN' GN 9 AM99+
X HMN' G' NHP P' P9GP' N ' O ' \
8!! ' 2' M I ' K !NP!N+
27' P' GHM99' UPPL' J ' POO !Q 'NHP P+
&3 ' % GN JP
O ' NHP P' 2' c 99' MGGJ P' T J' P' GHM99' 7 !O'
I P' A9 !O' L PGN' 7 ' NHP' LJ L GP ' NHMN' 99' P!NJ P'
' I M T' JG ' 7 ' HP P' NHPT% P' ! KP' M!O' 7 9 GH' 8
PG OPG ' I T' 7MNHP ' I JGN' AP' HM!Q%O' N I ' '
#!O' NHMN' J9O' AP' M' A9 N' %NHP' AJG !PGG+
P' ! N' T J' -M9M I !
8!! ' 5 ' T J' ! N' U! ' I P' \
&3 ' 4PG'# AJN' T J' KM P' ! N' 7 ' I P' ' 2' HM P' ! NH !Q'
JN' NH G' L ' LPNN K MN ' M!O' N ' K M GP' G I KUG+
8!! ' HMN%G' M99' !P8 2' 99' HM P' T J+
&3 ' X 99' T J' GJ P9T' \
8!! ' X HT' O ' T J' JA' I T' U GG' 77'\
3 $ % G' M' G PPN' !P+
#!O' 99' LP 7J I P' I P' 7 !P9T' %QM !GN' NHP' POO !Q+
2G' ! N' NH G' T J ' K JG !' # K NP' \
! ! ' 4PG ' G PPNHPM N8

#!O' 2' M I ' Q9MO' I T' K JG !' -M9M I !'
"MG' I MOP' G ' 7M ' M' KH KP+
&3 ' 5 ' T J' NH !U' HP%9' HM P' I P' \
! ! ' 4PG ' NH JN' O JAN+
&3 ' 5 ' T J' NH !U' G ' N ' \
! ' 4PG+
&3 ' X P' GHM99' HM P' I M!T' KH 9O P!+S / O ' H ' T J% P'
Q !' [$
T' -M9M I !' 2' H LP' 99' Q ' N ' 7 !P9T
' HP%G' MN' 9 AP NT'8 M9MG ' L ' KH KUP!+
"P' MG' UPLN' O !' NH' HM O' I PMN ' M!O' 99' 9 OQ !Q+
JN' 2' 99' U GG' H I ' JL' MQM !+

' ' PGGP!QP +

E --' X HMN' O ' T J' HP P'
4 J%9' 9 GP' NHP' ! A9PGN' G QHN' NHMN' P%P ' MG' GPP!+
' # P' NHPT' /% NHP' 7 P9O'
--' HPT' M P
4 J' APM ' M' KHM QP' NHP P' N +
! ' 2%9' M MT' GN M QHN
2' I JGN' P %!' 9PM P' T J' HP P+
! ! ' MT ' P%9' Q ' NH' T J'
2' 99' ! N' 9 GP' NHP' 7 QHN+
! ' " ' O O' T J' 9 UP' HP '
! ! ' 2%9' M M!N' T J' NH !' NHPGP' NH PP' ' 7 J ' OMTG'
2%9' I MUP' HP ' QHN' MQM !+' 4 J' I JGN' ! N' 7 I ' HP +
JN' GN 99' L PGP P' HP ' !' NH G' MT+
8!! ' 2' 99+
! ! ' / PN%G' QPN' HP ' !+
8!! ' I P' G PPN' ' P%9' Q ' N ' O ! !P 8
#!O' NHP!' P%9' L9MT' MN' KM OG+D' 9: 4 &

3 3' "2+

' ' 00 1 ' ($ ' , ' "'
#NNP!OM!NG+

' 2%9' ! ' GNPL' 7J NHP +
' X 99' T J' 9 GP' NH G' G QHN' \
' 2' HMO' MNHP ' GPP' M' P!' HM U' MN' M' 79T+
HM!' NH G' OPK G !' P P T' A9 ' NHMN' 7M99G'
H PMNG' M' A M P' 9 7P'8 PMKH' GN UP' 9M I P!NG'
HP' L9MKP' HP P !' N' 7M99G ' M!O' G J!OG' I P' 9 UP'
#' AP99 ' NHM!' A9MOP8 2' 99' GNMT' HP P' 8
2N' G' P! JQH' I T' HPM !Q' GHM99' AP' LJ! GH%O'
X NH' HMN' GHM99' HMLLP!' @%QM !GN' NHP' H KH' NHP P' G'
' OPM7 !Q ' AJN' N ' HPM ' ! N' NM !N' I !P' PTP'
X NH' O PMO' G QHNG' N' I MT' GHJ!+
' ' I T' Q O' 9 O+
4 J ' G GNP ' 99' ! ' 7J NHP +
-' 1H ' GHP' I JGN
HP' GHM99' GPP' OPPOG' 7'H ! J ' !' NHP ' U !O+
X H KH' G I PN I P' GH ' P99 LP!K 99%O'8 MNJ P' !
HM99' I MUP' M!O' MKN' NHP' GN T ' NHP' AP9 P7
NH' GPM9%O' NH' PTP' M!O' PM +' 4 J' I JGN' AP' L PGP !N8
4 J' M P' NHP' KN %G' I PPO ' NHP' L KP' M!O' QM 9M!O'
' K !' NHP']JPGN !%G' N N9P+
' -M O !' I P#
27'2' P P' NHP P ' 2%O' !U+
-' 4 J' I JGN' AP' NHP P' 8
H G' N M9' G' MG' %N P P' %NHP' ! QHN ' M!O' T J'
HP' !9T' GNM ' N ' GH !P+
' + 2' M I ' PWN !KN8
HP P' G' AJN' P! T' !' NHMN' 9 QHN ' H KH' GH G'
HP' !P' NHP' NHP +' 5M U!PGG ' H KH' P P ' MG'
HP' OM I ' 7' " ' H ' O PG' GNM!O' MKKJ G%O'
17'I M!T' I NM9' I 99 !G ' I MT' P %!' ! +
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HMN' ip NHP 'K J9O'7 iO' NHP 'QPN' HP GP97'
lP'LM N' 7M'Q O'IMlP'MiO' lMlT'M' l J OP'
PN' 77 HP PN 'GHP%G QJ 9NT+
' 4 J' l JGN'Q +
' 2i'7M NH'2' 99' i N+
. -'
XHT'NHP'Ui QHNG' l JGN'U i O9p
HP ' M9 J'MN'T J'pTP'Ui ' 7NH G' M'D
4 J'M P'NHP'N PMGJ p'MiO' l JGN'ippOG'AP'AT
'Q P'NHP'GP KP'LMT+
' 'LM O i'l P8
HP'N N9P' 7M'U i QO l' l MT'AP'N PO'
1JN' 7' NGP97+
-' XP99' P99'NHPi'MN'T J'L9PMGJ p[
H GP'NHMN' plM i' NH'T J'K J9O' GH'NHP ' 77KP'
'MiT' 7'NHP 'pipl pG+
' OM P P99'G GNP [
2%I'9 UP'N 'Ui 'T J'HJGAMiO'%7 P'T J GP97+
T'G lP'GlM99'GNM N' 7'N lP' HP' H l'NHP'Q OG'
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9 4 &' ' oo 1 ' , ' ' '

1H M99T J HPM %!9T L P G HP P G T J I P KT \
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#!O KHM QP I P 9 P N K I 7 N NHJG J!7 P!OPO+
H G I GP MA9P L !KP NHMN KJNG M MT
9 7P I P NHT 7 I H I NHM! M99 I P!
2 GH J9O M!O J9O O P N +
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" -' ! QHNG, ! " : M 9P
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HP P%G I M!T M I M!' M9 P NHMN HMNH JN9 %O
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NM!OG I M!T M 7MNHP NH H G KH 9O G I P K I 7 N
X P HM P AT G K !G OP !Q8 P PWL P+
#!O ! N NH JN I P!%G L NT8 N 9 P GN 99+
"M P NHP Q O GHPG8 P L P P!N
HP 9 MNHG I P I GP T 7MQP APQJ 9P
HP Q JN M!O HPJ I NHMN !' 9MQ H J G MNNP!O
0 Q PT MLL MKHP G 8 P K I P N % OG NHP Q OG
4 J!Q M!O J! MLLP!%OD ! N HM9N !Q J!OP K I PG
M!T M!O GNM9P 8 NHMN GJ P GHM99 L9PMGP NHP Q OG
!P NHM!GJKH N Q P JG! PKNM NH NHP I +
0 P M P I P K9PM GL NG+ T OPM U !G I P!+
XH GP 9 PG @7 NH G L K I 7 N M P 9M O O !+
4 J% P G 9O NHP I N N KHPML+
3 X HMN P!O !Q K J9O AP
17 I P K !NP!N \ 1%P JG NHP KN G HM P
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#G N JG OPMNH G KP NM !8 M Q M !' 7H ! J
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4 J QP!N9P OMJQHNP QM P I P 7 PPO I !KP8
4 J%9G GPP%N O !P! 7 P P + - MT H O PG GHP \
2 HPM O GHP c MG ! N P998 HP U !O 7 99
:M P I P G I P G +
! d GHP%G P99 PGN %O+
#!O N AP I M PO GH N9T+
T I T GH N 9 7P
2 M I I GN Q9MO !%N9 %N G NHP 9MNPGN NH !Q
2 GHM99 AP Q9MO 78 L NHPP NP99 HP G 8
I I P!O I P N HP M!O N L PKP HP L N !
P!OP HP NH G+
3 MT 9P N%G AP 77P P G M99[
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3 - I I P!O JG N HP + = 1 ',& - -
! HP Q OG P]J NP T J M99+
#!O I MUP HP NHM!U7J9
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#G I T 9PM P NMU !Q+ =? -'! ' (! '
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BB(+% +*' +: -+ ,' *, A
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" 9O H M ' N G M KJ GPO HMGNP T J I MOP+
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HP Q OG 99 GH NHP Q9 T !' M 9 7P
HMN NH J M N TPN N 9PMO+
M!' NHMN AP+
X HP!' P!JG 2% P GM O G 7M9GP \ " O NH !QG 7M P \
GP Q PMN G M!O Q P NHP N O !QG PM
+ HMN M P I GN OPM 9T G PPN M!O A NNP [
X HMN
" MNH MU%O JG 7 I J O PM I \
/ GN NHP!' 4 J K JG !+
J!NPO JL !' M GNPPO NHMN 3 I 9T
5 O 7 GN APGN !' H I M A9MKU !P !Q
N M HM NH 7 H NP H KH G I P 99 GMT
X PMUP!G H G L KP M!O I M!T 99 ! N AJT
" G Q O!PGG NH NH G ! NP 8 H KH GJLP GN N !'
" P P 7 !OG M99 M!KP !' NH G H GP G # K NP
NN !Q NHP GN !PG 7 #NHP!G H KH NHP KM9U !GD
5 O MNHP NP99 NHM!' N M I L9P8 7 NHP H GP
X J9O I MUP H G 9P!QNH M I 9P 7%N L9PMGPO H G OP
LJN L OP !'H I ' MG HP NHJG P!N K J!N !Q
HP 79 !NT LM P I P!N OM!K !Q MG %N P P N NHP I JG K
" G !' H 7G I MOP @7 MG NHPT GMT 7 I !'
M I P I JG K%G Q ! HMN P! JG 79 !N+
9O MG 9O MNJ ! M!O 9 UP H I L GGPGG%O
X NH 7 P I M9P 9P!N OM NPO M GLM U
1 HMN 7 P7PP GJ9LHJ P9GP N NH G P!O I MOP
2 K I I P!N ! N8 NHP H N H GP H N MG 7 P+
U N T MN NH G M!O 7P99 N HMN O G OP
" G L P K J9O Q P H G 99 A J!OG K I PG !'P!O+
0 QPNG GKH 9 O !Q AP !Q NHP P !N M !%O+
#!O 7U !O I M!MQP8 L Q 9 UP HP H !PG
#N NHP GHM L P9 H KH HP 7 PNG MN MNHP
HM!' M!T E N APTG8 GPPUG M99 7 J9 I PM!G
17A GNP JG M!O JQH EMOP T N O G GPMN
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L9J!QPG
5 G N H G OP HP!KP HP Q P AJN NHMN
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1!' P!O HP GNM!OG+
HMN # K NP%G 9PQG AP !Q 3 - "$
PP I %O NH - 3 !' 3* - KN %G PMNH
3 P!' NHP!' 7P99 77H G HPMO# M!O L PGP!N9T
MKU M O NHP EMOP K I PG !G $ "' -'7J99 L GP
PK I PG NHP OP %G 9 MO+ 4PN -' 9 !Q8
JN GJKH M PGGP9 %N G NHMN 79 MNG AJN 7
HP GJ QP NHMN !PWN MLL MKHPG + HP I JKH OPG PG
HM P G I P GLPPKH NH T J+ / HP ML LPM G[

3!NP) (% "" ' ! !' '

1H I GP MA9P P!O 7 J M99 M!KP [
HP Q OG M P I QHNT[# K NP 7 NHT HPM N+
HT NHT I M!9T HPM N AP TPN J!A UP!
: P I P NHT 9MGN OG 2 M I - M9M I !
1!P NHMN TPN 9 PG NHPP OT !Q+
MUP 3 I 9 M
#!O NH HP M99 NHP 9O%G E T+ &PMKH NHT HM!O 8
OM P P99[2% P N 9O I T 9MGN H J + 2 MG 7M9GP+
4PN !P P N PMKHP JG 7 Q P I P K JG ![
1!P U GG 7 I 7M 3 I 9 M[% G O !P
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' BA+:% : ,O%Z B-2+(* ' -' :*2(%8((:*% ' ; : @:' -2% +'2 ,%O 'B

BKKADCGN' LE' CFG' ?@G' GP□NGHOG' ' ?HN' >AD' ?' ?C□ >?OCADE' AMBC□AH' A>' LACF' QBG C□AH ' J G' @B C' DGME' BKAH' CFG' 'GP□NGHOG

. G>ADG' CFG' >□D C' LB□MNGD BK' A>' CF?C' JAHNDAB ' GN□>□OG ' CFG' ! H M□ F' ND?@? ' M?E' CFG' JFAMG' JADMN' A>' OM? □O?M' ?HN' DA@?HC□O' >?LMG ' =' JFGDG' CA' OFAA G I' HG' A>' CFG' G?DM□G C ' ?HN' OAH GQBGHCME' MG? C' (□M>BM ' A>' CFA G' JAD(@GH ' "□OF?DN' ! N J ?DN ' JGHC' CA' CFG' ?HO□GHC' CADG ' >AD' F□ ' =' %?@AH' ?HN' ECF□? I' ?HN' CA' F?BOGD' >AD' F□ ' =' ?M?@AH' ?HN' DOECG I' G' MG?DH' >DA@' AAN8 ' & ' CF?C' JFGH' ! M□T?LGCF' P□ □CGN' >ADN ' □H' 544 ' = ?C' H□ FC' CFG' BGGH' FG?DN' CFG' >□D C' K?DC' A>' ?H' ! H M□ F' KM?E ' H?@GN' ‹' ?M G@AH ' AD' ?M?@AH' DOECG 8' @?NG' LE' & D ' "□OF?DN' ! N J ?DN ' ?' GHCMG@?H' A>' FGD' OF?KGM ' ?OCGN' J□CF' PGDE' DG?C' ?KKM?B G' □H' FD□ C' FBDOF' ?MM I' H' ?OO□NGHC' F?KKGHGN' ?C' CFG' LG □HH□H ' A>' CFG' KM?E' LE' CFG' >?MM□H ' A>' ?' C? G ' CFDAB F' JF□OF' CFDGG' KGD AH ' JGDG' (□MGNR ?' OFAM?D' A>' C ' & ?DE8 ' ?MM ' ?HN' CJA' JFA' JGDG' KDAL?LME' @ADG' @□ GNR ?' OAMMG G' LDGJGD' ?HN' ?' OAA(' #FG' @□DCF ' FAJGPGD ' JGHC' AH ' ?HN' = ?>CGDJ?DN ' CFG' ?OCAD ' KGD>AD@GN' CFG□D' K?DC ' A' JGMM ' CF?C' CFG' BGGH' M?B FGN' FG?DC□ME' CFGDG?C ' ?HN' ?PG' CFG' ?BCFAD' A>' CFG' KM?E' DG?C' CF?H(' >AD' F□ ' K?□H I' U' C' □ ' OMG?D' CF?C' CFG' >?LMG' A>' F?BOGD' @B C' F?PG' LGGH' CDG?CGN' □H' ?' N□>>GDGHC' @?HHGD' LE' ! N J ?DN ' CF?H' JG' >□HN' □C' CDG?CGN' □H' #FG' #JA' ALMG' □H @GH ' G' F?PG' ?HACFGD' DGOADN' A>' ?' KM?E' AH' ?' □@□M?D' BLSGOC ' H' GH MAJG8 ' = %□?DEI' JG' F?PG' ?H' GHCDE ' BHNGD' CFG' N?CG ' A>' GKCG@LGD ' 51 / ' A>' = ?M?@AH' ?HN' D GCCI' LG□H ' ?OCGN' >ABD' C□@G ' C' □ ' □@KA □LMG' CA' □@? □HG' CF?C' #FG' #JA' ALMG' □H @GH' □ ' CFG' ?@G' KM?E ' GDG ' CFGH ' J ? ' ?' BLSGOC' ?N?KCGN' CA' ?' JD□CGD' JFA' JAD(GN' □H' CFG' K□D□C' □H' JF□OF' F?(KGDG' ?M@A C' BH□>AD@ME' JAD(GN ' C' J ? ' >?@□M□?D' CA' CFG' KGAKMG' □H' CFG□D' KAKBM?D' KAGCDE ' □C' J ? ' >?@□M□?D' CA' CFG' C? G ' #A' ?DD□PG' ?C' ?' D□ FC' SBN @GHC' DG ?DN□C□ 'CFG' ?BCFAD F□K' A>' #FG' #JA' ALMG' □H @GH ' JG' @B C' G ?@□HG' CFG' KM?E' M□HG' LE' M□HG' □H' □C ' DGM?C□AH' CA' ='#FG' H□ FC8 ' #?MG' I' A>' F?BOGD ' #FG' G ?@□H?C□AH' O?HHAC' LG' □MM' LG CAJGN' □>' □C' LD□H ' ?HE' A>' ABD' DG?NGD ' □HCA' @ADG' N□DGOC' ?OQB?□HC?HOG' J□CF' CFG' DG?C' @? CGD' A>' ! H M□ F' PGD G ' JFA G' KAG@' >' =' ?M?@AH' ?HN' DO□CG I' ?MCFAB F' □C' ? ' ?O(HAJMGN GN' LE' □C ' ?BCFAD' CA' LG' = (HAJGH M□CGI' □H' F□ ' AJH' N?E ' JFGH' ?LD□N GN □HCA' F□ ' = H□ FC8 ' #?MGI' >BDH□ FGN' CA' %DENGH' □H' F□ ' CD?H M?C□AH' VFG' F□@ GM>' O?MM ' F□ ' KAG@' ?' CD?H M?C□AH ' ?' BLSGOC' >AD' = CFG' @A C' ?H□@?CGN' ?HN' @A C' F?D@AH□AB ' K□GOG' A>' PGD □>□O?C□AH' □H' CFG' ! H M□ F' M ? H B ? G ? H N ' □H' ?' DGP□PGN' C? CG' >AD' ABD' AMN' KAGCDE ' J □MM' □C GM>' ?MJ ?E ' LG' ?N@□DGN' >AD' □C ' >ADOG ' □C ' □@KM□O□CE ' □C ' @?SG CE ' ?HN' □C ' SB C' KDAKADC□AH

='#FG' H□ FC8 ' #?MG' I' A>' F?BOGD' AKGH ' J□CF' CFG' DGCBDH' CA' CFGH ' A>' CFG' = ' NB(G' CF?C' F□ FCN' #FG GB I' ?>CGD' FG' F?N

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:%' ; 2-+:' * '@2' %' 2%*, O

H' F?BOGD' CFG' BKKM□?HC ' ?DG' ?' @ADG' HB@GDAB ' OA@K?HE' ' #FG GB ' J ? ' ?KKDA?OF□H ' CFGH R

X' %' ; -(' 8; -2%' -(' :%' @-(+' : (' %1%' -(O%
) :%2%' +: -+' +:%2%' C, %% %O' ,' +:%' : <:%' ; -1'
'@* B-,1' * ' -O %(' + ; -1' -,O' + ; -1
-@:' - +%2' *+:%2' @ -O' ,' @ *+:%(' 9 -@CJ
" ' +' (' @:' -' @21' -,O' (' @:' -' ; *%' +:%1' -C%
: -+' ,' +: (' ; *2 O' ,8 (' @2%-+' 2% 7 ,<'
: -+' %7%2' :%-2O' (' @:' -,*+:%2' ; - %,+ ,< O

. D□G>ME' CFGE' CGMM' CFG□D' C?MG' A>' JAG ' ?HN' ? ' D?K□NME' NAG ' CFG' OF□P?MDAB ' NB(G' DG AMPG' CA' ?PGH G' CFG□D' JDAH R

X' ,O' 2 <:+' -,*,' ; +:*' +%,' *2%' -9*O%
(' 9-,,%2' :%' O (B -18O' -,O' *2+:' :%' 2*O%
' :%9%(' ; -2O' -,O' - ' : (' :(+' 9%(O% O

=' @:* (8(' 2*<2%((%(' * ' ['%%,' E-9%+:' 7* ' ' BB' / >' /+

#FG' QBGGH' ?HN' FGD' □ CGD' DG@?□HGN' ?C' CFGH ' BC' A>' CF□ ' D?K□N' H?DD?C□AH ' J F□OF' AOOBK□G ' M□CCMG' @ADG' CF?H' ?' FBHNDGN' M□HG ' □H' F?BOGD ' F? ' CFG' >□D C' OGHG' A>' #FG' #JA' ALMG' □H @GH' LGGH' OAH CDBOCGN '

BDGNME' CFG' DG?NGD' JFA' AKGH ' CF?C' OGHG' >AD' CFG' >□D C' C□@G' J □MM' >GGM' CF?C' FG' F? ' M□ FCGN' BKAH' ?' JAD(' A>' HA' ADN□H?DE' KAJGD ' #FG' @GDG' □HCGDDBKC□AH' A>' CFG' LD□N?M' KDAOG □AH' LE' CFG' J □NAJGN' QBGGH R CFG' OAHCD? C' A>' CFG□D' LM?O(' ?D@GHC ' ?HN' CFG□D' C?□HGN' PG□M ' J □CF' CFG' JF□CG' DALG ' ?HN' JFG?CGH' OF?KMGC ' ?HN' FE@GHG?M' AH ' J □CF' JF□OF' CFG' KM?E' AKGH R □ ' ?' HALMG' ND?@?C□O' OAHOGKC□AH' ' LBC' CFG' KAGC ' JFA-GPGD' FG' LG ' KA G G ' CF?C' OA@@?HN' A>' ?KKDAKD□?CG' M?H B? G' JF□OF' DG?M□ G ' ?MM' CF?C' CFG' □@? □H?C□AH' O?H' K?□HC' A>' ?' ND?@?C□O' □CB?C□AH' ?HN' @APG@GHC ' CFGDG' □ 'HACF□H ' F?NAJE' AD' □HN□ C□HOC ' HA' P? BG' G KM?H?-C□AH ' HA' CD□P□?M' GK□CFGC ' FGH' CFG' □D C' BGGH' ?E R

X' :' B+1' O' C%?
!&'.& 3 '!.' ' $'O2-;' +:1' %-28O' (;*2O
:-+' O*%(' <**O' +'2,(' +*' +:%' ; *2 OJ < 7% '(' +:%9*,%(
'*'2O%-O' C,<(' +:-+' ;% -1' , ' +:% OA

JG' (HAJ' CF?C' CFG' CFAB FC ' JF□OF' LGMAH ' CA' FGD' OAHN□C□AH' ?DG' G@LAN□GN' □H' JADN ' A>' HA' OA@@AH' □ H□>□O?HOE' FGH' CFG' GOAHN' BGGH ' ?NNDG □H ' □KKAMEC?' ='CFG' AMN□GDG I' ?E R

R' 7, '' ' ' '2! -' ' 5$' C%(' (' @:' -' ;* -,'
(' -,1' * ' ' (' +:2%%J ;%%B' %2%1*'' - 'J
%,O' ' (' -' C,%%J
" ' ' +' +*' @:' +:%' <2*' ,O' *2' ' (' ,*' *,<%2' + %
' ' '!1 -' ! ! $2 ' ' " -', & ' "' ! .8 2

JG' >GGM' CF?C' CFG' KAGC' HAC' AHME' J □GMN ' F□ ' F?D@AH□AB ' M?H B? G' J □CF' CFG' NGO□ □AH' A>' ?' KD?OC□ GN' ?DC□ C' LBC' G F□L□C ' CFG' H□OGD' CABOFG ' JF□OF' ?CCG C' F□ ' (HAJMGN G' 'H?CBD?M' >GGM□H ' ?HN' G@KMAE ' □@? G ' JF□OF ' FAJGPGD' CD?H G' ?HN' BH>?@□M□?D ' ?DG' A' CDBG' CF?C' JG' JAHNGD' CFGE' HGPGD' AOOBDDGN' CA' B ' LG>ADG ' LBC ' ?C' CFG' ?@G' C□@G ' A' AD□ □H?M' CF?C' CFGE' ?KKG?D' CA' NG>E' OAKE□H ' AD' □@□C?C□AH ' #FG' JFAMG' OGHG' □ ' >BMM' A>' CFG' ?@G' DG@?D(?LMG' JADN K?□HC□H ' #FGDG' □ ' ?HACFGD' QB?M□CE' JF□OF' □C' G F□L□C ' JF□OF' □ ' ?M A' KGOBM□?D' CA' CFG' F□ FG C' ADNGD' A>' @□HN ' R CFG' ?L□M□CE' CA' GC' B ' CF□H(□H R CA' G O□CG' CF?C' $B C' ?HN' ?KKDAKD□?CG' DG>MGOC□AH' J F□OF' @□ FC' ?D□ G' A>' □C GM>' ABC' A>' CFG' G F□L□C□AH' A>' NGGK' K? □AH ' ?HN' K?□H>BM' CDB MG ' ?HN' DG AMBCG' GM> NGH□?M ' LBC' JF□OF' CFG' CDBG' KAGC' LDG?CFG ' □HCA' B ' J □CFABC' ?H' G>>ADC ' A' ? ' CA' □PG' CFG' (GE' CA' ABD' CFAB FC ' LBC' BCCGDME' ?PA□N□H ' CFA G' GHCGHC□AB ' @AD?M□ □H ' JF□OF' ?DG' A@GC□@G ' NGG@GN' CA' LG' CFG' KDAP□HOG' A>' CD? GNE' FGH' CFG' BGGH ' OA@@GHN' CFG' BDDGHNGD' JF□OF' #FG GB ' @?(G ' A>' F□ ' ?>>GOC□AH ' CA' ?' GH G' A>' NBCE ' CFG' KAGC' □PG ' B ' CFG' KF□MA AKFE' A>' BOF' FGDA□ @' □H' ?' NATGH' JADN ' KA(GH' LE' #FG GB R

S' -' 2 ' '
:'(' (:*' O' ; %' O*J (3'- -& 5'-&("& "
8 ' !-'!& ' & ' Z

#FG' >□D C' ?KKG?D?HOG ' □H' F?BOGD ' A>' ?M?@AH' ?HN' DO□CG' □ ' JFGH' CFGE' M□G' JABHNGN' AH' CFG' L?CCMG >□GMN' A>' #FGLG ' H' #FG' #JA' ALMG' □H @GH' CFG' HGOG ?DE' OAHNBOC' A>' CFG' CADE ' ? ' ?' ND?@?' DGQB□DG ' CF?C' CFG' KD□HO□K?M' KGD AH? G ' FABMN' LG' G F□L□CGN' CA' B ' LG>ADG' CFGE' LGOA@G' ?L ADLGN' □H' CFG' @?□H' ?OC□AH ' C' □ ' AH' BOF' AOO? □AH ' ? ' CFG G' CF?C' ?' ND?@?C□ C' A>' CFG' F□ FG C' ADNGD' @?(G ' F□ ' OF?D?OCGD ' DGPG?M' CFG@ GMPG ' H?CBD?MME ' ?HN' J □CFABC' ?H' G>>ADC ' ?HN' EGC' A' N□ -C□HOCME' CF?C' CFG□D' □HN□P□NB?M' □NGHC□CE' □ ' □@KDG GN' BKAH' CFG' @□HN ' A' ? ' CA' OA@L□HG' J □CF' CFG' BL GQBGHC' @APG@GHC' A>' CFG' KMAC ' #FG' GOAHN' OGHG' A>' #FG' #JA' ALMG' □H @GH' ?KKG?D ' CA' B ' A@GJF?C' NG>□O□GHC' □H' CF□ ' KAJGD ' C' □ ' JD□CCGH' J □CF' DG?C' GHGD E ' LBC' CFG' CJA' >D□GHN ' ?DG' GHGD GC□O' ?M□(G ' JG' NA' HAC' KDGO□ GME' GG' JF□OF' □ ' CFG' @ADG' G O□C?LMG ' CFG' @ADG' N?D□H ' CFG' @ADG' DG AMPGN ' CFG' @ADG' GHGDAB ' G' OABMN' OF?H G' CFG' H?@G ' A>' CFG' KG?(GD ' J □CFABC' ?HE' @?CGD□?M' □HSBDE' CA' CFG' KDAKD□GCE' A>' JF?C' CFGE' KG?(' '#?(G ' ? ' ?H' AKKA □CG' G ?@KMG ' GD@□?' ?HN' GMGH? ' □H' ' & □N B@@GD' □ FC8 ' %DG?@ ' JFGDG' CFG' N□>>GDGHOG ' A>' OF?D?OCGD' O?DOGME' DGQB□DGN' CA' LG' A' H□OGME' NG>□HGN ' HN' EGC' □H' " - , ! ' CFG' ?BCFAD' A>' #FG' #JA' ALMG' □H @GH' @?(G ' ?M?@AH' ?HN' DO□CG' G GHC□?ME' N□>>GDGHC R

X' 2@ +%' (' <%,+ 1' 7 (-<8O' ' 1%+' : (' %1%
(' C% -,' %,< ,%' 9%,+' *2' -' (:-2B' ;%-B*,

+') ,-2+'*,'

2i'M G 7N GHPMNH' 8 IP KT'MiO' I M19T'K J MQP'
P'AP07P99 G'H G GMQP+ -M9MI i'
"MG M I GN IPIMK iQ'MGLPKN8 H G A '
2G'Q M %O'MiO'GPPIGN 'AJ T HMN' N'7 iG i 8
4PN'G I PN IPG'%N G i N'G 'AJN'M9NP G'N '
HP']JM9 NT' 7H G'NH JQHNG8 9 iQ'N I P H G'PTP'
,X 9O P99 JL i'H G AEPKN8 IP9MiKH 9T'
PK IPG'H I'i A9T8 G'O PG'# K NP%G I NH8
JN' -M9M I i%G GMOIPGG G'M U iO 7'I NH
'I iQ9PO'MG 7'I NH'O O' I MUP'H I'GMO+
#iO'GMOIpGG'Ip T8 NH GP'OM UP'HJI J G'N9 MN'
N KU' M GAPK I iQ9T i' NHP G' i'H I'
/ 7P i'7M 'O P99 iQ+R'$

#F' ' HALMG JDCH '$?HN' C ' QB CG B>>OGHC CA' GH?LMG' CFG C? G
DGKDG GHC?CAH A>' CFG CJ 'OF?D?OCGD ' CA' LG' J GMN' NG>HGN' @C' C'
?HN' A@C CFG DGOAMMGOCAH 'A>' C'H CFG DG?NH ?HN' JG' NABLC' DG?CME
JFGCFGD' CFG OF?D?OCGD ' CFG@ GMPG 'DG?M G CF' NG ODKCAH' 'CFGE ?DG'
HAC' GM> GPAMPG' ?HN' @?H>G CGN' #FG'CF DN' OGHG'?M A'C ' ?' ND?@?CD'
?NNCAH' CA' CFG C?MG A>' F?BOGD' C (GGK 'CFG HCGDG C OAHOGHCD?CGN'
BKAH' KAMEC?' ?HN' G KGO?MME i@M?' C C ' HAC G GHC?M CA' CFG
?OCAH' LBC C C ' ?' D?OG>BM' ?NNCAH' CA' C ' C F? ' CFG @GDC' CAA' A>'
NGPGMAK'H ' CFG OF?D?OCGD A>' i@M?' ?HN' A' CA' DGOAHOMG B ' CA' CFG
CFG CDB@KF?HC' DP?M' JFOFGPGD' FG LG ' ?' FGD' FB L?HN' #FG' QBGGH
?HN' FGD' C CGD' C?M(' A>' CFG >DGHN FK' A>' #FG GB ' ?HN' GDCFAB '
i@M?' CGMM ' CFG CADE' A>'FGD' AJH >DGHN FK' CA' KDAPG

6' HMN'NHP'N JP'9 P'%N ppi'IM O'MiO' IM O' I MT' AP'
P'WHMI' i'GPW' O OJM9+R

#F' 'H A@G ADC'@AN>G 'CFG BL GQBGHC'KA CCAH'A>' i@M?'='LDNG'
F?L'GN'LBC' @?NGH FG?DCGN I' GD' NG ODKCAH' A>' FGD' G?DME'>DGHN-
FK' F?' LGGH' OA@K?DGN' CA' CFG OGMGLD?GN' K? ? G'H ' &'N B@@GD'
C FC8 '%DG?@R

6' 2G' M99'NHP' K JIGP9'NHMN' P'N 'HM P'GHM %O R' BK+

i piN' i'NHP 'APH 78 J' KHPGN' AM9 I G
&MN9 P 'NHMI'i QQM O' MGNP'[NHP '9 PG K iKP i'JG
JKH' I P'NHMI' HPAPG' G NH+R

#FG'>DCF OGHG A>' #FG' #JA' ALMG' CH @GH' C ' ?' OGHCD' G K?H CAH'
A>'?' FADC'K? ? G C'H F?BOGD' R

6' JN' N' P P'M99'N '9 iQ'7 'N 'OP GP'
HP'Q PMP' K9MI J'MiO'NHP' M I PiN iQ'
,XH KH'NHMN'NHP'9MO PG' I MOP'MN'NHP'A PII iQ'
1T'NHP'A O PG+R

#FG'GK CD'D?@@?CCD'GHNCH 'A>'CFG OGHG C 'KGDF?K '>?@M?7D CA'@?HE R

6' H G 9O%G'M K NT'7J99 7'GN MT iQ'GN PPNG'8
iO'OPMNH%G'NHP' I M UPN'L9MKP' HP P'PMKH' iP' I PPNG+R

BD BCH ' CFG KM?H' JCCF' JFCOF' JG GC ABC' A>' >AMMAJCH ' CFG OABD G
A>' F?BOGD8' CADER ?HN' ABD' DG? AH '>AD' ?NAKCCH ' CF' 'KM?H' JG' F?MM
FGDG?>CGD' F?PG' CA' G KM?CHR JG'K? ' APGD' ?MM CFA G OGHG ' ?HN' K?DC '
A>' OGHG ' JFCOF'@?E'LG' O?MNG'CFG BHNGDKMAC' BOF' CH' CFG GOAHN'
?OC C ' CFG LG CHHCH 'A>' OGHG' ' H' F?BOGD' JG' MG?DH' CF?CR' :

/'?i'MN % ' i'MiQJ GH'MiO' i' p
5 p pi'NH G'-M9MI i'MiO'PUP'# K NP
O 'p p NM p'NHP P'IMT i 'Q 9O'NHPI'] JNP+R

#FG'AMN' DA@?HCD'KAGC DG GDP6' F' N'?MA BG' >AD' CFG DG?M LB CHG '
A>' CFG CADE'SPFGH CFG CJA' >DCGHN ' G?OF' GGCH ' i@M?' >DA@' CFG
KD' AH' JCHNAJ'LGOA@G' BKAH' CFG CH C?H'NG>ECH ' DCP?M ' >AD' FGD' MAPG'
#F' 'HOCNGHC C ' HAC'@?H? GN' JCCF' @ADG'KDGK?D?CAH' LE' CFG ND?@?-
CC C ' LBC' CFG KDGMBNG' CA' CC G FCLC' CFG' CJA' EABH ' @GH' OAH AMCH '
G?OF' ACFGD' BHNGD' CFGCD' ?NPGD G' >ADCBHC' ?HN' @?(CH ' DG AMBCCAH ' A>'
GCGDH?M'>DCGHN FCK' C C 'CH ?H ?CCGHC'PG'KGDB ?M A>' CF' N?MA BG' CF?C
J G' LG CH' CA' N' OAPGD' CF?C KADC'AH ' GPGH' A>' CFG DG?C 'HOCNGHC ' A>' JDCCGH' LE'
ND?@?'F?PG'LGGH' JDCCGH' LE' NC>>GDGHC'KGD AH 4' AD' CF?C' C>' JDCCGH' LE'

G' ?NN

6 2 ! ' NH G' GKP ! P' NHP P' G' ! P' N M ! ' 7' I PNMLH G' H KH' G' LP HMLG' MG' KHM MK_ NP GN K' 7' O9PNKHP ' MG' M ! TNH ! Q' NHMN' K J9O' AP' L OJKPO# 2N' G' I M UPO' AT' M' G9 _ ! PGG' 7' MGG K MN ! ' H KH' HP' 7NP ! ' GH G# P P M9' M99JG ! G' M P' GJKKPGG P9T' ! N OJKPO8 AJN' AT' PMKH ' MG' N' MLLPM G ' P' M P' L PLM PO' 7 ' M ! O' KM ! ' M ! N K LMNP ' NHP' ! P W N P ' GPP' NHP' K ! ! PKN ! ' 7' OPMG' ! ' NHP' L PN%G' I ! O' NH JQH' H KH' NHP' ! P' HMG' GL J ! Q' JN' 7' NHP' NHP ' M ! O' NHMN' M99' M P' AJN' A M ! KHPG ' 7' H KH' ! P' Q ! M9' NH JQHN' G' N P' N# #99' NH G' G' NHP' U' 7' M' 9PGG' 7P N 9P' 7M ! KT' M ! O' M' I P' NM OT' J ! OP GNM ! O ! Q' NHM ! ' HMUGLPM P%G' ' HP' J9O' HM P' 9PMLPO' P ' I M ! T' 7' NHP' ! NP P ! ! Q' GNPLG ' M ! O ' PMKH ! Q' MN' ! KP' NHP' I GN' P I NP' LM N KJ9M ' 7' NHP' GP PG ' J9O' HM P' I I PO MNP9T' NJ ! PO' M MT' N ' PM P' G I P' ! P ' KHM ! ' 7' NH JQHN+R

G' F?MM' KDG GHCME' ?NPGDC' CA' CFG' N□>>GDGHOG ' A>' CEMG' CFB ' OMG?DME' ' KA□HCGN' ABC

G' ?DG' HAJ ' ?DD□PGN' ?C' ?' K?DC' A>' CFG' C?MG' JFGDG' CFG' KAGCDE' A>' F?BOGD' ? B@G ' CFG' ND?@?C□O' >AD@ ' #FG' NG OD□KC□AH' A>' ! @□M□?' J?M(□H ' □H' CFG' ?DNGH ' CFG' >□D C' □ FC' A>' FGD' LE' ?M?@AH ' ?HN' F□ ' □@? □H?C□PG' MAPG ' CFG' BL GQBGHC' KDA CD?C□AH' A>' F□ ' FG?DC' LG>ADG' CFG' ?@G' P□ □AH' LE' DO□CG ' ?DG' ?MM' CAMN' J□CF' JAHNGD>BM' K□D□C' LE' CFG' AMN' KAGC ' #FG' GHC□DG' K? ? G' □ ' CAA' MAH ' >AD' G CD?OC ' LBC' JG' □PG' A@G' M□HG ' JF□OF' J□MM' FAJ ' CF?C' CFG' GHGD E' A>' F?BOGD' □@KA GN' HA' 0A@@AH' C? (' A>' D□P?MDE' BKAH' F□@' JFA' BHNGDCAA (' CA' ND?@?C□TG' CF□ ' OGHG' A>' K? □AH R

6' H G' - M9M I !' %QM ! ' U ! N' H G' A 7 G' N MT+
Y' 2N' P P %] J O' HP ' Y' N ' NHPP' ! ' Q PMN' H ! J '
O ' N ' AP' 7M9GP ' ! P' 7 ' N ' AP' N MT' N J '
' I P ' NHMN' M I ' NH T' K JG ! ' M ! O' NH T' A NHP '
4 G I ' 7J99' OPPL ' M ! O' PMKH' 7' JG' N ' NHP +
HMN' ! P ' P ' 7 ' N ' O P ! ' ! ' NHP' LM ! +
99' NHMN' NHP' OPMNH' OPLM NP ! ' GHM99' JG' N M ! +
P NHP ' 7' JG' ! ' 9 P' N ' H ! OP ' NHP
P' ! ' ! ! P' NHP ' KMGP ' I T' 9P P' A NHP 8
JN' NHMN' NH J' GH J9OPGN' N J9T' 7J NHP ' I P'
2 ! ' P P T' KMGP' MG' 2 ' GH J9O' 7J NHP ' NHPP+
H G' MG' NH ! P' MNH ' M ! O' I ! P' M9G ' KP NM ! 8
2 ' N' N' P99 ' NH J' OM %GN' N' ! N' NHGM !'
HJG' M N' NH J' 7' I T' K J ! GP9' JN' 7' O JAN+
! O' ! ' NH J' J9OPGN' 7M9GP9T' APP ! ' MA JN'
' 9 P' I T' 9MOT ' H I ' 2 ' 9 P' M ! O' GP P+
! O' P P ' GHM99' N 99' NHMN' I ! P' HPM NP' GNP P+
Y ' KP NPG ' 7M9GP' # K NP ' NH J' GHM9N' ! N' G ' 8
2 ' 9 %O' HP ' 7 GN ' M ! O' N 9OQ' NHPP' I T' P'
G' N ' I T' K J ! GP9 ' M ! O' I T' A NHP ' G !'
' 7J NHP ' I P' MG' ' HM P' N 9O' AP7 !+
O ' H KH' NH J' M N' TA J$! OP ! ' MG' M' U ! QHN'
' HP9LP ! ' I P ' 7' N' 9 P' ! ' NHT' I QHN
1 ' P99B' M N' NH J' 7M9GP' 2 ' OM P' P99' GMT%! +%
H G' # K NM' 7J99' L JO9T' GLMUP' MQM !+
$ Y' H J' GHM9N %] J O' HP ' Y' AP' MNHP ' 7M9GP' NHM ! ' 2
# ! O' NH J' M N' 7M9GP ' ' NP99' NHPP' JNNP 9T8
O ' ' ' 2 ' 9 %O' HP ' 7 GN' P P' NH J+% R

C' □ ' ?' DG@?D (?LMG' O□D0B@ C?HOG' CF?C' AHG' A>' CFG' OAHN□C□AH ' A>' CFG' >D□GHN F□K' A>' CFG' EABH ' @GH R CFG' OF□P?MD□O' LAHN R

6' P NHP ' 7' JG' ! ' 9 P' N ' H ! OP ' NHP R S

1' O?K?LMG' A>' ND?@?C□O' G K?H □AH ' F? ' LGGH' K? GN' APGD' LE' CFG' JD□CGD' A>' CF□ ' OGHG' □H' #FG' #C□ A' ALMG' □H @GH ' #FG' CADE' □ ' >AMMAJGN' □H' DO□CG' LG□H ' >DGGN ' LBC' □H' F?BOGD' FG' DGCBDH ' CA' #FGLG ' ?HN' ?>CGD' ?' MAH ' ?L GHOG' 0A@G ' CA' CFG' OABDC' A>' #FG GB ' □H' N□ B□ G ' #FG' BH□CE' A>' C□@G' □ ' KDG GDPGN' □H' CFG' ND?@?' LE' @?(□H ' F□@' ?' P□OCAD' □H' ?CFMGC□O' KADC ' ?HN' CFB ' □HCDANBOGN' CA' CFG' >?PABD' A>' #FG GB ' ?HN' CFG' GDP□OG' A>' ! @□M□?' H' F?BOGD ' ?M?@AH ' ?>CGD' GPGH' EG?D 8 NBD?HOG ' :

6' T' HP9L ! Q' 7' M' 7 P ! O' A MUP' H G' L G !+R

#FG' ?AMGD8 ' N?B FCGD' □ ' ?' K?D? □C□O?M' DAJCF' ?DABHN' CFG' AMN' P□ ADAB ' CDGG

?M?@AH' □ ' >MGN' CA' CFG' JAAN ' DO□CG' F? ' D□NNGH' CA' CFG' >□GMN ' CA' @?(G' F□ ' & ?E' ?DM?HN ' ?HN' F□ ' BHF?KKE' >D□GHN ' >G?D>BM' A>' KBD B□C ' FG?D ' F□@ ' BH(HAJH ' □H R

6' MTP ' NH' M99' NHT' 79 PG' M ! O' NHT' Q PP ! +
& QHN' P9K I P' AP' NH J' 7M P' 7 PGH7 ' MT
2 ' H LP' NHMN' 2 ' G I P' Q PP ! ' HP P' QPNNP ! ' I MT+R

#FG' AMN' KAGC' OAHC□HBG ' J□CF' F□ ' □H□@□C?LMG' FB@ABD R

6' X HP ! ' NHMN' # K NP' HMO' M I PO' M99' H G' 7 99+
! O' GJ ! QP ! ' M99' NHP' J ! OP9 9JGN 9T+
2 ! N ' M' GNJOT' HP' 7P99' GJOOP ! 9T+
#G' O ' NHPGP' 9 P G' ! ' NHP '] JM ! NP' QPM G
$ ' ! ' NHP' K L ' M ! O' ! ' O ! ' ! ' NHP' A P PG+
' JL ' ! ' O ! ' MG' AJKUPN' ! ' M' P99+R

#FG' MAPGD' □PG ' BCCGD?HOG' CA' F□ ' M?@GHC?C□AH ' F□ ' D□P?M' FG?D ' F□@ ' ?HN' C?DC ' ABC' A>' CFG' LB FG ' J□CF ' =' ?M G' DO□CG ' >?M G' CD?□CAD I' DO□CG' KDAKA G ' CF?C' CFGE' FABMN' NGCGD@□HG' CFG□D' 0AHCGHC□AH' LE' @ADC?M' 0A@L?C' AH' CFG' >AMMAJ□H ' N?E R

6' " P P' 2' 9@' AP' 7 J ! OP ! ' MG' M' U ! QHN+
! O' A ! QP ! ' HM ! PGG' QHN' P ! JQH' 7 ' NHPP+
! O' KH GP' NHP' APGN ' M ! O' 9PM P' NHP' GN' 7 ' I P
! O' I PMN' M ! O' O ! UP' NH G' ! QHN' 9@' 2' A ! Q+R

#FG' OADDG KAHN□H ' OGHG' □H' #FG' # JA' AL MG' □H @GH' □ ' >□HGME' JD□CCGH ' #FGDG' □ ' ?' QB□GC' CDGH CF' ?LABC' □C' JF□OF' G F□L□C ' PGDE' F□ F' ?DC ' #FG' CDBOCBDG' A>' CFG' PGD G ' CAA ' □ ' A@GJF?C' N□>>GDGHC' >DA@' CF?C' A>' CFG' KD□ AH' OGHG' LGCJGGH' CFG' >D□GHN ' . BC' C□MM' JG' F?PG' HA' N□>>□OBMCE' □H' LGM□GP□H ' CF?C' □C' @□ FC' LG' JD□CCGH' LE' CFG' ?BCFAD' A>' CF?C' KDGP□AB ' OGHG ' #FG' CF□DN' OGHG ' JFGDG' DO□CG' OA@G ' CA' ?M?@AH' =' J□CF' @G?C ' J□HG ' ?HN' >MG I' □ ' @GDGME' CFG' O?DDE□H ' ABC' A>' CFG' ?OC□AH' KDA@□ GN' □H' CFG' KDGP□AB ' □HCGDP□GJ ' C' □ ' BHHGOG ?DE' >AD' CFG' ND?@?C□O' @APG@GHC' G' QB□CG' ? DGG' J□CF' &D ' K?MN□H ' □H' F□ ' G C□@?CG' A>' CF□ ' OGHG R CF?C' □C' □ ' HAC' PGDE' OF?D?OCGD□ C□O' A>' G□CFGD' F?(KGDG' AD' MGCOFGD ' LBC' CF?C' □C' =' MG?H ' CAJ ?DN ' MGCOFGD' >' ?HN' AHG' ?D B@GHC' >AD' F□@' @□ FC' LG' ND?JH' >DA@' ?H' □HCGDOF?H G' A>' ?DO? @ ' LGCJGGH' CFG' 8 (□H @GH ' □H' JF□OF' CFGE' DGCADC' AH' G?OF' ACFGD' >AD@GD' ?@ADAB ' ?NPGH-CBDG ' ' BOF' ?' N□?MA BG' □ ' QB□CG' M□(G' MGCOFGD8 ' @GH' A>' ?□GCE I' #FG' OA@L?C' □C GM>' C?(G ' KM?OG' □H' CFG' □ CF' OGHG ' #FG' K? ? G' □H' F?BOGD' BKAH' JF□OF' CF□ ' OGHG' □ ' >ABHNG ' KA G G ' ?MM' F□ ' OF?D?O-CGD□ C□O' GHGD E ' #FG' F?DN' ABCM□HG' JF□OF' □C' KDG GHC ' □ ' □H' A@G' NG DGG' ?' H?CBD?M' 0AH GQBGHOG' A>' □C ' >ADOG' ?HN' OMG?DHG Rn

6' # ! O' ! ' NHP' Q P ' MN' N I P' M ! O' L9MKP' TGPN+
H G' # K NP' M ! O' NH G' - M9M I ! ' APP ! ' I PN
H ' KHM ! QP ! ' %QM ! ' NHP' K 9 J ' ! ' NHP ' 7MKP8
& QHN' MG' NHP' HJ ! N ' ! ' NHP' 9PQ ! P' 7' H MKP'
HMN' GNM ! OPNH' MN' M' QMLLP' NH' M' GLPM
HP ! ' HJ ! NPO' G' NHP' 9 ! ' ' NHP' APM +
! O' HPM PNH' H I ' K I P' JGH ! Q' ! ' NHP' Q P PG+
! O' A PMU ! Q' A NH' NHP' A JQHPG' M ! O' NHP' 9PM PG+
! O' NH ! U%NH ' Y " P P' K I %NH' I T' I NM9' P ! P I T
. X NH JNP ! ' 7M 9' HP' I JGN' AP' OPMO' ' 2 8
O ' P NHP ' 2' I JGN' G9MT' H I ' MN' N9 P' QML+
1 ' HP' I JGN' G9MT' I P ' 7' NHMN' I P' I GHML+%
' 7M POP ! ' NHPT' ! ' KHM ! Q ! Q' 7' NHP ' HJP+
#G' 7M ' MG' P NHP ' 7' NHP I ' NHP ' U ! P +
HP P' ! %MG' ! ' Q O' OMT ' ! P' ! ' GM9J ! Q+
JN' GN M QHN' NH JNP ! ' OPG' PHPM G ! Q
3 P KH' 7' NHP I ' HP9L ' N ' M I P ! ' NHP '
#G' 7 P ! O9T' MG' HP' XP P' H G' P ! ' A NHP 8
! O' M7NP ' NHMN' NH' HM LP' GLPM PG' GN ! Q'
HPT' 7 ! OP ' PMKH' MN' NHP ' ! OP ' 9 ! Q+R

C' □ ' BKAH' CFG' = GPGD□OF' A>' CFG@' FGMK' CA' ?D@GH' ACFGDI' CF?C' CFG' ND?@?C□ C' F? ' >ABHNGN' CFG' □HCGDOF?H G' A>' OABDCG □G ' LGCJGGH' CFG' CJA' (□H @GH ' #FG' OAHOGKC□AH' ?HN' G GOBC□AH' A>' CF□ ' OGHG' ?DG' OGDC?□HME' PGDE' D?OG>BM ' LBC' CFG' D?OG' □ ' O?DD□GN' A@GJF?C' CAA' >?D' CA' LG' H?CBD?M' #FG' ND?@?C□O' □CB?C□AH' □ ' >□HGME' □@? □HGN' LBC' □H' CFG' F?HN ' A>' ?' JD□CGD' A>' CFG' F□ FG C' KAJGD' □C' @□ FC' JG' CF□H(' F?PG' LGGH' O?DD□GN' LGEAHN' CFG' KA□HC' A>' GMG ?HOG ' AD' GPGH' A>' LG?BCE ' □C' @□ FC' F?PG' LGGH' DGHNGDGN' NGGKME' K?CFGC□O ' BKAH' CFG' KD□HO□KMG' CF?C ' ?C' CFG' @A@GHC' A>' @ADC?M' OAH>M□OC ' CFG' NGGK G?CGN' ?>>GOC□AH' A>' CFG' CJA' EABH ' @GH' JABMN' F?PG' D?KKMGN' J□CF' CFG' OF□@GD□O?M' K? □AH' JF□OF' G?OF' F?N' C?(GH' CA' F□ ' FG?DC ' ?HN' JABMN' F?PG' N□ KM?EGN' □C GM>' □H' A@GCF□H ' @ADG' G@□HGHCME' CD? □O' CF?H' CFG' OAH CD?□HGN' OABDCG E' A>' CFG' OGHG' LG>ADG' B ' C' □ ' CF□ ' KAJGD' A>' NG?M□H ' J□CF' F□ F' K? □AH ' JF□OF' ?KKG?D ' CA' B ' CA' LG' @A C' J?HC□H ' □H' CFG' OGHG ' JFGDG' K? □AH' □ ' DGQB□DGN ' C' □ ' ?H JGDGN ' CF?C' CFA G' OGHG ' ?DG' JD□CCGH' LE' MGCOFGD ' ?HN' HAC' LE' F?(KGDG ' >' CF□ ' KDG GHCME ' #FG' □HCGD-DBKC□AH' CA' CFG' OA@L?C' LE' #FG GB ' ?HN' F□ ' CD?□H ' CFG' OAHNG@H?-C□AH' A>' CFG' D□P?M ' LE' CFG' NB(G ' CFG' □HCGDOG □AH' A>' □KKAMEC?' ?HN' ! @□M□?' ?HN' CFG' >□H?M' NGCGD@□H?C□AH' CF?C' CFG' (H□ FC ' FABMN' NGK?DC ' ?HN' J□CF□H' ?' @AHCF' DGCBDH' ?OOA@K?H□GN' LE' ACFGD' (H□ FC ' CA' OAHCGHN' □H' LAN□ME' CDGH CF' >AD' CFG' >?□D' KD□TG R CFG G' □HO□NGHC ' ?DG' >ABHNGN' KDGCCE' OMA GME' BKAH' F?BOGD ' J□CF' CFG' G OGKC□AH' CF?C' CFG' GMNGD' KAGC' NAG ' HAC' @?(G' #FG GB ' NGODGG' CF?C' CFG' P?HQB□ FGN' F?MM' N□G' BKAH' CFG' LMAO(' #FG' OGHG' F? ' HA' @?D(GN' NGP□?C□AH' □H' CEMG' >DA@' CF?C' JF□OF' KDGOGNG ' □C

#FG' BKKA GN' □HCGDP?M' A>' C□@G' NBD□H ' CFG' ?L GHOG' A>' CFG' (H□ FC

BD CFGADE □ 'CF?C CFG K? ? G 'JF□OF F?PG LGGH ? ODLGN' CA' F?('
KGDG ? ' ?' K?DCH6D' H' CFG JAD(' A?' #MG' #J4' ALMG' □H @GH' ?DG
G GHC□?MME =' NG ODK□PG' ?HN' N□N?0C□O'I' CF?C CA' ?J□CG' CFG G K? ? G '
□C J? 'HAC HGOG ?DE CF?C CFG KAGC FABMN' LG ?LMG CA', A' ABC A?'F□-
GM?'I' CF?C CFGE '>AD' CFG @A C K?DC' @□ FC GHCGD □HCA' CFG 0A@KA □CAH
A?' ?' DG?C KAD□ KAG@ ' CF?C CFG JD□CGD A?' CFG G K? ? G ' J? ' @? CGD'
KGDG' C'□ '?'HCGN'N?BL' A?'CFG KD□HC FAK '@□C?C□H 'CFG 0AMABD□H '
A?'#□C?H' C J?E K□GOGN' "A@GA'?HN'0BM□GC □HCA' FC' =' ?□B &?D□B 8
JFGDG' CFG HGOG □CE' >AD' □@□C?CAH' J? '?OCB?MME' >ADOGN' BKAH' F□@'H'
@?(□H ' ' A?' F?(KGDG8 'M□HG ' ?HN' F□ ' A J H ' ?HN' EGC CFG M? C
KGGOF' A?'CFG "A@GA' A?' CJ?E8 'CD? GNEZ' BL C□CBCG 'CFG G CFDGG M□HG '
□H' CFG' KM?OG' A?='#FB ' J□CF'?' (□ ' ' N□G'I R

6' H G' 9OMG Q GG M 'Q G AJ NHPIG IP'M9 PMOT
2'MI'N99'M Q Ø 6JKH'HPM PI9T'E TG N MIGL N IP
HMN' I NM9'GPIGP'Q G G KU'MIO'7M ING' NH'9MGN IQ+R

G' @HC□AH'CFG G CF□H 'CA' FAJ'CF?C @GH A?'PGDE F□ F'C?MGHC F?PG
HAC' LGGH'?LMG'CA' D?KKMG'J□CF' F?(KGDG8 ' CEMG□H'CFG J?E' A?' □@□C?-
C□AH' ' KAGC' ?HN' G KGO□?MME' ?' OAHCG@KAD?DE' KAGC' @□ FC' F?PG
>AD@GN'F□ ' AJ□H' CEMG'□H' A@G NG DGG' BKAH' F?(KGDG' HAC' AHME'LE'
CFG' 0AH C?HC' OAHCG@KM?C□AH' A?' F□ 'KGOBM□?D' G OGMMGHOG 'LBC' CFDAB' F
CFG' GHGD?M' OF?D?OCGD' CF?C ?' @?H' A?'CFG'PGDE'F□ FG C' GHCB'□@HDG' G '
BHOAH' O□AB' ME'BKAH'CFG ? DG ?CG'KAGCDE' A> F□ ' ? G' #F□ ' J G' LGM□GPG'
CA' F?PG' LGGH' CFG O? G J□CF' F?K@?H' A?'CFG'P□D□C?CAD' A?
F?(KGDG' □H 'CFG' ADN□H?DE' GH G A?' CFG' J ADN ' FG' OAB M' HAC' □@□C?CG'
F□@' □H' F□ ' OGHG ' A?'K? 'AH'LGO?B G FG' OAB M' HAC' =' F□C ?C' KMG?' NDG'
CA' □H>AD@' ?HN' ?H□@?CG' AC□GD G □ CGHOG I' .BC'□H' ?' M□@□CGN' D?H G ' FG
?K□KDA?OFGN' F?(KGDG' LGO?B G' FG' F?N' CFG' ?@G' G?DHG CHG ' CFG
?@G' OA@@?HN' A?' CD□(□H ' OA@L□H?C□AH ' A?' M?H B? G' ?' DFEC□F@' □H
J□FOF' F?D@AHE □ ' LMGHNGN' J□CF' CDGH CF' ? KAJ'GD' A?' K?□HC□H ' OGHG '
LE'P□P□N' NG ODK□CAH' ?' C□GHNHGNOE' CA' DG>MGOC' ?HN' KF□TG' AK□TG' MM'
N?H?K?MB I' =' 'MAA(' BKAH' F?(KGDG' CA' LG' CFG' JAD C A?' @ANGM '
CFAB F' CFG @A C G CD?ADN□H?DE' A?' JD□CGD I' G' CF□H('□?' F?(KGDG'
LG' CFG' JAD C A?' @ANGM '□C □ '," 'FG' □ '□FG' @A C G CD?ADN□H?DE' A?'
JD□CGD ' □ ' KDAN□ □AB ' NGKCF' A?' CFAB FC' F□ ' BHLABHNGN' D?H G' A?'
KAJ'GD' A?' KDANB□H 'CFG G OGHG ' ABC' A?' F□ ' A J H' DG ABDOG 'W' #F□ '□ '
?' QBG C□AH' J F□OF' J G' OGDC?□HME' 0?HHAC' KDGCGHN'CA'?H J6D' ?C□ >?OCAD□ME '
#FG' ACFGD' QB?M□CG ' J F□OF' @□ F□'DG@?□H ? ' ?' @ANGM' M□G' LGHG?CF' CFG
BD>?OG' @□C?CG '□>' C' LG' KA □LMG' CFG' CDBOCBDG' A?' F□ ' PGD G ' CFG
CFAB F□'?HN' CFG'□@? GDE'?DG' J?HC□H ' ?HN' CFG @GDG' PGD □>□O?C□AH' □ ' ?'
?MM' CF?C J G' O?H' NA' □ 'CA' 0A@K?DG ?' >G J' KGOBM□?DC□G ' □H' CFG >□D C ?HN

M? C ?OC <A?'#FG'#J4' ALMG' □H @GH' J□CF' K? ? G 'CF?C A>'GD CFG@-
GMPG '□H' CFA G A?' F?K@?H8 'JA(' J□CF' J F□OF' JG' F?PG' ?H ?OQB?□HC-
?HOG

G' J□MM' LG □H' J□CF' ?' QB?M□CE' J F□OF' ' DG@?D(?LMG' GHAB F' □H
HAC' LG' HGOG ?DE' >AD' ABD' KBDKA G' CA' GMGOC' K? ? G ' CF?C ?DG' PGDE'
OMA GME' K?D?MMGM' ' G' AHME' NG □DG' CA' FAJ'CF?C' F?K@?H' □ ' ?'DG>MGO-
C□PG' KAGC' ?HN' CF?C□H' CF□ ' DG KGOC' CFG' CAHG' A?' CFAB FC' CF?C @?E' LG
>ABHN' □H' CFG' >□D C ?HN' M? C ?OC ' A?' #FG' #J4' ALMG' □H @GH' □ fHAC'
□HOA@K?C□LMG' J□CF' F□ ' F?LC□C ' A?'OA@KA □CAH

G' F?PG' ?MDG?NE' GMGOCGN' ?H' □HPAO?C□AH' LE' F?K@?H' J□CF' CFG
□HCGHC' A?' FAJ□H ' CF?C F□ ' CEMG □H' CF□ ' NGC?OFGN'?HN' OA@KMGCG' >AD@
A?' KAGCDE' ?KKDA?OFG ' @BOF' @ADG' OMA GME' CA' CFG' □HPAO?C□AH ' □H' #FG'
#J4' ALMG' □H @GH' CF?H' CFG' CEMG' A?' 0AH AH' F?K@?H' ?KKG?D ' U
CA' B ' CA' NGM□ F□ □H' CF□ ' KGO□G ' A?' AD?CAD□O?M' PGD G' DGQBL□H ' DG?C
□HOAHGN ?C□AH' ?HN' @?5G CE' A?' G KDG □AH' ?HN' NG@?HN□H 'CFG' H□OG C
?NSB C@GHC' A?'?' 0?M@' ?HN' C?CGME' DFECF@' G' NGD□PGN' KGDF?K 'CF□ '
MAPG' A?'□HPAO?C□AH ' ? ' J GMM ? ' CFG' KAJ'GD' A?'□HCDANBO□H ' BOF' K? ? G '
BOOG >BMME□H' F□ ' ND?@? ' >DA@' F□ ' >?@□M?DCE' J□CF' A@GD' ?HN'
CFB '>AD'CFG' ?@G' DG? AH' F□ ' KM?E ' F?PG' @ADG' A?' CFG' C?CGME' >AD@' A?'
CFG' GK□D' N□?MA BG' CF?H' CFG' K? □AH?CG' D?K□N□CE' A?' CFG' CDBG' ND?@?'
4' J□MM' GMGOC' AHC' □HPAO?C□AH' >DA@' F?K@?H8 ' CD?H M?C□AH' A?' CFG'
N□?N ' CF?C' A?' ?@G@HAH8 ' KD?EGD' □H' CFG' CF□D□' LAA(' CA' FAJ' CFG'
ABDOG ' ?C' MG? C' J F□OF' J GDG' AKGH' CA' CFG' J D□CGD' A?' CFG' □HPAO?C□AH ' □H
CFG' >□C F?C' A?'#FG' #J4' ALMG' □H @GH ' >AD' G ?@K□G ' A?' OAHNGH ?-
C□AH' A?'CFAB FC' @?5G CE' A?' N□OC□AH ' ?HN' >GM□O□CE' A?' GK□CFGC R

6' 1'?' P' NHMM' 2OM' O NH'L NPK□'M1O' HMGN'NHP' N N9PG' i+
GN'Q9 J6' I GN' i ik A9P' 8 M1O' NH J' M99 GPP iQ' GJI'8
HPM' IQ' M99' P K I7 N iQ8 79 OG' PM NH' M1O'L P G' APIPMNH' [
HMN' M99' NHP' LP EJ PG' 7' IpI' KHMGN GP' P pI' MZNP' OPMNH' 8
P' NIPGGPG' M1O' GPP' LP 7 I %O' NHP' HPM NT' G P' I MUP+R

#FG G' □HPAO?C□AH ' □H' F□ ' A@GD' F?PG' CFG' HGOG ?DE' 0AHNGH ?C□AH' A>
CFG' AD□ □H?M' H' F□ ' AJH' □HPGHC□AH ' □H' CFG' ?@G (□HN' FG' □ ' H?CBD?MME
*()

X HMN' APPN9PG' i' J' i[GC< ''F '%

6' 1'[NHP' GN MIQP' O 77P PIK' WN' JG' MIO' NHP' GNM G'
HPT' U' NH' IK9 IMN IG' GN IQ' MIO' 7MMN9+
#IO' i NH IQ' UI ' MIO' P' UI 'M99' NHP ' U IQ+
#IO' i JQHN' KMI'O ' ' i NH IQ' KMI'L P PIN+R S32 @%' 2

' ' 9 ' 6 9 49 ' F' 9 ' & ' 3 ' 7 4

@ADG' N□>>B G ' LBC' F□ ' N□>>B GHG ' □ ' HAC' CFG' N□>>B GHG ' A>' 0 8MGCOFGD '
#?(G' AHG' G ?@KMG' R

6' 'M99' TP' LPMKP7J9' PQP!NG' 7'NHP' ! QHN
9P!N9T Q9 O !Q' PWHM9MN !G+
/M!QJ GH !Q' !OG'M!O' I J I J !Q'7M99G' 7' MNP G+
MO!PGG' 7'HPM N'M!O' I ! JG'GPKJ P!PGG
3!KHM!N I P!NG'OPMO'G9PPLG'M99'NHP'7 P!OG' 7' PGN+
HMN'P P' JQHN'JL !'NHP'9 7P' 7' I M!+
3WNP!O'T J'JN I GN'GN P!QNHG8 M!O'NH G'KHM I %O'H J'
O W 9 UP'NHP'KP!N P' I MUP'NHP' 9P!N' HPP9G'
17' I P'M!O'O NJ!P'GNM!O8' M!O'Q PMN'PW GNP!KP+
HP' I MUP %G'N PMGJ T' ! ' N' GPP I'N 'AP+R

#FG' C□@G' □ ' K? C' JFGH' □C' @?E' LG' HGOG ?DE' CA' KDAPG' CF?C' F?K@?H'
J?''?'DG?M' KAGC' #FGDG'?DG' K? ? G ' □H' F□ ' KM?E ' JF□OF' FAJ'CF?C' FG'
J?' O?K?LMG' HAC' AHME' A>' □P□H ' □HCGDG C' CA' >ADOGN' □CB?C□AH ' ?HN'
G CD?P? ?HC' OF?D?OCGD ' LE' F□ ' ?MM □H>AD@□H ' GHGD E ' L?C' A>' KABD□H '
ABC' CFG' JGGCG C' K□D□C' A>' LG?BCE' □H' CFG' @A C' BHG KGOCGN' KM?OG '
#?(G' CFG' >AMMAJ□H ' >ABD' M□HG ' ? ' ?H' G ?@KMG' R

6' "P P%G' ! JQHN'AJN' H GLP !Q' NH' JG' ' 9 UP'M' KM9 I'
P7 P'M' NP I LPGN'8$ ' $ '% ' ' '
2%'$ '% ' '(' % ' ' $ ' $' '$ $ '
+' 0 'NHMN'GHP'7PM G'GNPM9G' !'N ' M GH'HP +R

? 'GPGD' KGD AH□>□O?C□AH'@ADG' G QB□ □CGME' LG?BC□>BM'W #FG' JD□CGD' A>'
CFG G' M□HG ' J□CF' F□ ' JAHNDAB ' >?O□M□CE ' J? ' GQB?M' CA' ?HECF□H ' CF?C'
N□N' HAC' NG@?HN' CFG' 3 'F□ FG C' QB?M□C□G ' >AD' CFG' ND?@? ' ?HN' CFA G'
QB?M□C□G ' JG' NA' 'CF□H(' ?DG' @?H□>G C' □H' CFG' >□D C' ?HN' M? C' ?OC ' A>'
#FG' #JA' ALMG' □H @GH ' D□OF' ? ' CFG G' ?DG' □H' G OGMMGHOG ' J□CF□H'
CFG' D?H G' A>' BOF' ?' JD□CGD' ? ' F?K@?H ' '0$ '$ ' 8 " '
' 0 ' ' $' ' ' ' J ' 0 $' $ '
0

#FG' OM? □O?M' H?CBDG' A>' CF?C' KADC□AH' A>' #FG' #JA' ALMG' □H @GH'
CF?C' JG' CF□H(' @□ FC' F?PG' LGGH' ? □ HGN' CA' FeK@?H' @□ FC' F?PG'
LGGH' CDG?CGN' LE' ?' JD□CGD' HAC' PGDE' NGGKME' □@LBGN' J□CF' CFG' K□D□C' A>'
+DGG(' KAGCDE ' J□CFABC' CFG' B G' A>' ?HE' KGOBM□?D' KFD? G ' AD' GK□CFGC '
JF□OF' ?' KAGC' NGD□PG ' >DA@' ?' K?DC□OBM?D' OABD G' A>' DG?N□H ' ? ' JG'
OAH C?HCME' >□HN' □H' &□MCAH ' G' J□MM' GMGOC' ?' PGDE' >GJ' K?D?MMGM' G ?@-
KMG ' A>' BOF' >DA@' #FG' #JA' ALMG' □H @GH ' ?HN' >DA@' F?K@?H8 '
KM?E ' ?HN' CFG' CD?H M?C□AH' A>' CFG' M□?N' R

' 2 $ ' 7

HP' GKTNHP NJGU%O' A M +
9JAAP %O']JPP!G+
9PM GL NPO' K JG !+
HP' HPM P!9T' 9 I NP +
HMUP ' 7' %P M!U' GNMNPG+
MK PO' G 9 P ' I GN PGG+
1H ' T J' HPM P!9T' KHM I P G+

=

HT' I JG K 7 NPO' H GP+
" G' A9JAAP %O' KHPPUG+
9O GL NPO' LPP G+
HP' HPM P!9T' 9 QHNP!P +

H J' I QHNT' GHMUP ' 7'NHP' PM NH+
: 9OP! NH !PO']JPP!+
HP' PNP !M9' O P99P G+

C' JABMN' LG' CGN□AB ' ? ' JGMM' ? ' BHHGOG ?DE' CA' KBD BG' CFG G' NGC?□M '
>?DCFGD' FAGPGD' J? ' CFG' JD□CGD' A>' CFA G' K? ? G ' □H' #FG' #JA' ALMG'
□H @GH' JF□OF ' AH' ' DABHN ' F?PG' J□CF' DG?C' KDAL?L□M□CE' LGGH'
?CCD□LBCGN' CA' F?(KGDG ' □C' □ ' OMG?D' CA' B ' CF?C' CFGDG' JGDG' CJA' F?HN '
OAHOGDHGN' □H' CFG' KDANBOC□AH' A>' CFG' KM?E ' ? ' N□ □@□M?D' □H' CFG□D' CEMG '
? ' F?K@?H ' ? ' ?' CD?H M?CAD' A>' A@GD ' □ ' N□ □@□M?D' CA' AKG ' #FGDG'
□ ' A@G' ?H?MA E ' FAJGPGD' DG@ACG' □C' @?E' ?KKG?D ' LGCJGGH' CFG' KAGC□O?M'
OF?D?OCGD ' A>' MGCOFGD' ?HN' AKG ' ? ' 0A@K?DGN' J□CF' JD□CGD ' A>' DG?CGD'
GHGD E' ?HN' □@KM□O□CE ' ?HN' CFG' N□>>GDGHOG ' □H' (□HN' A>' CF□ ' KAGC□O?M'
QB?M□CE' @?E' GDPG' ? ' ?H' □MMB CD?C□AH' A>' CFG' □@KGD>GOC' ?D B@GHC' JF□OF'
JG' CFB ' 0AHOMBNG R

"

6' HPT' GMN' OP9 QHN7J99T+
#!O' GLP!N'M99' ! QHN' !' LP!'7 P9O'8 7 PG' J!O' MA JN'NHP I'GH !%O 8
#G' HP!'MA JN'NHP'G 9 P' I !' HP!'M ' G 7 PP'7 I' !O
#!O' GNM G' GH !P' K9PM 8' N ' H GP' G PPN' APM I G'H QH' L GLPKNG'M!O'NHP' A G'
17'M99' GNPPL'H 99G'M!O'L !!MK9PG'NH JGN' JL'NHP I GP9 PG'7 'GH G8
#!O' P P!'NHP'9 9T' M99PTG'E T'N ' Q9 NNP ' !'NHP 'G QHN+
X HP!'NHP' J! I PMGJ %O'7 I M I P!N' AJ GNG'N 'O GK9 GP' HP '9 QHN+
#!O' M99' NHP' G Q!G' !' HPM P!'M P' GPP!'NHMN' Q9MO' NHP' GHPLHP O%G' HPM N8
' I M!T'7 PG' O GK9 G%O' NHP ' APM I G' I MOP' AT' NHP' EM!'LM N
P7 P'NHP'7MKP' 7'29 !8 M!O'HP 'A QHN'NJ PNG' GH %O'
#'NH JGM!O'K J NG' 7'QJM O' UPLN'7 PG' ' M!O' P P T' QJM O' M99 %O
',O 7NT' GN JN' I P!'AT' H I'NHP 'H GP' PMN' MNG' M!O' HM O' H NP' K I +
#!O' M99' O O' 97J99T' PWLPKN' NHP' G 9 P NH !PO' I I +R

"

6' HP' N LG' PWJ9N !Q' GMN' !' OP ' J!O+
#!O' APM I !Q' 7 PG' 99J I !%O' M 'NHP' Q J!O8
#G' HP!'NHP' I !' P7J9QP!N' 9M I L' 7'! QHN+
1%P 'HPM P!%G' K9PM 'MCJ P' GL PMOG' HP 'GMK PO' 9 QHN+
X HP!' I N' M' A PMNH' O GNJ AG' NHP' OPPL' GP P!P+
#!O' ! N' M' K9 JO' %P KMGNG' NHP' G 9P I !'GKP!P+
J!O' HP 'NH !P' NHP' O' L9M!PNG'
#!O' GNM G' J!!J I AP %O' Q 9O' NHP' Q9 !Q' L 9P' 8
1%P 'NHP' OM U' N PPG' M' TP99 P ' P OJ P' GHPO+
#!O' N L' NH' G 9 P 'P P T' I J!NM !%G' HPMO' 8
HP!'GH !P' NHP' M9P\' NHP' KUG' !'L GLPKN' GP
#'79 O' 7'Q9 T' AJ GNG' 7 I'M99' NHP' GU PG'
HP' K !GK JG' G M !G' PE K !Q' !'NHP' G QHN+
3TP' NHP' A9JP' MJ9N' M!O' A9PGG' NHP' JGP7J9' 9 QHN
' I M!T'79M I PG' AP7 P'L JO' 29 !'A9MCP+
#!O' 9 QHNP!' Q9 I I P !Q' VM!NHJG' NH' NHP ' MTG' G
HP' 9 !Q' P79PKN !G' 7'NHP' O GNM!N' 7 PG'
:9PM I' !'NHP' M99G'M!O'N P I A9P' !'NHP' GL PG8
#'NH JGM!O'L 9PG' NHP' OJGUT' H G Q 9O+
#!O' GHPO' M' GHMOT' 9JGN P' %P 'NHP' 7 P9O+
OJ99' 7 7NT' QJM OG' PMKH' 79M I !Q' L 9P' MNNP!O+
X H GP' J I AP %O' M I G' AT' 7 9G' NH KU' 79MGHPG' GP!O8
/ JO' !P QH' NHP' K J GP G' %P 'NHP 'HPMLG' 7'K !'8
#!O' M OP!N' M G' M N' NHP' G !Q' I I +R

G' F?PG' AHME' AHG' JADN' CA' ?NN ' F?K@?H' N□GN' □H' CFG' PGDE' EG?D'
CF?C' CFG' >□D C' GN□C□AH' A>' #FG' #JA' ALMG' □H @GH' JZ?' KBLM□ FGN '
J□CF' CFG' H?@G' A>' F?(KGDG' □H' CFG' C□CMG K? G ' >' CFG' C□CMG K? G' JGDG'
?' LAA(GMMGD8 ' □HPGHC□AH ' CFG' H?@G' A>' F?(KGDG' JABMN' LG' A>' F□ FGD'
KD□OG' CF?H' CF?C' A>' F?K@?H

$‘ ‘ $

/’ 9 M I PNJ’ J9QJG’ I H’79M JG #L 99 ’
- KJ9M’ MGNM9 M’L9PIM’ I i GNPN’M]JM+RS i * #

1’ "3

‘ ‘ ‘)

3#&/’10’ 1 "# - 1 ’ # 5’ #&1 ’10’ 2 "023/5+

& ’ ‘ 3

’ ‘HAC’FAJ’ ‘ F?M’A>>GHN’□H’NGN□O?C□H ’@E’BHKAM□ FGN’M□HG ’CA’EABD’$ADN F□K’HAD’FAJ’CFG’JADMN’J□M’OGH BDG’@G’>AD’OFAA □H ’
A’ CDAH ’?’KDAK’CA’BKKADC’A’JG?(’?’L BDCFGH’AHME□’EABD’FAHABD’GG@’LBC’KMG?GN’ ’?OOABHC’@E GM’F□ FME’KD?□ GN’?HN’PAJ’CA’C?(G
?NP?HC?G’A>’?M’□NMG’FABD’C□M’ ’F?PG’FAHABDGN’EAB’J□CF’A@G D?PGD’M?LABD’ .BC□’>’CFG’>□D’C FG□D’A>’@E’□HPGHC□AH’KDAPG’NG>AD@GN’ ’F?M’LG’
ADDE□C’F?N’A’HALMG’?’AN>?CFGD’?HN’HGPGD’?>CGD’G?DU’A’L?DDGH’?’M?HN’>AD’>G?D’□C’EDGMN’@G’CDM’A’L?N’?’F?DPG C’ ’MG?PG’□C’CA’EABD’
FAHABD?LMG’BDPGE’?HN’EABD’FAHABDg’CA’EABD’FGPDC□’OAHCGHC’JF□OF’ ’J□ F’@?E’?MJ?E’?H JGD’EABD’AJH’J□ F’?HN’CFG’JADMN□’FAKG>BM’
G KGOC?C□AH

,ABD’ AHABD□’□H’?M’NBCE

i ’ 8 "

?’9 ’ #G’M OJUP’G i ’GNT9PO’6T J’Q MKP R’G ’6T J’H i J R’ MG
7 IP 9T’NHP’GJM9 I OP’7MOO POGG N’i A9PIPI’i’QPIP M9+
’ HPL PI’7G’"P ’MIO’/PMIOP R’M9NH JQH’ M 9 P%GL N i’7’N’ MG’i N’
LJA9 GHPO’N 99’)=’ ’MG’L AMA9T’P99’UI i’i’NHP’L PN K ’K K9PG+’ HP’7 9_
9 iQ’9 IPG’M P’i’NHP’7 GN’GPGNTMO’S

6 HP’IPI’7 PM9NT’ PGN G P P T’TPM
O ’H G’GMUP’H I’NHP ’Q OOPGG’HP9O’G ’OPM
% i($)G ’ %“UPLN’M’G 9PI i’7PMGN+R

’G %%SMI GG’7MJ9N+’ ’ i’ iipN’K9 + S

6’/ P’G N ’T JIO’N ’UI ’ HMN’K iGK piKP’G
4P%’ H ’UI G i’N K iGK piKP’G A i’ 79 PO
HPI’QPIN9P’KHPMNP’J QP’i N’ 2’ %%
/PGN’QPJ9NT’ 7’I’T 7MJ9NG’NHT’G PPN’GP97L P+R

@AB

’ i’NHP’79PGH’ 7’I’P’MjIO’ 7’I’T’G i+R
& ’ #’

6 &P PIQ%O’I MT’GHP’AP’ i’NHMN’HMMP7J9’OJUP8
XH GP’HMJQHNT’GL N’ iQPO’ NH’OPG P
X 99’K GN’I’T’K i’MIO’’) ’ ’ -2’ ’
-M N’222+’#KN’2+’ K+2+ S

F %SNPM G’L PTG+ AP I MQP’G N AP’7 JIO NH JN M MN i i"pi T 2+’
J MQP JG9T’N ’LJJKU’H I’7 I’H G’H GP+$$
9
1 P’ iP’M I’NHP’9JGNT’K J GP %G P i+
iOP’HP’ NHP’ MG’NHP’NPiOP’A T+

P iQ’G ’piQ%O’OPG P’O NH’9PiO’HP’7 KP+’
7 KU NH JQHNPO’ PiJG’I MUPG’M I M i’JiN ’H I
/ ’ ’NHP’GJi’ NH’LJ L9P K 9 J %O’7MKP’
"MO’NM%PI’H G’9MGN’9PM P’ 7NHP’ PPL iQ’I i’
& GP KHPPU%O’#O i G□H PO’H I’N ’NHP’KHMGP8
"JiN iQ’HP’9 %O’AJN’9 P’HP’9MJQH%O’N ’GK i’8
KU NH JQHNPO’ PiJG’I MUPG’M I M i’JiN ’H I

3 pi'G 'GHP'U GG%O'H G'A 'H G KHPPU'H G KH i+
#iO' HP P'GHP'piOG'GHP'O NH'MIP 'APQ i+

P 'HPi'HP'9'LG' P P'PMOT'7 'H G'LMT+
"P' iUG'MiO'NJ iG'H G'9'LG'MI NHP', MT+

P P'O O'LMGGPiQP' i'GJ1 I P %G'HPMN
P'NH GN'7 'O iU'NHMI'GHP'7 'NH G'Q O'NJ i'N
"P'HP9L'GHP'GPPG'AJN'HP9L'GHP'KMii N'QP%8
HP'AMNHPG' i' MNP 'TPN'HP'7 P I JGN'AJ i'
#iO'KM99G N'HPM piST'I GNJ P'M ' 7Q MKP
X GH iQ'HP 'KHPPUG P P'QM OPiG'7J99' 7'79 P G+
'NHPT' P P'OP %O' NH'GJKH'O GN 99 iQ'GH P G+

/ U H 'M A O'9 PG'NMiQ9PO' i'M iPN+
'7MGNPi%O' i'HP'M I G'#O i G 9 PG'8
-J P'GHM I P'MiO'M %O' PG GNMiKP' I MOP'H I'7 PN+
XH KH'A PO' I P'APMJNT' i'H G'MiQ T'PTPG'8
&M i'MOOPO'N 'M P'NHMN' G MiU D
-P 7 KP' 99'7 KP N' P 79 'NHP'AMiU+

N 99'GHP'piN PMNG'MiO'L PNN 9T'piN PMNG+
O 'N 'ML PNNT'PM'FGHP'NJipG'HP'NM9P8
N 99' G'HP'GJ99pi'GN 99'HP'9 %'G'MiO'7 PNG
% WN'K I G i'GHM I P'MiO'MiQP'MGHT'LM9P'8
piQ' PO'GHP'9 PG H I'APGN8 MiO'AP iQ' H NP+
"P'APGN' G APNNP %O' NH'MI P'OP9 QHN+

/ U H 'HP'KMi'GHP'KMii N'KH GP'AJN'9 P'8
#iO'AT'HP'7M ' II NM9'HMiO'GHP'G PM G
O I'H G'G 7N'A G I'ip P'N ' pI P+
99'HP'NMUP'N JKP' NH'HP'K iNPiO iQ'NPM G+
XH KH'9 iQ'HM P' M i%O' I MU iQ'HP 'KHPPUG M99' PN8
#iO' ip'G PPN'U GG'GHM99'LMT'NH G'K JiN9PGG'OPAN+

L i'NH G'L I GP'O O'HP' M GP'H G'KH i+
/ UP'M'O P OMLLP'@LPP iQ'NH JQH'M' M P+
XH 'Api Q'9 U%O' i'OJKUG'MG']J KU9T' i 8
' 77P G'HP'N 'Q P' HMN'GHP'O O'K M P8

6' HP'X IMi'"MNP HM P'MK ILM G i' 7'NHP' IJNMA 9 NT' 7'7 NJiP' NH'NH G
i IA9P' MNP A O'8S6' HP' I GP T' 7 IMi' IMT'7 NGT'AP'K ILM PO'N 'M'O OMLLP '
H ' HPi'GHP'G JiOP' MNP 'LMGN' J'G QHN'MiO' iOPPO'KMi'GPPI'i I P'N 'JG'
GPG'MQM i'GHMUPG'AJN'HP GP97'MiO' G'NHF'GMI P'GHP' MG+%%
' 5 2' G GM O'N 'AP'HP P'JGPO'MG 8"' ' X P'HM P GJA6P]JPiN9T S

V3"P' 8 '"' ' iO G'7M iN9T'GHP'JLHPM PNH+R

JN'NHP' 2 i$0 %M P'NHP'6'AJJP' iO G+R

6' HP'NPiOP'GL iQ'JL i'NHT'NPILN iQ'9L'
MI'NHT' QHN'HMiO'GP CP'9 P'JL i'NHT'9P7N\
HPi' 'NHTGP97'AP' 7'NHTGP97' PEPKNPO+
NPM9'NH iP' i'7 PPO I'MiO'K ILM i'NHP7N+
M K GGJG G'H I GP97'H I GP97'7 G U+
#iO'O PO'N'U GG'H G'GHMO ' i'NHP'A U+

6 KHPG'M P'IMOP'N'9 QHN'EP P9G'N ' PM +
5M iN PG'N 'NMGNP'7 PGH'APMJNT'7 'NHP'JGP+
"P AG'7 'NHP 'GIP99'MiO'GMLLT'L9MiNG'N 'APM 8
H iQG'Q iQ'N 'NHPI GP9 PG'M P'Q NH%G'MAJGP'
PPOG'GL iQ'7 I'GPPOG'MiO'APMJNT'A PPOPNH'APMJNT+
H J' MGN'APQ N SN 'QPN' N G'NHT'OJNT+

6' L i'NHP'PM NH%G ik PMGP' HT'GH J9OGN'NH J'7PPOD
i9PGG'NHP'PM NH' NH'NHT' ik PMGP'AP'7PO'\

6' JKH'AJN'IT'9LG' NH'NH GP'7M '9LG' 7'NH ip
@ H JQH'I iP'AP'i N'G '7M 'TPN'M P'NHPT' PO
HP'U GG'GHM99'AP'NH iP' i'MG' P99'MG' I ip' S
X HM'GPPGN'NH J' i'NHP'Q J1O'\H 9O'JL'NHT'HPMO8
/ U i'I iP'PTPAM99G'NHP P'NHT'APMJNT'9 PG
HPi' HT'i N'9LG' i'9LG'G iKP'PTPG i'PTPG'\

6'# N'NH J'MGHMI%O'N 'U GG'\NHPi' iU'MQM i+
#iO'2' 99' iU'G 'GHM99'NHP'OMT'GPPI'i QHN8
/ P'UPPLG'H G' P P9G' HP P'NHP P'M P'AJN'N M i8
P'A 9O'N 'L9MT' J'GL N'G i N'G'i'G QHN
HPGP'A9JP PiO' 9PNG' HP P i' P'9PMi'
P P'KMi'A9MA'i 'Ui 'i N' HMN' P' IPMi+

6' JN'HP' 2 i$0 %M P'NHP'6'AJJP' iO G+R

T'9M ' 7 MNJ P'NH J'M N'A JIO'N 'A PPO
HM'NH IP' I MT'9 P' HPI'NH J'NHTGP97M N'OPMO'8
#IO'G ' I'GL NP' 7OPMNH'NH J'O GN'GJ P+
2I'NHMN'NHT'9 UPIPGG'GN 99' G 9P7N'M9 P+R

T'NH G'NHP'9 P G KU']JPPI'APQMI'N 'G PMN+
O ' HP P'NHPT'9MT'NHP'GHMO 'HMO'7 G U'NHPI+
#IO' NMI' PO'D I'NHP I O OMT'HPMN+
X NH'AJ I IQ'PTP'O O'H N9T' P 9 U'NHPI'8
X GH IQ'#O I G'HMO'H G'NPMI'N 'QJ OP+
'HP' P P'9 UP'H I 'MIO'AT' PIJG%G OP+

#IO'I '#O I G' NH'M'9MCT GL QHN+
#IO' NH'M'HPM T'OM U'O G9 U IQ'PTP+
" G'9 P IQ'A G' %P HP9I IQ'H G'7M 'G QHN+
/ UP'I GNT' ML J G' HPI'NHPT'A9 N'NHP'GUT+
J IQ'H G'KHPPUG'K PG'6'O P'I 'I P' 79 P'[
HP'GJI'O NH'AJ I'IT'7MKP'8 2'I JGN'PI P+R

6'#H'IPR']J NH' PIJG'6T JIQ'MIO'G 'JIU IO'[
X HM'AM P'PWKJGPG IMU%GN'NH J'N 'APQ IP'[
2%9'G QH'KP9PGN M9'A PMNH' H GP'QPIN9P' IO'
HM99'K 9'NHP'HPMN' 7'NH G'OPGKPIO IQ'GJI#
2%9' IMUP'M'GHMO '7 'NHPP' 7'IT'HM G'8
27'NHPT'AJ I'N '2%9']JPIKH'NHPI' NH'IT'NPM G+

6 HP'GJI'NHMN'GH IPG'7 I'HPM PI'GH IPG'AJN' M I+
#IO'9 '2'9 P'APN PPI'NHMN'GJI'MIO'NHPP'
HP'HPM N'2'HM P'7 I'NHPIKP'O NH'9 NN9P'HM I
H IP'PTP'OM NG'7 NH'NHP'7 P'NHMN'AJ IPNH'IP'8
#IO' P P'2'I N' NM9'97P' P P'O IP+
PN PPI'NH G'HPM PI9T'MIO'PM NH9T'GJI+

6'# N'NH J' AOJ MNP'79 NT'HM O'MG'GNPP9+
MT' I P'NHMI'79 IN'7 'GN IP'MN' M I' P9PINPNH'\
N'NH J'M IM%G I'MIO'KMIGN'I N'7PP9
X HMN'%N G'N '9 P'\H ' MIN' 7'9 P'N IPINPNH'\
1'HMO'NHT' I NHP'A 'IP'G 'HM O'M' I IO+

HP'HMO'I N'A JQHN'7 NH'NHPP'AJN'O PO'JIU IO+D

6 X HMN'M I'2'NHMN'NH J'GH J9OGN'K INPIP'IP'NH G'\
1' HMN'Q PMN'OMIQP'O P99G'JL I'IT'GJ N'\
X HMN' P P'NHT'9 LG'NHP' GP'7 'IP'L 'U GG'\
LPMU'7M 8 AJN'GLPMU'7M ' OG' '9GP'AP'1JN'
: P'IP' IP'U GG+'2%9Y'Q P' N'NHPP'MQM I+
#IO' IP'7 ' INP PGN' 7'NH J' 9N'HM P'N M I+

6O P'9 79PGG'L KNJ P'K 9O'MIO'GPIGP9PGG'GN IP+
XP99 LM INPO'O 9' IMQP'OJ99'MIO'OPMO+
NMNJP'K INPIN IQ'AJN'NHP'PTP'M9 IP+
H IQ'9 UP'M'IMI'AJN' 7'I ' IMI'A PO'8
H J'M N'I 'IMI'NH JQH' 7M'IMI%G K IL9PW I+
O 'IPI' 99 U GG'P PI'AT'NHP ' I'O PKN I+R

H G GMO' ILMN PIKP'KH UPG'HP'L9PMO IQ'N IQJP' '
X NM'AM P'PWKJGPG IMU%GN'NH J'N 'APQ IP'[
&PO'KHPPUG'MIO'7 P T'PTPG A9MCP'7 NH'HP' IQ8
P IQ'EJOQP'I'9 P'GHP'KMII N' QHN'HP'KMJGP'
#IO'I 'GHP' PPLG'MIO'I 'GHP'7M I' J9O'GLPMU
#IO'I 'HP'G AG'O'HP' INPIO I PING@ A PMU+

IPN I PG'GHP' GHMUPG'HP'HPMO'MIO'NHPI'H G'HMIO+
'QMCPNH'GHP' I'H I'I ' I'NHP'Q JIO8
IPN I PG'HP'M I G' I7 9O'H I'9 UP'M'AMIO'8
HP' JQO'HP' 99 I N' I'HP'M I G'AP'A JIO'8

' 6 $ ' 9N I'MLL9 PG'NHP'GM IP'PL NHPN' I'NHP'GM IP' MT % I'H G' YY5 K
N IP'7'5 KP'RS6 HP'OPG P'MIO'9 IO'IQ'N 'LJN' 77MI') '2'G 9 NM IPGP
AT'JI N IQ'MI NHP'A OT'AJN'I N NH JN'M N'G J9'N 'H G' I'NHP'KHPP 7J9'G K PNT'
7 PO9 KU+ND
F ' G HP P'JGPO' I'NHP'GPIGP' 7 $ 8' % SMG M9 IP'PWL9M IG' N'
6' INPILNJ JG9T'P7JGP'NH G'7M J +R

D %SDINPIN IG+ ' I'1NHP99 ' #KN'2 +' K+'22+ S62'HM P'GM O'
I NH IQ' AJN' HMN'2'L NPGN ' 7'O IQ+R' HP' O'K IN I JPO'N 'AP'
JGPO'9 IQ'MTNP'NHP'N I P' 7 HMUGLP P+
F % SNPIOP IPGG+

SMNN PO+
' 9N I'MLL9 PG'NHP'GM IP'PL NHPN' I'NHP'GM IP' MT % I'H G' YY5 K
N IP'7'5 KP'RS6 HP'OPG P'MIO'9 IO'IQ'N 'LJN' 77MI') '2'G 9 NM IPGP
AT'JI N IQ'MI NHP'A OT'AJN'I N NH JN'M N'G J9'N 'H G' I'NHP'KHPP 7J9'G K PNT'
7 PO9 KU+ND
F ' G HP P'JGPO' I'NHP'GPIGP' 7 $ 8' % SMG M9 IP'PWL9M IG' N'
6' INPILNJ JG9T'P7JGP'NH G'7M J +R

D %SDINPIN IG+ ' I'1NHP99 ' #KN'2 +' K+'22+ S62'HM P'GM O'
I NH IQ' AJN' HMN'2'L NPGN ' 7'O IQ+R' HP' O'K IN I JPO'N 'AP'
JGPO'9 IQ'MTNP'NHP'N I P' 7 HMUGLP P+
F % SNPIOP IPGG+

F - %%O SM KHPO+
'G'HP P'JGPO'MG'M'L9J M9'I JI+ 2I'NP I'1NHP99 '#KN'22+ K+'2+'@GPP
L+') ' P'EJGN 7 PO'NHP'MO LN I' 7'M IP ' PMO IQS
6 HP' IO GHMU%O'GJ QP' NH'H QH'MIO'I IGN JG . S'
JL I'NHP'AP9 P7'NHMN' I'NH G'9 I P' P'HM P'M'L KNJ P' H KH' MG L AMA9T'GJQQPGNPO
AT'N P'I A9P'LMGGMQP' I' ? A' S6'"MGNG'NH J'Q PI'NHP'H GP'GN PIQNH'\' "MGN
NH J'K9 NHPO'H G IPKU' NH' NHJIOP \R' HP'LMGGMQP'AP7 P'JG GH G NHMN'NHP
IMQP' MG'7MI 9M'N 'NHP' I IO' 7 HMUGLP P' 7'NHP' IMEPGNT' 7'NHP' M H GP
P PKN IQ'H G IMIP'JIOP'NHP' I79JPIKP' 7'LMGG i+
' H G' G M'7M IN'PKH ' 7'NHP' IOP 7J9'LMGGMQP' I'? A S6 "P'GM NH' IQ'NHP
N J I LPNG' "M'H M[R

HP'HMO'I N'A JQHN'7 NH'NHPP'AJN'O PO'JIU IO+D

6 X HMN'M I'2'NHMN'NH J'GH J9OGN'K INPIP'IP'NH G'\
1' HMN'Q PMN'OMIQP'O P99G'JL I'IT'GJ N'\
X HMN' P P'NHT'9 LG'NHP' GP'7 'IP'L 'U GG'\
LPMU'7M 8 AJN'GLPMU'7M ' OG' '9GP'AP'1JN'
: P'IP' IP'U GG+'2%9Y'Q P' N'NHPP'MQM I+
#IO' IP'7 ' INP PGN' 7'NH J' 9N'HM P'N M I+

6O P'9 79PGG'L KNJ P'K 9O'MIO'GPIGP9PGG'GN IP+
XP99 LM INPO'O 9' IMQP'OJ99'MIO'OPMO+
NMNJP'K INPIN IQ'AJN'NHP'PTP'M9 IP+
H IQ'9 UP'M'IMI'AJN' 7'I ' IMI'A PO'8
H J'M N'I 'IMI'NH JQH' 7M'IMI%G K IL9PW I+
O 'IPI' 99 U GG'P PI'AT'NHP ' I'O PKN I+R

H G GMO' ILMN PIKP'KH UPG'HP'L9PMO IQ'N IQJP' '
X NM'AM P'PWKJGPG IMU%GN'NH J'N 'APQ IP'[
&PO'KHPPUG'MIO'7 P T'PTPG A9MCP'7 NH'HP' IQ8
P IQ'EJOQP'I'9 P'GHP'KMII N' QHN'HP'KMJGP'
#IO'I 'GHP' PPLG'MIO'I 'GHP'7M I' J9O'GLPMU
#IO'I 'HP'G AG'O'HP' INPIO I PING@ A PMU+

IPN I PG'HP' NG'MG'7'HP'N 9O'NHP'GMPLG+
X NH'QPIN9P' IMEPGNT'MIO' I OPGN'L OP8
#I I'HP' PM G'JL QHN'KJ PNG'MIO'9PMLG
#G' H'GH J9O'GMT'9'[FNHJG I T'GN PIQNH' G'N PO8
#IO'NH G'2'O 'N'KMLN MNP'NHP'PTP'
1'NHP'7M 'A PPOP'NHMN' G GMIO IQ'AT+

' 6 $ ' 9N I'MLL9 PG'NHP'GM IP'PL NHPN' I'NHP'GM IP' MT % I'H G' YY5 K
N IP'7'5 KP'RS6 HP'OPG P'MIO'9 IO'IQ'N 'LJN' 77MI') '2'G 9 NM IPGP
AT'JI N IQ'MI NHP'A OT'AJN'I N NH JN'M N'G J9'N 'H G' I'NHP'KHPP 7J9'G K PNT'
7 PO9 KU+ND
F ' G HP P'JGPO' I'NHP'GPIGP' 7 $ 8' % SMG M9 IP'PWL9M IG' N'
6' INPILNJ JG9T'P7JGP'NH G'7M J +R

D %SDINPIN IG+ ' I'1NHP99 ' #KN'2 +' K+'22+ S62'HM P'GM O'
I NH IQ' AJN' HMN'2'L NPGN ' 7'O IQ+R' HP' O'K IN I JPO'N 'AP'
JGPO'9 IQ'MTNP'NHP'N I P' 7 HMUGLP P+
F % SNPIOP IPGG+

F - %%O SM KHPO+
'G'HP P'JGPO'MG'M'L9J M9'I JI+ 2I'NP I'1NHP99 '#KN'22+ K+'2+'@GPP
L+') ' P'EJGN 7 PO'NHP'MO LN I' 7'M IP ' PMO IQS
6 HP' IO GHMU%O'GJ QP' NH'H QH'MIO'I IGN JG . S'
JL I'NHP'AP9 P7'NHMN' I'NH G'9 I P' P'HM P'M'L KNJ P' H KH' MG L AMA9T'GJQQPGNPO
AT'N P'I A9P'LMGGMQP' I' ? A' S6'"MGNG'NH J'Q PI'NHP'H GP'GN PIQNH'\' "MGN
NH J'K9 NHPO'H G IPKU' NH' NHJIOP \R' HP'LMGGMQP'AP7 P'JG GH G NHMN'NHP
IMQP' MG'7MI 9M'N 'NHP' I IO' 7 HMUGLP P' 7'NHP' IMEPGNT' 7'NHP' M H GP
P PKN IQ'H G IMIP'JIOP'NHP' I79JPIKP' 7'LMGG i+
' H G' G M'7M IN'PKH ' 7'NHP' IOP 7J9'LMGGMQP' I'? A S6 "P'GM NH' IQ'NHP
N J I LPNG' "M'H M[R

HP'HMO'I N'A JQHN'7 NH'NHPP'AJN'O PO'JIU IO+D

6 X HMN'M I'2'NHMN'NH J'GH J9OGN'K INPIP'IP'NH G'\
1' HMN'Q PMN'OMIQP'O P99G'JL I'IT'GJ N'\
X HMN' P P'NHT'9 LG'NHP' GP'7 'IP'L 'U GG'\
LPMU'7M 8 AJN'GLPMU'7M ' OG' '9GP'AP'1JN'
: P'IP' IP'U GG+'2%9Y'Q P' N'NHPP'MQM I+
#IO' IP'7 ' INP PGN' 7'NH J' 9N'HM P'N M I+

6O P'9 79PGG'L KNJ P'K 9O'MIO'GPIGP9PGG'GN IP+
XP99 LM INPO'O 9' IMQP'OJ99'MIO'OPMO+
NMNJP'K INPIN IQ'AJN'NHP'PTP'M9 IP+
H IQ'9 UP'M'IMI'AJN' 7'I ' IMI'A PO'8
H J'M N'I 'IMI'NH JQH' 7M'IMI%G K IL9PW I+
O 'IPI' 99 U GG'P PI'AT'NHP ' I'O PKN I+R

H G GMO' ILMN PIKP'KH UPG'HP'L9PMO IQ'N IQJP' '
X NM'AM P'PWKJGPG IMU%GN'NH J'N 'APQ IP'[
&PO'KHPPUG'MIO'7 P T'PTPG A9MCP'7 NH'HP' IQ8
P IQ'EJOQP'I'9 P'GHP'KMII N' QHN'HP'KMJGP'
#IO'I 'GHP' PPLG'MIO'I 'GHP'7M I' J9O'GLPMU
#IO'I 'HP'G AG'O'HP' INPIO I PING@ A PMU+

IPN I PG'HP' NG'MG'7'HP'N 9O'NHP'GMPLG+
X NH'QPIN9P' IMEPGNT'MIO' I OPGN'L OP8
#I I'HP' PM G'JL QHN'KJ PNG'MIO'9PMLG
#G' H'GH J9O'GMT'9'[FNHJG I T'GN PIQNH' G'N PO8
#IO'NH G'2'O 'N'KMLN MNP'NHP'PTP'
1'NHP'7M 'A PPOP'NHMN' G GMIO IQ'AT+

F - %%O SM KHPO+
'G'HP P'JGPO'MG'M'L9J M9'I JI+ 2I'NP I'1NHP99 '#KN'22+ K+'2+'@GPP
L+') ' P'EJGN 7 PO'NHP'MO LN I' 7'M IP ' PMO IQS
6 HP' IO GHMU%O'GJ QP' NH'H QH'MIO'I IGN JG . S'
JL I'NHP'AP9 P7'NHMN' I'NH G'9 I P' P'HM P'M'L KNJ P' H KH' MG L AMA9T'GJQQPGNPO
AT'N P'I A9P'LMGGMQP' I' ? A' S6'"MGNG'NH J'Q PI'NHP'H GP'GN PIQNH'\' "MGN
NH J'K9 NHPO'H G IPKU' NH' NHJIOP \R' HP'LMGGMQP'AP7 P'JG GH G NHMN'NHP
IMQP' MG'7MI 9M'N 'NHP' I IO' 7 HMUGLP P' 7'NHP' IMEPGNT' 7'NHP' M H GP
P PKN IQ'H G IMIP'JIOP'NHP' I79JPIKP' 7'LMGG i+
' H G' G M'7M IN'PKH ' 7'NHP' IOP 7J9'LMGGMQP' I'? A S6 "P'GM NH' IQ'NHP
N J I LPNG' "M'H M[R

JN' HPi'H G Q9JNN i'pTP'G '7J99' HMNH'7PO
" G' NHP'MQPING M 1'MN'9 UP'OP9 Q'HN'\
X H ' G G'7M i\'NHMN'OM P'i N'AP'G 'A 9O'
'N JKH'NHP'7 P'NHP' PMNHP'AP iQ'K 9O'\

6'"MO'2'i 'PTPG'AJN'PM G' I T'PM G' J9O'9 P'
HMN' i M O'APMJNT'MiO' i G A9P8
1 ' P P'2'OPM7'NHT' JN M O'LM NG' J9O' I P'
3MKH'LM N' i'I P'NHMN' P P'AJN'GPiG A9P8
H JQH'ip NHP'pTPG'i 'PM G'N 'HPM'i 'GPP+
4PN'GH J9O'2'AP' i'9 P'ATN JKH iQ'NHPP+

6' MT'NHMN'NHP'GPiGP' 7'PP9 iQ' P P'AP P7N' IP+
#iO'NHMN2'K J9O'i N'GPP'i 'HPM 'i 'N JKH+
#iO'i NH iQ'AJN'NHP' P T'G IP99' P P'9P7N' IP+
4PN' J9O'I T'9 P'N 'NHPP'AP'GN 99'MG' I JKH8
O '7 I'NHP'GN 99%M T' 7'NHT'7MKP'PWKP99 iQ
IPG'A PMNH'LP 7JI %O'NHMN'A PPOPNH'9 P'AT'G I P99 iQ+

6' JN'1' HMN'AMi]JPN' P N'NH J'N 'NHP'MNGNP+
p iQ'iJ GP'MiO'7PPOP' 7NHP' NHP'7 J'[
X J9O'NHPT'i N' GH'NHP'7PMGN' I QHN'P P'9MGN
#iO'A O' JGL K i'O JA9P 9 KU'NHP'O '\
/PGN'?PM9 JGT'NHMN'G J'JI P9K I'P QJPGN
H J9O'AT'H 'GNPM9 iQ' i'O GNJ A'NHP'7PMGN+R

1ikP I P'NHP JAT K 9 J %O'L NM9' LPi%O+
XH KH'N 'H G GLPPKH'O O'H IPT'LMGGMQP'T P9O8
/ UP'M PO'I i'NHMN'P P'TPN'APN UPi%O'
X PKU'N 'NHP'GPMIMi'NPILPGN' 'NHP'7 P9O+

2 'i' HP' IPOT'7'3 G'#KN'222+'K+'22+'S
6'1'N M i'IP'i N'G PPN' NH'NHT'i NP
'O i'IP'i'NHT'G GP'79 O' 7NPM G8
iQ'% '7 'NTGP97'MiO'2' 99O NP+R
%F'8%'G HP P'JGPO'i'NHP'GPiGP'7i ' ''' % %' G G IP HMN'
F HP'i8 % % M P O JAN9PGG NHP'PTP9 OG'AJN'NHP'PL NHPN''' ' G
GMN 9 iQ+'XP'IJGN'PIPIAP'NHMN' HMUGLP P'HMG'OPGK APO' 9PNG MG
6' PPN'MHI'NHP 9 OG' 7'2J %G PTPG+R
HP'L L PNT'7NH G PL NHPN' G 7J99T i N KPO' AT'JG i' TIAP9 ip'#KN'22+'K+'22+'
L+')+

6'XHMN[KMiGN'NH J'NM9U R']J NH'GHP'6HMGN'NH J'N'N iQJP'\
' J9O'NH J'HMOGN'i N' '2'HMO'i 'HPM iQ[
HT'IP I M O%G KP'DHMNH'O ip'I P'O JA9P' iQ8
L7' ' 7

'N 'GHPLHP OG' P'JiN 'NHP'A OG
:JGNG'MiO'7 J9'79M GDN 'HP O I pi'MiO'N 'HP OG+

H G 99'L PGMQP'MO GPO9T'GHP'I M UPNH'
3 pi'MG'NHP' iO'G HJGH%O'AP7 P'N M ipNH+
1 'MG'NHP' 97O NH'Q i'AP7 P'HP'AM UPNH+
1 'MG'NHP'AP T'A PMUG'AP7 P'N'GNM ipNH
1 '9 UP'NHP'OPMO9T'AJ99PN' 7M'QJi
" G I PMi iQ'GN JKU'HP'P P'H G' OG'APQJi+

#iO'MH G'9 U'GHP'79MN9T'7M99PNH'O i+
O '9 UG U 99'9 P'MiO'9 P'AT'9 UG' P PNH'
#'GI 9P' PKJ PG'NHP' JiO iQ' 7M'7 i+
JN'APGGPO'AMiU JL'N'NHMN'AT'9 P'G 'NH PNH'[
HP'G 99T'A T'AP9 P iQ'GHP' G OPMO
9ML'HP'LM9P'KHPPU'N 99'K9MLL iQ' IMUPG' N' PO8

#iO'M99 M I MC%O'A MUP' 77H'G'9MNP' iNPiN$
O 'GHM L9T'HP'O O'NH iU'N ' PL PHPiO'HP +
XH KH'KJii iQ'9 P'O O' NN 9T'L P piN
OM '7M99'NHP' N'NHMN'KMi'G ' P99'OP7PiO'HP [
O ' i'NHP'Q MGG'GHP'9 PG'MG'GHP' P P'G9M i
99'H G'A PMNH'A PMNHPNH'9 7P' i'HP 'MQM i+

'P' iQG'HP'i GP'HP'GN UPG'HP ' i'NHP'KHPPUG+
"P'APiOG'HP'7 iQP G'H 9OG'HP 'LJ9GPG'HM O8
"P'KHM7PG'HP'9 LG'M'NH JGMiO' MTG'HP'GPPUG'
'IPiO'NHP'HJ N'NHMN'H G'JiU iOIPGG IM %O'8
"P'U GGPG'HP 8 MiO'GHP'AT'HP'Q O' 99+
X 99'ip p' GP'G 'HP' 99'U GG'HP'GN 99+

HP'i QHN' 7G 'i ' G NJ i%O'N 'OMT8
"P'N 'A9JP' iO G'FM iN9T'GHP'JLHPM PNH
/ UP'NHP'7M 'GJi' HPi' i'H G'7 PGH'M MT'
"P'KHPP G'NHP'I i'MiO'M99'NHP' 9O' P9 P PNH'N

HMN NHP GNM QMCP G'HM iQ N i'OPMNH
MT GMT NHP L9MQJP G AMi GH%O AT NHT A PMNH+

S-J p'9LG'G ppN GPM9G i'lTG 7N9LG lL iNPO'
XHMN AM QM iG lMT?' lMUP'GN 99N 'AP GPM9 iQ\
'GP99 lTGP97?'KMi'AP p99K iNPiNPO+
'NH J 9N AJT'MiO'LMT'MiO JGP Q O OPM9 iQ 8
XHKL J GN QPNHP'Q9JPO '7M99N 'NHP'PM NH+
@ HP '9LG N QPNHP'Q9JPO '7M99N 'NHP'PM NH+

']J kU 5PG P HMNH'KMJQHN'NHP'T p9O iQ'L pT
#iO'Q9JNN i 9 UP'GHP'7PPOG'TPN'ip p'7 99PNH'8
"p'9LG M P'K i]JP G'HG9LG APT+
-MT iQ' HMN MiG l'NHP'iGJ9NP' 99PNH'8
XH GP' J9NJ P'NH JQHN'O NH'L NKH'NHP'L KP'G 'HQH'
HMN'GHP' 99'O M 'HG9L% KH'N PMGJ P'O T+

#iO'HM iQ'7P9N'NHP'G ppNIPGG 7NHP'GL 9+
X NH'A9 iO7 9O'7J T'GHP'APQ iGN '7 MQP'8
"p'7MKP'O NH' ppU'MiO'GI UP'HP'A9 O'O NH'A 9'
#iO'KM p9pGG'9JGN'GN G'JL'M'OPGLP MNP'K J MQP'8
-9MiN iQ' A9 i'APMN iQ' pMG i'AMKU+
O QPNN iQ'GHM1P%G'LJ P'A9JGH'MiO'H i J %G MKU+

" N'7MiN'MiO' PM T' NH'HP'HM O'pIA MK iQ+
/ UP'M 9O'A O'AP iQ'NM1%O' NH'N 'IJKH'HMiO9 iQ+
1'MG'NHP'79PPN7 N' P'NHMN%G N %O' NH'KHMG iQ+
1'9UP'NHP'7 ' M O' i7MiN'GN 99%O' NH'OMiO9 iQ+
"P'i ' APT'MiO'i 'i'l P' pG GNPNH+
XH 9P'GHP'NMUPG'M99'GHP'KMi'i N'M99'GHP'9 GNPNH+

D "P'G iP'7NHP'IMiT'N MKPG' 7 HMUGLP P%G 9PQM9 GNJO PGSM'M JG i'N'
NHP'LPiM9NT'7 'i iLMTIPiN' HKH'7 IPO'NHP'K iON i' 7M I iPT A iO+
64 %%SK TPGG' 'AMGH7J9IPGG+
D HP'G 7N' MW'JL i' HKH'NHP'GPM9'MMNMKHPO'N'M9PQM9 iGN JIPiN' MG IL PGGPO'
PJJ PO'N 'AP'NPILP PO'AP7 P'NHP' IL PGG i' MG'IMOP'JL i' N+' 'OM9GNM'7
GMTG'7?JGN KP' HM99 S6'2'HM P'H I'M9 PMOT'NPILP iQ'APN PPi'IT'7 iQP'MiO'
IT'NHJIA'MiO'GH N9T' 99'2'GPM9' NH'H I+R
Y' S9 KPiGP+

' G GHP' i'NHP' p T'9 GNG' 79 p
"p'KHMIL i'I JNPO'7 'NHP'H N'piK JiNP
#99'G IMQ IM T'GHP'O NH'L p+
"P' 99'i N'IMiMQP'HP 'M9NH JQH'HP'I JiN'HP'C
HMN' GP'NHMI' MiNM9JG% G'HP'MiI T+
'K9L'39TG JI 'MiO'N '9MKU'HP'E T+
3 pi'MG'L 'A OG'OPKP %O' NH'LM iNPO'Q MLPG F
5 'GJ 7P N'AT'NHP'PTP'MiO'L ip'NHP'IM +
3 pi'G 'GHP'9MiQJ GHPNH'i'HP'I GHMLG+
#G'NH GP'L 'A OG'NHMN'HP9L9PGGAP PG'GM
HP' M I'p77PKNG H KH'GHP'i'H I'7iOG I GG iQ+
HP'GPPUG'N 'U iO9P' NH'K iN iJM9'U GG iQ+

XHPi'HP'OO'7 i'1'HMO'GHP'NHPi'QM P' p
JKH'ipKNM'7 I'H G9LG'GHP'HMO'i N'GJK%O+
O J9' OG'MiO'7 iG I JGN'i N' pLP9'N' 9 p 8
XHMN'NH JQH'NHP' GP'HM P'L KU9PG'TPN'%N G'LJJK%O'
XP P'APMJNT'JiOP'N piNT'9 KUG'UPLN'7MGN
4PN'9 P'A PMUG'NH JQH'MiO'L KUG'NHPI'M99'MN'9MGN+

O 'LNT'i 'GHP'KMi'i 'I P'OPNM i'H I'8
HP'L '7 9FL MTG'HP'NHMN'HP'I MT'OPLM N
HP'G PG 9 %O'i '9 iQP'N ' PGN M i'H I 8
OG'H I'7M P P99'MiO'9 U P99N'HP'HPM N
HP' HKH'AT' JL O%G'A 'GHP'O NH'L NPGN+
"P'KM PG'NHPiKP' iKMQPO' i'H G A PMGN+

6' ppN'A T R'GHP'GMTG'6'NH G'i QHN'2%99 MGNP' i'G +'
O 'IT'G KU'HPM N'K I IMiOG I iP'PTPG N ' MNKH+
P99'IP'9 P%G IMGNP '+GHM99' P'IPPN'N I '\
MT'GHM99' P'\GHM99' P'\ 9N'NH J'IMUP'NHP' IMNKH'R
"P'NP99G'HP'i'8N I 'HP'iNPiOG'
'HJiN'NHP'A M' NH'KP NM i' 7H G'7 PiOG+

X HMN' MW'G'7 CPi'AJN'O GG 9 PG NH'NPILP iQ+
#iO'T P9OG'MN'9MGN'N'P P T'9 QHN' IL PGG i'\D
HiQG' JN 7H LP'M P'K ILMGG%O' 7N NH' piNJ iQ+'
HP79T'i'9 P' H GP'9PM P' PWKPPOG'K II GG i'
#77PKN i'7MiNG'i N'9 UP'M'LM9P 7MK%O'K M O+
JN'NHPi' PG'APGN' HPi'I GN'H G'KH KP'G'7 M O+

XHPi'HP'OO'7 i'1'HMO'GHP'NHPi'QM P' p
JKH'ipKNM'7 I'H G9LG'GHP'HMO'i N'GJK%O+
O J9' OG'MiO'7 iG I JGN'i N' pLP9'N' 9 p 8
XHMN'NH JQH'NHP' GP'HM P'L KU9PG'TPN'%N G'L9JKU%O'
XP P'APMJNT'JiOP'N piNT'9 KUG'UPLN'7MGN
4PN'9 P'A PMUG'NH JQH'MiO'L KUG'NHPI'M99'MN'9MGN+

O 'LNT'i 'GHP'KMi'i 'I P'OPNM i'H I'8
HP'L '7 9FL MTG'HP'NHMN'HP'I MT'OPLM N
HP'G PG 9 %O'i '9 iQP'N ' PGN M i'H I 8
OG'H I'7M P P99'MiO'9 U P99N'HP'HPM N
HP' HKH'AT' JL O%G'A 'GHP'O NH'L NPGN+
"P'KM PG'NHPiKP' iKMQPO' i'H G A PMGN+

6' HP'A M [R']J NH'GHP' HP PMN'M'GJOOPi'LM9P+
/ UP'9M i'AP i'Q'GL PMO'JL i'NHP'A9JGH iQ' GP+
GJ LG'HP'KHPPUG'8 GHP'N pIA9PG'MN'H G'NM9P+
#iO' i'H G ipKU'HP'T U iQ'M I G'GHP'NH G
HP'G iUPNH'O i'GN 99'HMiQ iQ'AT'H G'ipKU+
"P' i'HP'AP99T'7M99G'GHP' i'HP'AMKU+

6' 1i'H G'A AMKU'HP'HMNH'M'AMNN9P'GPN'
17A GN9T'L UPG'NHMN'P P'NH PMN'H G'7 PG8

' PMOP' '7 HM GLP P'KMi'7 QPN'NHP'LMNH G', NH H KH'HP'HMG'PILQ TPO'
NH G PWL PGG i'i'MI NHP'L9MKPS6'#iO'ITL '7 9'HMiQ%O[R
EF HP'M99JG i'G N'NHP'LKNJ P' 7'fPJWG'IPiN iPO'AT -9iT+' XP'IMT'
AGP P'NHMN'NHP P' MG i'3iQ9 GH'N MiG9MN i'7-9iT'G'PM 9T'MG'NHP'OMNP'7'NH G
L'PI+

% 9 '-' %%SNHMN'M77 O'i 'HP9L+
EF 'SOPMO9T+

" G PTPG 9 UP Q9 IG GH iP' HPi'HP O NH'7 PN
" G Gi JN O QG GPLJ9KH PG HP P%P 'HP'Q pG8
5 GNPIL P iQ'QPiN9P'" P' i'H G OPG P+
#G'M 'MiO' MNP 'O 'MAMNP'NHP'7 P+

6' H G G J ' i7 IP 'NH G AMNP A PPO iQ'DGLT+
H G'KMiUP 'NHMN'PMNG'JL'9 P%G'NPiOP'GL iQ F
H G'KM T NM9P'O GGPiN JGEPM9 JGT+
HMN'G IPN IP'N JP'ip G'G IPN IP'7M9GP'O NH'A iQ'
i KUG MN' IT'HPM N'MiO' H GLP G' i'I iP'PM +
HMN' 7'2'9 P'NHPP'2'NHT'OPMNH'GH J9O'7PM

6'#iO'I P'NHMi'G 'L PGPiNPNH'N 'I iP'PTP'
HP'L KNJ P' 7Mi'MiQ T KHM7 iQ'A M +
iOP' H GP'GHM L'7MiQG' i'H G AMKU'O NH'9 P'
#i' IMQP'9 UP'NHTGP97'M99'GNM i%O' NH'Q P'8
XH GP'A9 O'JL i'NHP'7 PGH'79 P G Ap iQ'GHPO'
5 NH'IMUP'NHPI'O L' NH'Q P7'MiO'HMiQ'NHP'HPMO+

6'XHM'GH J9O'2'O 'GPP iQ'NHPP'G 'iOPPO+
HMN'N pIA9P'MN'NHP' IMQ iMN i'\
HP'NH JQHN' 7 N'O NH'IMUP'IT'7M iN'HPM N'A9PPO+
#iO'7PM'O NH'NPMKH' N'O iMN i'
2'L LHPGT'NHT'OPMNH'IT'9 iQ'G +
27'NH J'piK JiNP' NH'NHP'A M'N I +

6' JN'7'NH J'ippOG' 9N'HJiN'AP' J9%O'AT'IP8
iK JL9P'MN'NHP'N I JG'79T iQ'HM P+
1 'MN'NHP'7 W' HKH'9 PG'AT'GJAN 9NT+
1 'MN'NHP' P' HKH'i 'piK JiNP'OM P'

SL $ P' 7O iQ'HM I+ ' i' HP' PKHMiN' 7$ piKP'#KN'2 +
K+'2+
6 4 J'GNMiO' NH i'H G OMiQP +R

pp'i NP' i'NHMN'LMGGMQP' 9+'+L+')+
'3 SG QI 7 PG GN 7P+' G+'>J KU9T'GMTG'NHMN'? Hi'&JQAT'G i ' i$
F4- SAJO' 'T JiQ'GH N+
' %$ ' HP' Q'IM9'PON iG'PMO' %$ ' H G PMO iQ'G PNM ipO'AT'
M9 ip+

SL $ P' 7O iQ'HM I+ ' i' HP' PKHMiN' 7$ piKP'#KN'2 +'-M N'2+ S
K+'2+
6' ppH 'NH G P'K IP'K MiU iQ' i+R

F % %' HP' NP I'NHP'L9MKP' HP P'GHP'^NHP'HM P" G NMPNH'HP'7 I8 NHP'L9MKP'
@)=) S6 XP'NP I'NHP'L9MKP' HP P'GHP'^NHP'HM P" G NMPNH'HP'7 I8 NHP'L9MKP'
NH 'JQH' HKH'GHP'Q PG'N' P9 P7HP' MJG N+R
%+ PTGSO P99+
'4 $SK iG NPNH+
' 'D SK IIPiN+

D)%SD iQ#' 'i"piT2 +'-M N'2+ S
6' ppH 'NH G P'K IP'K MiU iQ' i+R

F % %' HP' NP I'NHP'L9MKP' HP P'GHP'^NHP'HM P" G :piN9pI piK%' #KMOPI T'R'
@)=) S6 XP'NP I'NHP'L9MKP' HP P'GHP'^NHP'HM P" G NMPNH'HP'7 I8 NHP'L9MKP'
NH 'JQH' HKH'GHP'Q PG'N' P9 P7HP' MJG N+R
%+ PTGSO P99+
'4 $SK iG NPNH+
' 'D SK IIPiN+

-J GJP'NHPGP'7PM 7J9'K PMNJ PG' %P'NHP'O iG+
#iO' i'NHT' P99 A PMNH%'O'H GP'UPPL' NH'NHT'H JiOG+

6'#iO' Hpi'NH J'HMGN' i'7 N'NHP'LJ A9 iO'HM P
M U'NHP'L ' PNKH'N' P GH N'DH G'N JA9PG+
" 'HP' JN JiG'NHP' iO'MiO' NH' HMN'KM P'
"P'K MiUG'FMiO'K GGPG' NH'M'NH JGMiO'O JA9PG
HP' IMiT'IJG NG'FNH JQH'NHP' HKH'HP'Q PG
O '9 P'KMi'K IIpiN'JL i'p p T' P+

6'XHP P'O O'2'9PM P'\RS6 'IMNNP' HP P R']J NH'HP8
6'/PM P'IP'MiO'NHPi'NHP'GN T'ML N9T'piOG
HP'i QHN' G GLPiN+RS6'XHT' HMN' 7NHMN'AR']J NH'GHP+
6'2'MI R']J NH'HP'6PWLPKNPO' 7'IT'7 piOG8
#iO'i '%N G OM U'MiO'Q iQ'2'GHM99'7M99+R
S2i'i QHN R']J NH'GHP'SOPG P'GPPG APGN' 7M99+

6' JN'7NH J'7M99' 'NHPi' IMQ iP'NH G+
HP'PM NH' i'9 P' NH'NHPP'NHT'7 N iQ'N LG+
#iO'M99' G AJN'N ' A'NHPP' 7M U GG+
&'KH'L PTG IMUP'N JP'IPi'NH P PG8 G 'O 'NHT'9 LG'
MUPI OPGN'5 Mi'K9 JOT'MiO'7 9 i
/PGN'GHP'GH J9O'GNPM9'M'U GG'MiO'OP'7 G i+

6 ' 7NH G'OM U'i QHN'2'LP KP P'NHP' PMG i
TiNI M7 'GHMIP' AGKJ PG'HP'G 9 p'GH ip+
99'7 Q iQ'iMNJ P'AP'K iOPIi%O' 7N PMG i+
O 'GNPM9 iQ' I J9OG'7 I'HPM pi'NHMN' p p'O ip+
XHP p i'GHP'7 MI%O'NHPP' i'H QH'HPM pi%G OPGL NP+
'GHMIP'NHP'GJi'AT'OMT'MiO'HP'AT'i QHN+

[=L7‘ ‘ 7

6‘ ‘ i‘NTTGP97NHTGP97M N‘ IMOP‘M MT8
‘K GG‘NHP‘KJ JG‘ UIMiGH L‘ 7iMJ p
‘I GKH p7‘ GP‘NHMi‘K ‘9H IPA PO‘GN 7p+
#‘I 1iQ9P‘APMJNT‘ NH‘ i7 I N pG+
1‘NHP G‘ H GP‘OPGLP MNP‘HMiOG‘NHPI GP9 pG‘O ‘G9MT+
1‘AJNKHP G p‘HNHM‘ PM pG‘H G G i‘ 79 7p+
O J9‘KMiUP iQ‘ JGN‘HP‘H OOPi‘N pMGJ p‘7 PNG+
JN‘Q 9O‘NHMN%G‘LJN‘N ‘JGP‘I P‘Q 9O‘APQPNG+R ,

6‘ MT‘HPi R‘]J NH‘#O i‘6T J‘ 99‘7M99‘MQM i‘
2iN‘T J‘ O9P‘ p HMiO9PO‘NHPI P8
HP‘U GG‘2‘QM P‘T J‘ G APGN %O‘ i‘ M i+
#iO‘M99‘ i‘ M i‘T J‘GN P‘MQM iGN‘NHP‘GN PMI‘8
O ‘AT‘NH G‘A9MKU 7MK%O‘i QHN‘OPG p%G‘7 J9‘iJ GP+
4 J‘N PMN GP‘IMUPG IP‘9 UP‘T J‘ GP‘MiO‘ GP+

6‘27‘9 P‘HM P‘9PiN‘T J‘N piNT‘NH JGMiO‘N iQJPG+
#iO‘p p T‘N iQJP‘I P‘I iQ‘NHMi‘T J‘ i‡
p NKH iQ‘9 UP‘NHP‘ MiN i‘IP I M O%G G iQG+
4PN‘7 I‘I ip‘PM‘NHP‘NPILN iQ‘NJip‘ G‘A9 i‘8
O ‘Ui ‘IT‘HPM N‘GNMiOG‘M IPO‘i‘I ip‘PM +
#iO‘ 99‘i N‘9PN‘M‘7M9GP‘G JiO‘piNP‘NHP P8

6‘/PG‘NHP‘OPKP iQ‘HM I iT‘GH J9O‘Ji‘
2iN‘NHP‘]J PN‘K9 GJP‘7IT‘A PMGN8
#iO‘NHPi‘IT9 NN9P‘HPM N‘ P P‘]J NP‘JiO ip+
2i‘H G‘APOKMHIAP‘N ‘AP‘AM %O‘ 7‘ PGN+
‘9MOT‘i 8 IT‘HPM N‘9 iQG‘i N‘N ‘Q Mi+
JN‘G JiO9T‘G9ppLG‘ H 9P‘i ‘ N‘G9ppLG‘M9 ip+

6‘XHM‘HM P‘T J‘J Q%O‘NHMN‘2‘KMii N‘ pL P‘\
HP‘LMNH‘ G GI NH‘NHMN‘9PMOPNH‘ i‘N ‘OMiQP 8

‘ SI MO‘ ‡ $
M SOPGN TPO+
M SQ P7+
‘ S9M i‡ MIOPi‘OPGK APG M 9M i‘MG‘M‘L9M i‘MI iQ N PPG‘MiO‘NHP‘
PL NHP‘)K i7 IG NH G pWL9MiMN i‡ XP‘HM P GJKH‘M GKPiP‘i‘ "pi T‘ 2+‘
-M N‘222+‘#KN‘222+

6‘ iOP‘NH G‘NH KU Q O i‘A MUP‘ P%‘GH JO‘ J GP9 pG‘
O ‘NH JQH‘NH G‘9MJiO‘Mi i‘NHP‘OPP‘ 99‘K IP+R

2‘HMNP‘i N‘9 p‘AJN‘T J‘OP KP‘i‘9 p+
HMN‘9PiOG‘PIA MKPIPiNG‘JiN‘‘p p T‘GN MiQP +
4 J‘O‘ N‘7 ‘ iK PMGP8 1‘GN MiQP‘PWKJGP‘[
XHPi‘ PMG i‘ G‘NHP‘AM O‘N ‘9JGN%G‘MAJGP+

6‘ M99‘N‘i N‘9 p‘7 ‘9 P‘N ‘HPM pi‘ G‘79PO+
iKP‘G PMN iQ‘9JGN‘ +J PM NH‘JGJ L%O‘H G‘iM I P8
iOP‘ H GP‘G IL9P‘GPI A9MiKP‘HP‘HMNH‘7PO‘
L i‘7 PGH‘APMJNT‘A9 NN iQ‘N‘ NH‘A9MI P8
XHK‘NHP‘H N‘NT MiN‘GNM iG‘MiO‘G i‘AP PM PG+
#G‘KMNP L 99M G‘O ‘NHP‘NPiOP ‘9PM PG+

6‘/ P‘K I7 NPNH‘9 UP‘GJiGH iP‘M7NP ‘ M i+
JN‘9JGN%G‘P77PK‘N‘G‘NP I LPGN‘M7NP ‘GJi8
/ P%G‘QPiN9P‘GL iQ‘O NH‘M9 MTG‘7 PGH‘ PIM i+
/JGN%G‘ iNP‘K IPG‘P P‘GJI I P‘HM97‘AP‘O iP+
/ P‘GJ 7PNG‘i N8 9JGN‘9 UP‘M‘Q9JNN i‘O PG‘
/ P‘G M99‘N JNH‘8 9JGN‘7J99‘ 7‘7 QPO‘9 PG+

6‘ P‘2‘K J9O‘NP99‘AJN‘I P‘2OM P‘i N‘GMT‘8
HP‘NPWN‘G 9O‘NHP‘ MN ‘N ‘Q ppi+
HP P7 P‘ i‘GMOiPGG‘i ‘2‘ 99‘M MT8
T‘7MKP‘G 7J99‘ 7GHMIP‘8 IT‘HPM N‘ 7NPPi8 F
iP‘PM G‘NHM‘N‘ T J‘XMiN i‘NM9U‘MNNPiOPO+
5 ‘AJI‘NHPIGP9 PG7 ‘HM iQ‘G ‘ 77PiOPO+R

X NH‘NH G‘HP‘A PMUPNH‘7 I‘NHP‘G PPN‘PIA MKP‘
17‘NH GP‘7M ‘M I G‘ HKH‘A JiO‘H I‘N ‘HP‘A PMGN+‘
#iO‘H I P M O‘NH JQH‘NHP‘OM U‘9MJiO‘D JiG‘MLMKP8
/PM PG/ P‘JL i‘HP‘AMKU‘OPPL9T‘O GN PGG%O+
/ U‘H ‘N‘A QHN‘GNM‘GH NPNH‘7 I‘NHP‘GUT+
‘Q9 OPG‘HP‘ i‘NHP‘i QH‘N‘7 I‘ PiJG%PTP8

X H KH‘M7NP‘H I‘GHP‘OM NG‘MG‘ iP‘ i‘GH P‘

HP 'K L JG GN PG' 7MPIN IPG'APQJI+
3IO' NH JN'MJO PIKP'MIO'M'IP P'O IP+

O ' H 'HMNH'GHP'N 'GLPIO'NHP'I QHN' NHM9+
JN' O9P'G JIOG' PGPIA9'IQ'LM MG NPG+
/ UP'GH 99 N IQJPO'NMLGNP'G'MIG P IQ'P P T'KM99+
X PMNH%O'JL' I'7MNM97 9OG'EJGN' I'H G' MT+
HP'7PM' HP P 7O NH'IMUP'H I'GHMUP'MIO'GHJOOP 8
3 PI'G 'NHP'N I JG'TP9L IQ' 7NHP'H JIOG'
#LLM9G'HP 'GPIGPG'MIO'HP 'GL QHN'K I7 JIOG+

O 'I 'GHP'UI G N' G I 'QPI9P'KHMGP+
JN'NHP'A9JIN'A M ' JQH'APM ' 9 I'L JO+
PKMJGP'NHP'K T' P1M IPNH' I' IP'L9MKP+
X HP P'7PM 7J99T'NHP'O QG'PWK9M I'M9 JO'
O IO IQ'NHP 'PIPIT'N 'AP'G 'KJ GN+
HPT'M99'GN M I'K J N%GT'XH 'GHM99'K LP'H I'7 GN+

H G O G I M9'K T' IQG'GMO9T' I'HP 'PM +
H JQH' H KH' N'PINP G'N 'GJ L GP'HP 'HPM N+
XH ' P K I P'AT O JAN'MIO'A9 O9PGG'7PM
X NH'K 9O LM9P'D PMUIPGG'IJ1AG'PMKH'7PP9 IQ'LM N'
/ UP'G 9O P G' HPI'NHP 'KMLNM I' IKP O NH'T P9O+
HPT'AMGP9T'79T'MIO'OM P'I N'GNMT'NHP'7 P9O+

HJG'GNMIOG'GHP' I'M'N P1A9 IQ'PKGNMGT8
99'KHPP IQ'JL'HP 'GPIGPG'G P O G1MT%OF
HP'NP99G'NHP1'%N G'M'KMJGP9GG'7MINMGT+
#IO'KH 9O GH'P 'NHMN'NHPT'M P'M7 M O8
OG'NHP1'9PM P']JMU IQ'A OG'NHP1'7PM'I 'I P'8S
#IO' NH'NHMN' O'GHP'GL PO'NHP'HJINPO'A M 8

?' i - '5MO MIKPNH+
' i "8, ' HP'HTLHPI'OPI N IQ'NHP'K IL JIO'MOEPKN P'G I M UPO' I'NHP'
Q IM9'PON I' 7')= +
G 7I 8"- 1;"' H G G'NHP'PMO IQ' 7NHP'PO N I' 7')= ‡ HP' Q IM9'HMG
6'M O G I MT9O+R
Z H
F K KJ1GLPKN I+

XH GP'7 NHT' I JNH'APLM INPO'M99' NH' PO' ,
/ UP' I 9U'MIO'A9 O'AP IQ' I IQ9PO'A NH'N QPNHP
"MNP7J9'O KP' 7'9 P R'@NHJG'KH OPG'GHP'5PMNH
6': I Q ii IQ'QH GN'PM NH%G I' HMN'O GN'NH J'I PMI'
'GN 79P'APMJNT'MIO'N 'GNPM9'H G'A PMNH+
XH ' HPI'HP'9 %O'H G'A PMNH'MIO'APMJNT'GPN'
:9 GG I'NHP' GP'GI99'N 'NHP' 9PN'\
JN'AMKU'PN PG'N ' MNP'NHP'A M'7 'I J NHP +

6'27'HP'AP'OPMO S1'I ' N'KMII N'AP+
PP IQ'H G APMJNT'NH J'GH J9OGN'GN UP'MN' N S
1'TPG' N' I MT8 NH J'HMGN'I 'PTPG'N 'GPP+
JN'HMNP7J99T'MN' MIO I'O GN'NH J'H N+
HT'I M U' G 7PPA9P'MQP8 AJN'NHT'7M9GP'OM N'
GNMUPG'NHMN'M I 'MIO'K9PM PG'MI' I7MI%G'HPM N+%

6'"MOGN'NH J'AJN'A O'AP M P'NHPI'HP'HMO'GL UP+
#IO'HPM IQ'H I'NHT'L P'HMO'9 GN'H G'FL P+
HP'5PGN I PG' 99'KJ GP'NHPP'7 'NH G'GN UP'8
HPT'A O'NHPP'K L'M' PPO'NH J'L9JK U%GN'M'79 P
/ P%G'Q 9OPI'M 'MN'H I'GH J9O'HM P'79PO
#IO'I N'5PMNH%G'PA I'OM N'N 'GN UP'H I'OPMO+%%

65 GN'NH J'O IU'NPM G'NHMN'NH J'L U%GN'GJKH' PPL IQ\'
X HMN' I MT'M'HPM T'Q 1MI'MO MINMQ'NHPP'\
XHT'HMGN'NH J'KMGN' IN 'PNP IM9'G9PPL IQ'
H GP'PTPG'NHMN'NMJQHN'M99' NHP'PTPG'N 'GPP'\
' MNJ P'KM PG'I N'7 'NHT' I NM9' Q J +
IKP'HP'APGN' U G' J I%O' NH'NHT' Q J +R

"P P' P K IP'MG' IP'7J99' 7OPGLM +
HP' M 9%OF'HP'PTP9 OG' H '9 UP'G9J KPG'GN LL%O

F '%7 ' %
E G P99'HMG]J NPO'N'LMGGMQ'7 I' MGG IQP %G 6 Q I' M NT R'M99JO IQ'
MG' HMUGLP P'HP P'O PG'N 'NHP'APMJN 7J9'7MA9P' 7' JL O'MIO'5PMNH'PWKHM Q IQ'
M G8S
6' N MIQP'M77PKN IL
JL O' P MO7J9'L LHPK PG
'GHP'MN'NHPGP'GMO'G QIG O M G JL'HP'A PMNH+
#N'MLLM N IG'G QIG'MIO'L O Q PG+
X HP P I' NH'7PM 7J9'PTPG'NHPT'9 IQ'HM P'QMC%O+
2I7JG IQ'NHP1' NH'O PMO7J9'L LHPK PG
#IO'U 99G IGNPMO' 7'Q IQ'9 7P+R
' 'G S9 P PO+
41/+ 27+ ' *

HP'K TGNMG'N OP'NHMN'7 1'HP'N 'KHPPUG'7M '
2I'NHP'G PPN'KHMIPG' 7HP'A G I'O LL%O8
JN'NH JQH'NHP'79 OQMNPG'A PNUG'NHP'G 9 P',M I'
#IO' NH'H G'GN IQ'K J GP'ALPIG'NHP1'MQM I+

1'H 'HP'PTPG'MIO'NPM G O O'9PIO'MIO'A [
"P'PTPG'GPPI'I'NHP'NPM G'NPM G'I'HP'PTP8
NH'K TGNM9G' HP P'NHPT' P %O'PMKH' NHP %G G '
'NHMN'7 PIO9T'G QHG'G JQHN'GN 99'N'O T8
JN'9 UP'M'GN 1T'OMT'I ' IO'I ' M I
QHG'O T'HP'KHPPUG'NPM G 1MUP'NHP1' PN'MQM I+

M MA9P'LMGG IG'NH IQ'HP'K IGNMIN' P
#G'GN IQ' H'GH J9O'APGN'APK 1P' 'Q P78
#99'PINP NM I%O'PMKH'LMGG I'9MA J G'G '
HMN'P P T'L PGPIN'G 'GPP1 PNH'KH P7
JN'I IP' G'APGN8 NHPI'E I'NHPT'M99'N QPNHP+
/ UP'1MIT'K9 JOG'K IGJ9N IQ'7 '7 J9' PMNHP +

T'NH G'7M' 77GHP'HPM G'G 1P'HJING1PI'H 99 '
#'IJ GP%G'G IQ'IP%P'L9PMG%O'HP'AMAP'G ' P99'
HP'O P' 1MQ'IMN I'GHP'OO'7 99 '
H'G'G JIO' 7H LP'O NH'9MA J'N 'PWLP9
O 'I ' P IQ'E T'A OG'HP' PE KP
#IO'79MNNP G'HP ' N' G'#O I G% KP+

X HP PMN'HP'NPM G'APQMI'N 'NJ I'NHP 'N OP' ;
P IQ'L G I%O' I'HP'PTP'9 UP'LPM 9G' I'Q9MGG8
4PN'G 1PN 1PG'7M99G'MI' PIN'O L'APG OP
X H KH'HP'KHPPU'I P9NG'M'GK I IQ' N'GH J9O'LMGG
' MGH'NHP'7 JG'7MKP' 7NHP'G9JNN GH'Q JIO+
XH ' G'AJN'O JIUPI' HPI'GHP'GPP1'PNH'O I%O+

HJG'H L IQ'NHMN'#O I G'G M9 P+
"P' MGH'GJGLPKN'GHP'O NH'PWNPIJMNP'8
+#IO'NHMN'H G'APMJNT' I MT'NHP'APNNP'NH P
X NH'5PMNH'GHP'HJ1A9T'O NH' I G 1JMNP8
P99G'H 1' 7N LH PG'GNMNJPG'N 1AG8 MIO'GN PG'
" G KN PG'H G'N J1LHG'MIO'H G'Q9 PG+

'? P R]J NH'GHP'6'H 'IJKH'M7 9 MG'2'
'AP'7GJKH'M' PMU'MIO'G 99T'I IO

6'$ G I N'I T'7MJ9N'NHP'A M'L U%O' I T'N IQJP'8
P' PMU%O' I'H I ' I G A9P'K I I MIOP 8
% G'HP'7 J9'K PMN'J P'NHMN'HMNH'O I P'NHPP' IQ8
2'O O'AJN'MKN'HP%G'MJNH ' 7NHT'G9MIOP'
: P7HMNH'N 'N IQJPG'MIO'IP P' IMI'TPN'
J9O' J9P'NHP1'A NH' NH JN'NPI' IPI%G N+R

1'H 'HP'PTPG'MIO'NPM G'O O'9PIO'MIO'A [
"P'PTPG'GPPI'I'NHP'NPM G'NPM G'I'HP'PTP8
NH'K TGNM9G' HP P'NHPT' P %O'PMKH' NHP %G G '
'NHMN'7 PIO9T'G QHG'G JQHN'GN 99'N'O T8
JN'9 UP'M'GN 1T'OMT'I ' IO'I ' M I
QHG'O T'HP'KHPPUG'NPM G'I MUP'NHP1' PN'MQM I+

#G'7M9K I'N'NHP'9J P'M MT'GHP'79 PG8
HP'Q MGG'GN LG'I N'GHP'N PMOG' I' N'G'9 QHN8
#IO' I'HP'HMGNP'JI7 NJIMNP9T'GL PG'
HP'7 J9'A M %G'K]JPGN' I'HP'7M 'OP9 QHN8
X H KH'GPPI'HP'PTPG'MG I J OP %O' NH'NHP' P +
/ UP'GNM G'MGHM1%O' 7OMT'NHP1 GP9 PG' NHO P +

1 'MG'NHP'GIM9' H GP'NPIOP'H IG'AP IQ'H N+'
H IUG'AMKU M O' I'H G'GHP99T'KM P' NH'LM I+'
#IO'NHP P'M99'G1 NHP %O'JL' I'GHMOP'O NH'G N'
/ IQ'MN7NP'7PM IQ'N 'K PPL'7 NH'MQM I'8
'MN'H G'A9 OT' P 'HP'PTPG'M P'79PO'
2IN 'NHP'OPPL'OM U'KMA IG' 7HP'HPMO8

6' T'N IQJP'KMII N'PWL PGG' IT'Q P77 ' IP'
#IO'TPN R']J NH'GHP' APH 9O'N '#O IG'OPMO[
T'G QHG'M P'A9 I'M MT'I T'GM9N'NPM G'Q IP'
IP'PTPG'M P'NJ I%O'N '7 P' IT'HPM N'N '9PMO8
"PM T'HPM N%G'9PMO' IP9N'MN' I IP'PTPG% PO'7 P[
'GHM99'2'O P'AT'O LG' 7H N'OPG P+

6 HM9KGLP'P' I'H G'Q PMNP' UG MG I N'MGHM1PO'N ' PKJ'N ' NHP'N PMGJ T' 7'
H G'PM 9T'NH JQHNG S

6'3WK99PIN' PNKH'[-P O N I'KMNKH' I T G J9'
JN'2'O '9 P'NHPP'[MIO' HPI'2'9 P'NHPP'I N'
HM G'G'K I P'MQM I+R

' 9 '' * '$ '' 8* G I N']JNP'NHP'GM I P' G'MG'$ '' * H KH' P'HM P'M9 PMOT'
I N KPO'M9NH JQH'NHP'JGJM9'GLP99 IQ' 7NH G O I'NHP'LMGGMQP'AP7 P'JG G'$ '' '

6 #9MG'L ' 9O' HMN'N PMGJ P'HMGN'NH J'9 GN[
XHMN'7MKP' P1M IG'M9 P'NHMN%G' NH'NHP' P iQ'\
XH GP'N iQJP' G 1JG K'i '\ HMN'KMIGN'NH J'A MGN'
PWP 'GM 'NHP'APMJNP JG'9 P T'NHMN'HP' P'
X NIPGG'NHP'PINP NM I1PIN'NHMN'HP'QM P'8
27'HP'O O'GPP'H G'7MKP' 'HT'NHPI?'2'UI '
"P'NH JQHN'N 'U GG'H 1 'MIO'HMNH'U 99%O'H 1'G +

6'% 'G'N JP'%N G'N JP8 NHJG' MG'#O i G'G9I'8
"P' MI'JL i'NHP'A M' NH'H G'GHM L'GLPM +
XH 'O O'i N' HPN'H G'NPPNH'MN'H 1'MQN I+
JN'AT'M'U GG'NH JQHN'N 'LP GJMOP'H 1'NHP P8
#IO'iJCC9 iQ' i'H G'79MIU'NHP'9 iQ'G ip'
HPMNH%O'JIM M P'NHP'NJGU' i'H G'G 7N'Q i+

6' IIPN'I ' P9HPiKP7 NH'i'K PMJ P' PM [
'GJi'i ' iO' 99 P P'GN P'N 'U GG'T J
"M iQ'i '7M 'DN'9 GP'T J'IPPO'i N'7PM 8
HP'GJI'O NH'GK i'T J'MIO'NHP' iO'O NH'H GG'T J'
JN' HPI'#O i G'9 %O'GJI'MIO'GHM L'M '
/J U%O'9 UP'N 'NH P PG'N ' A'H 1' 7H G'7M 8

6'#IO'NHP P7 P' J9O'HP'LJN'H G'A iIPN' i+
HP' iO' J9O'A9 'N' 77 $MIO'AP iQ'Q ip+
-9MT' NH'H G'9 KUG'8 NHPi' J9O'#O i G' ppL
#IO'GN M QHN' i'L NT' 7H G'NPiOP'TPM G+
HPT'A NH' J9O'GN P' H'7 GN'GH J9O'O T'H G'NPM G+

6' 'GPP'H G'7MKP'NHP'9 i' M9U%O'M9 iQ
PH iO'G 1PdHPOQP'APKMJGP'HP' J9O'i N'7PM'H 1
' PK PMNP'H 1 GP97' HPI'HP'HMNH'GJIQ+
HP'N QP ' J9O'AP'NM 1P'MIO'+QPi9T'HPM'H 1'
27'HP'HMO'GL UP'NHP' 97' J9O'9PM P'H G'L PT
#IO'ip p'7 QHN'NHP'G 99T'9M 1A'NHMN'OMT+

6'XHPI'HP'APHP9O'H G'GHMO ' i'NHP'A U+
HP'7 GHPG'GL PMO' i' N'NHP 'Q 9OPi'Q 99G'8
XHPI'HP' MG'AT'NHP'A OG'GJKH'L9PMGJ P'N U'
HMN'G 1P' J9O'G iQ'G 1P' NHP ' i'NHP ' A 99G'
X J9O'A iQ'H 1'1J9AP PG'MIO' LP PO'KHP PG8
"P'7PO'NHP1' NH'H G'G QHN'NHPT'H 1' %NH'AP PG+

6'2N'GHM99'AP'KMJGP' 7 M'MIO'O P'P piNG+
#IO'GPN'O GGPiG i'%W WN'NHP'G i'MIO'G P8
JAEPK'MIO'GP 9P'N 'M99'O GK iNPiNG+
#G'O T'K 1AJGN iG 1MNNP'GN'7 P8
NH'i'H G'L 1P'OPMNH'O NH'1T'9 P'OPGN T+
HPT'NHMN'9 P'APGN'NHP '9 PG GHM99'i N'piE T+R

6'JN'NH G'7 J9'Q 1'MIOJ KH i GI JNPO'DA M
XHMN'7MKP' P1M IG'M9 P'NHMN%G' NH'NHP' P iQ'\
XH GP'N iQJP' G 1JG K'i '\ HMN'KMIGN'NH J'A MGN'
PWP 'GM 'NHP'APMJNP JG'9 P T'NHMN'HP' P'
X NIPGG'NHP'PINP NM I1PIN'NHMN'HP'QM P'8
27'HP'O O'GPP'H G'7MKP' 'HT'NHPI?'2'UI '
"P'NH JQHN'N 'U GG'H 1 'MIO'HMNH'U 99%O'H 1'G +

6'% 'G'N JP'%N G'N JP8 NHJG' MG'#O i G'G9I'8
"P' MI'JL i'NHP'A M' NH'H G'GHM L'GLPM +
XH 'O O'i N' HPN'H G'NPPNH'MN'H 1'MQN I+
JN'AT'M'U GG'NH JQHN'N 'LP GJMOP'H 1'NHP P8
#IO'iJCC9 iQ' i'H G'79MIU'NHP'9 iQ'G ip'
HPMNH%O'JIM M P'NHP'NJGU' i'H G'G 7N'Q i+

6' IIPN'I ' P9HPiKP7 NH'i'K PMJ P' PM [
'GJi'i ' iO' 99 P P'GN P'N 'U GG'T J
"M iQ'i '7M 'DN'9 GP'T J'IPPO'i N'7PM 8
HP'GJI'O NH'GK i'T J'MIO'NHP' iO'O NH'H GG'T J'
JN' HPI'#O i G'9 %O'GJI'MIO'GHM L'M '
/J U%O'9 UP'N 'NH P PG'N ' A'H 1' 7H G'7M 8

6'#IO'NHP P7 P' J9O'HP'LJN'H G'A iIPN' i+
HP' iO' J9O'A9 'N' 77 $MIO'AP iQ'Q ip+
-9MT' NH'H G'9 KUG'8 NHPi' J9O'#O i G' ppL
#IO'GN M QHN' i'L NT' 7H G'NPiOP'TPM G+
HPT'A NH' J9O'GN P' H'7 GN'GH J9O'O T'H G'NPM G+

6' 'GPP'H G'7MKP'NHP'9 i' M9U%O'M9 iQ
PH iO'G 1PdHPOQP'APKMJGP'HP' J9O'i N'7PM'H 1
' PK PMNP'H 1 GP97' HPI'HP'HMNH'GJIQ+
HP'N QP ' J9O'AP'NM 1P'MIO'+QPi9T'HPM'H 1'
27'HP'HMO'GL UP'NHP' 97' J9O'9PM P'H G'L PT
#IO'ip p'7 QHN'NHP'G 99T'9M 1A'NHMN'OMT+

6'XHPI'HP'APHP9O'H G'GHMO ' i'NHP'A U+
HP'7 GHPG'GL PMO' i' N'NHP 'Q 9OPi'Q 99G'8
XHPI'HP' MG'AT'NHP'A OG'GJKH'L9PMGJ P'N U'
HMN'G 1P' J9O'G iQ'G 1P' NHP ' i'NHP ' A 99G'
X J9O'A iQ'H 1'1J9AP PG'MIO' LP PO'KHP PG8
"P'7PO'NHP1' NH'H G'G QHN'NHPT'H 1' %NH'AP PG+

6'2N'GHM99'AP'KMJGP' 7 M'MIO'O P'P piNG+
#IO'GPN'O GGPiG i'%W WN'NHP'G i'MIO'G P8
JAEPK'MIO'GP 9P'N 'M99'O GK iNPiNG+
#G'O T'K 1AJGN iG 1MNNP'GN'7 P8
NH'i'H G'L 1P'OPMNH'O NH'1T'9 P'OPGN T+
HPT'NHMN'9 P'APGN'NHP '9 PG GHM99'i N'piE T+R

6'2N'GHM99'AP'7 KU9P'7M9GP'MIO'7J99' 77MJO'8
JO'MIO'AP'A9MGNPO'i'M'A PMNH iQ' H 9P8
HP'A NN 1'L G i'MIO'NHP'N L' %P GN M %OF
X NH'G PPNG'NHMN'GHM99'NHP'N JPGN'G QHNG'APQJ 9P
HP'GN iQPGN'A OT'GHM99'N'1MUP'1 GN' PMU
N UP'NHP' GP'OJ1A'MIO'NPMKH'NHP'7 9N'GLPMU+

6'2N'+GHM99'AP'GLM iQ'MIO'N '7J99' 7' N+
PMKH iQ'OPK PL N'MQP'N 'N PMO'NHP' 1PMGJ PG8D
HP'GNM iQ' J7 MI'GHM99' N'UPPL'i']J PN
-9JKU'O i'NHP' KH'pi KH'NHP'L ' NH'N PMGJ PG
2N'GHM99'AP' MQ iQ' 1MO'MIO'G 99T' 1 9O
MUP'NHP' 9O'T JiQ'NHP' 9O'APK 1P'M'KH 9O+

6'2N'GHM99'GJGLPKN' HP P' G'i 'KMJGP' 77PM 8
2N'GHM99'i N'7PM' HP P' N'GH J9O'1 GN' 1 GN JGN8
2N'GHM99'AP' 1P K 7J9'MIO'N 'GP P P+
#IO'1 GN'OPKP iQ' HPI' N'GPP1G' 1 GN'EJGN8
-P P GP' E'GHM99'AP' HP P' N'GH G'1 GN'N M O+
-JN'7PM'N ' M9 J 'K J MQP'N 'NHP'K M O+

HJG' PM T' 7NHP' 9O'M MT'GHP'H PG+
#IO'T UPG'HP'G9 P'O PG8 AT' H GP'G 7N'M O'
HP 'I GN PGG'I JiNPO'NH JQH'NHP'PILNT'GU PG'
,2I'HP'9 QHN'KHM N'JJKU9T'G'K i PT%O+
" 9O iQ'NHP 'K J GP'N '-MLH G' HP P'NHP 'JJPPI+
PMiG'N ' I I J P'HP GP97'MIO'i N'AP'GPPI+

[HP P'2'L LHPGT+
' i'9 P'HP PM7N'GHM99'MUNPi O8
2N'GHM99'AP' M NPO' i' NH'EPM9 JGT+
O IO'G PPN'APQ ii iQ'AJN'JiGM J T'PiO8
P%P 'GPNN9PO'P]JM99T'AJN'H QH' '9 '8
HMN'M99'9 P%G'L9PMGJ P'GHM99'i N'IMUKH'H G' P+

6' iKP'NH J'M N'OPMO'9 [HP P'2'L LHPGT+
' i'9 P'HP PM7N'GHM99'MUNPi O8
2N'GHM99'AP' M NPO' i' NH'EPM9 JGT+
O IO'G PPN'APQ ii iQ'AJN'JiGM J T'PiO8
P%P 'GPNN9PO'P]JM99T'AJN'H QH' '9 '8
HMN'M99'9 P%G'L9PMGJ P'GHM99'i N'IMUKH'H G' P+

6'2N'GHM99'AP'7 KU9P'7M9GP'MIO'7J99' 77MJO'8
JO'MIO'AP'A9MGNPO'i'M'A PMNH iQ' H 9P8
HP'A NN 1'L G i'MIO'NHP'N L' %P GN M %OF
X NH'G PPNG'NHMN'GHM99'NHP'N JPGN'G QHNG'APQJ 9P
HP'GN iQPGN'A OT'GHM99'N'1MUP'1 GN' PMU
N UP'NHP' GP'OJ1A'MIO'NPMKH'NHP'7 9N'GLPMU+

6'2N'+GHM99'AP'GLM iQ'MIO'N '7J99' 7' N+
PMKH iQ'OPK PL N'MQP'N 'N PMO'NHP' 1PMGJ PG8D
HP'GNM iQ' J7 MI'GHM99' N'UPPL'i']J PN
-9JKU'O i'NHP' KH'pi KH'NHP'L ' NH'N PMGJ PG
2N'GHM99'AP' MQ iQ' 1MO'MIO'G 99T' 1 9O
MUP'NHP' 9O'T JiQ'NHP' 9O'APK 1P'M'KH 9O+

6'2N'GHM99'GJGLPKN' HP P' G'i 'KMJGP' 77PM 8
2N'GHM99'i N'7PM' HP P' N'GH J9O'1 GN' 1 GN JGN8
2N'GHM99'AP' 1P K 7J9'MIO'N 'GP P P+
#IO'1 GN'OPKP iQ' HPI' N'GPP1G' 1 GN'EJGN8
-P P GP' E'GHM99'AP' HP P' N'GH G'1 GN'N M O+
-JN'7PM'N ' M9 J 'K J MQP'N 'NHP'K M O+

HJG' PM T' 7NHP' 9O'M MT'GHP'H PG+
#IO'T UPG'HP'G9 P'O PG8 AT' H GP'G 7N'M O'
HP 'I GN PGG'I JiNPO'NH JQH'NHP'PILNT'GU PG'
,2I'HP'9 QHN'KHM N'JJKU9T'G'K i PT%O+
" 9O iQ'NHP 'K J GP'N '-MLH G' HP P'NHP 'JJPPI+
PMiG'N ' I I J P'HP GP97'MIO'i N'AP'GPPI+

F 0 % 8G S %P GN P PO+
D ' '$ ' % %SN'OMIKP+

D F SAPMJNT+
' 6 ($ i% S NH'NHP'Gi JN' 7NHP'J KH i' 'HPOQPH Q+

)

' ' ' (' '

' " ')

3#&/' 10' 1 "# - 1 ' # 5' #&1 ' 10' 2 "023/5+

' MAPG' ' NGN□O?CG' CA' EABD' $ADN F□K' □ ' J□CFABC' GHN ' JFGDGA>' CF□ ' K?@KFMGC ' J□CFABC' LG □HH□H ' □ ' LBC' ?' BKGD>MBAB ' @A□GCE Z' #FG' J?DD?HC' ' F?PG' A>' EABD' FAHABD?LMG' N□ KA □C□AH ' HAC' CFG' JADCF' A>' @E' BHCBCADGN' M□HG ' @?(G ' □C' ? BDGN' A>' ?OOGKC?HOG ' F?C' ' F?PG' NAHG' □ ' EABD ' JF?C' ' F?PG' CA' NA' □ ' EABD ' LG□H ' K?DC' □H' ?MM' ' F?PG ' NGPACGN' EABD ' GDG' @E' JADCF' DG?CGD' @E' NBME' JABMN' FAJ' DG?CGD' @G?HC□@G ' ? ' □C' □ ' □C' □ ' LABHN' CA' EABD' $ADN F□K ' CA' JFA@' ' J□ F' MAH ' M□>G ' C□MM' MGH CFGHGN' J□CF' ?MM' F?KK□HG

, ABD' $ADN F□K8 ' □H' ?MM' NBCE

#' 7 '&

" 3' #&: 3 +

/ JKGJG') J ((' @7 ' H G' PWKPGG P' L OP' GJ I M I PO' JLP AJG ' M7NP ' HP' HMO' KMJGPO' H G' !' 7MNHP ! 9M ' P JG' J9HJG ' N ' AP' K JP99T' I J OP PO ' M!O ' K !N M T' N ' NHP' & I M!' 9M G' M!O' KJGN I G' ! N' P]J !Q' ' GNMT !Q' 7 ' NHP' LP L9P%G' GJ77 MQPG ' HMO' L GGPGGPO' H I GP97' 7'NHP' U !QO I ' P!N ' MKK I LM! PO' NH' H G' G !G' M!O' NHP ' ! A9P I P!' 7& I P 'N ' APG PQP' # OPM#' 5J !Q' H KH' G PQP ' NHP' L !K LMG' I P!' 7' NHP' M I T' I PPN !Q' !P' P P! !Q' MN' NHP' NP!N' 7 PWNJG' M]J ! JG ' NHP' U !Q%G G ! ' !' NHP ' O GK J GPG' M7NP ' GJLLP ' P P T' !P' K I I P!OPO' NHP' NJPG' 7' H G' !' 7P8 M I !Q' H I ' 99MN !JG' PWN 99PO' NHP' !K I LM MA9P' KHMGN NT' 7' H G' 7P' / JK PN M#' 2L ' NHMN' L9PMGM!N' HJ I J ' NHPT' M99' L GNPO' N ' & I P8 M!O' !NP!O !Q ' AT' NHP ' GPK PN' M!O' GJOOP!' M M9' N ' I MUP' N M9' 7'NHMN' H KH' P P T' !H' HMO' AP7 P' M JKHPO' !9T' 99MN !JG' 7 !OG' H G' 7P' @NH JQH' N' P P' 9MNP' !' NHP' ! QHN ' GL ! ! !Q' M I !QGN' HP ' I M OG ' NHP' NHP ' 9MO PG' P P' M99' 7 J!O' OM!K !Q' M!O' P P99 Q ' ' !' GP P M9' O GL NG# X HP PJL !' NHP' ! A9P I P!' T P9OPO' 99MN !JG' NHP' KN T ' M!O' H G' 7P' NHP' 7M I P# #N' NHMN' N I P' PWNJG' M]J ! JG ' AP !Q' !79M I PO' NH' / JK PKP%G APMJNT ' TPN' G I NHP !Q' H G' LMGG !G' 7 ' NHP' L PGP!N' OPLM NPO' NH' NHP' PGN' AMKU' N ' NHP' KM I L8 7 I ' HP!KP' HP' GH N9T' M7NP ' L 9T' NHO P ' H I GP97 ' M!O' MG' @MKK O !Q' N ' H G' PGMNP ' TM99T' P!NP NM !PO' M!O' 9 OQPO' AT' / JK PKP' MN' 99MN J I # HP' GM I P' ! QHN' HP' N PMKHP JG9T' GNPM9PNH' !N ' HP ' KHM I AP ' 9P!N9T' M GHPO' HP ' M!O' PM 9T' !' NHP' I ! !Q' GLPPOPNH' M MT# / JK PKP ' !' NH G' 9M I P!NMA9P' L9 QHN ' HMGN 9T' OPGLMNKHPNH' I PGGP!QP G ' !P' N ' & I P' 7 ' HP ' 7MNHP ' M! NHP ' N ' NHP' KM I L' 7 ' MN !P# HPT' KM I P ' NHP' !P' MKK I LM! PO' NH' ?J! JG' JNJG ' NHP' NHP ' X NH' -JA9 JG' M9P JG8 M!O ' 7 !O !Q' / JK PKP' MNN PO' !' I J ! !Q' HMA N ' OP I M!OPO' NHP' KMJGP' 7' HP ' G # HP ' 7 GN' NMU !Q' M!' MNH' 7'NHP I ' 7 ' HP ' P P!QP ' P PM9PO' NHP' MKN ' M!O' H 9P' I M!!P ' 7' H G' OPM9 !Q ' M!O' NHM9' GJOOP!9T' GNMAAPO' HP GP97# X H KH ' O !P ' NH' !P' K !GP!N' NHPT' M99' PO' N ' N' JN' NHP' H 9P' HMNPO' 7M I 9T' 7' NHP' M]J !G' 8 M!O ' APM !Q' NHP' OPMO' A OT' N ' & I P ' JNJG' MK]JM !NPO' NHP' LP L9P' NH' NHP' O P ' M!O' I M! !P ' 7' NHP' 9P' OPPO ' NH' M' A NNP ' ! PKN P' MQM !GN' NHP' NT' M! !T' 7' NHP' U !Q8 HP P NH' NHP' LP L9P' P P' G ' I PO ' NHMN' NH' 1!P' K !GP!N' M!O' M' QP!P M9' MKK9M I MN ! ' NHP' M]J !G' P P' M99' PW 9PO ' M!O' NHP' GNMNP' Q P ! I P!N KHM!QPO' 7 I ' U !QG' N ' K !GJ9G+

0 ' HP' NHP' ! QHN' AP7 P ' !' M]J !%G' NP!N+
!9 KU%O' NHP' N PMGJ P' 7' H G' HMLLT' GNMNP+
X HMN' L KP9PGG' PM9NH' NHP' HPM P!G' HMO' H I ' 9P!N'
2!' NHP' L GGPGG !' 7' H G' APMJNP JG' I MNP8
&PKU ! !Q' H G' 7 NJ!P' MN' GJKH' H QH L JO' MNP+'
HMN' U !QG' I QHN' AP' PGL JGPO' N ' I P' 7M I P+'
JN' U !Q' ! ' LPP ' N ' GJKH' M' LPP 9PGG' OM I P+

1' HMLL !PGG' P!E T%O' AJN' 7'M' 7P [
#!O ' □>'L GGPGG%O ' MG' AH' OPKMT%O' M!O' NAHG' g
#G' G' NHP' I ! !Q%G' G 9 P I P9N !Q' OP '
#QM !GN' NHP' Q 9OP!' GL9P!O J ' 7'NHP' GJ!' (
#!' PWL %O' OMNP ' KM!KP99%O' P P' P99' APQJ!'
" ! J ' M!O' APMJNT ' !' NHP' !P %G' M I G
P' PMU9T' 7 N PGG%O' 7 I ' M' 9O' 7'HM I G+

PMJNT' NGP97'O NH' 7' NGP97' LP GJMOP'
HP' PTPG' 7' I P!' NH JN' M!' MN 8
X HMN' !PPOPNH' NHP!' ML 9 Q PG' AP' I MOP'
' GPN' 7 NH' NHMN' H KH' G' G ' G !QJ9M ' \
1 ' HT' G MN !P' NHP' LJA9 GHP
17'NHMN' KH' EP P9' HP' GH J9O' UPPL' J!U! !'
O I ' NH P GH' PM G ' APKMJGP' N' G' H G' !' \

-P KHM!KP' H G' A MGN' 7' / JK PKP% G P P Q!NT'
JQQPGNPO ' NH G' L JO' GGJP' 7' M' U !Q8
O ' AT' J ' PM G' J ' HPM NG' 7N' NM !NPO' AP '
-P KHM!KP' NHMN' P! T' 7' G ' KH' M' NH !Q+
M !Q' K I LM P ' O GOM !7J99T' O O' GN !Q'
" G' H QH L NKH%O' NH JQHNG ' NHMN' I PM!P ' I P!' GH J9O
MJ!N+
HMN' Q 9OP!' HML' H KH' NHP ' GJLP G' M!N+

JN' G I P' J!N I P9T' NH JQHN' O O' !GN QMNP'
" G' M99 N N I P9PGG' GLPPO ' 7' ! !P' 7'NH GP
" G' H ! J ' H G' M77M G ' H G' 7 P!OG ' H G' GNMNP+'
PQ9PKNPO' M99 ' NH' G 7N' !NP!N' HP' Q PG'
']JP!KH' NHP' K M9' H KH' !' H G' 9 P ' Q9 G+
1' MGH' 7M9GP' HPMN ' MLL%O' !' PLP!NM!N' K 9O+
HT' HMGNT' GL !Q' GN 99' A9MGNG F' M!O' !P%P ' Q G' 9O[

/ ' CFG' LG □G GN' DNG?' ?MM' □H' KA C
!P' AT' NHP' N JGN9PGG' !QG' 7'7M9GP' OPG P
/ JGN A PMNHPO' M]J !' 9PM PG' NHP' & I M!' H GN+
#!O' N ' 99MN J I ' APM G' NHP' 9 QHN9PGG' 7 P'
XH KH' !' LM9P' P I AP G' H O ' 9J UG' N ' MGL P+
#!O' Q O9P' NH' P I A MK !Q' 79M I PG' NHP' M GN'
17' 99MN !P%G' 7M ' 9 P ' / JK PKP' NHP' KHMGNP+

" ML9T' NHMN' !M I P' 7' KHMGNP' J!HMLL%9T' GPN'
H G' AMNP9PGG' POQP' !' H G' UPP!' MLLPN NP' 8
XHP!' MN !P' J! GP9T' O O' ! N' 9PND
' L M GP' NHP' K9PM ' J!' I MNKHPO' PO' M!O' H NP'
XH KH' N J I LH%O' !' NHMN' GUT' 7' H G' OP9 QHN+
XHP P' I NM9' GNM G ' MG' A QHN' MG' HPM P!%G' APMJN PG+
X NH' LJ P' M+GLPKNG' O O' H I ' LPKJ9 M ' OJN PG+

$ 2' 2!' "P! T' 2 +' - M N' 2+' M!O' !' / PM ' HMUGLP P' JGPG' 2' MG' N' G' HP P' JGPO' I PM! !Q' Z- *' ! N' M' $ '
' S7 APM +
F ' HP' O' G' HP P' JGPO' MG' !' M' L P JG' LMGGMQP' 7' NHP' P!JG' M!O'
#0 ! G S
6' X MGNPO ' NHM %O' M!O'
#G' I J!NM ! G! ' I P9NG' NH' NHP' I O OMT' GJ!+R
<6<

' 4 % SNP I LNPO
f' 3' % %' G' HP P' JGPO' MG' M' P A' !PJNP +' 2N' G' G ' JGPO' !' NHP' L P I ' MGK APO' N
&M9P QH ' P!N N9PO' HP' OM P P99#RS
Y P99' MQP ' N' OM 9T' MGNPNH' 8
P99' H ! J ' H ' N' M9NP G8
P99' APMJNT ' N9 MN' N' "' % $*0HO

X HP!ʻ MNʻ 99MN J I ʻ NH Gʻ 7M9GPʻ 9 Oʻ M %O
X P99ʻ MGʻ HPʻ P9K I %Oʻ ATʻ NHPʻ & I M!ʻ OM I P+
X NH !ʻ H GPʻ 7MKPʻ APMJNTʻ M!Oʻ NJPʻ GN %Oʻ
X H KHʻ 7ʻ NHP I ʻ A NHʻ GH J9Oʻ J!OP L Lʻ HP ʻ7M I Pʻ
X HP!ʻ NJPʻ A MQQ%O ʻ APMJNTʻ J9Oʻ A9JGHʻ7 ʻ GHM I Pʻ8
X HP!ʻ APMJNTʻ A MGNPOʻ A9JGHPG ʻ !ʻ OPGL NPʻ
NJPʻ J9Oʻ GNM !ʻ NHMNʻ Dʻ NHʻ G 9 P ʻ H NP+

JNʻ APMJNTʻ !ʻ NHMNʻ H NPʻ !N NJ9PO D
0 I ʻ P!JG% O PGʻ O NHʻ KHM99P!QPʻ NHMNʻ 7M ʻ7 P9Oʻ
HP!ʻ NJPʻ K9M I Gʻ 7 Iʻ APMJNTʻ APMJNT%Gʻ PO+
X H KHʻ NJPʻ QM Pʻ NHPʻ Q 9OP!ʻ MQP ʻ N ʻ Q 9Oʻ
HP ʻG 9 P ʻ KHPPUG ʻ M!Oʻ KM99%Oʻ Nʻ NHP!ʻ NHP ʻGH P9O8
PMKH !Qʻ NHP I ʻ NHJGʻ N ʻ JGPʻ Nʻ !ʻ NHPʻ7 QHN S
X HP!ʻ GHM I Pʻ MGGM 9%O ʻ NHPʻ POʻ GH J9Oʻ7P!KPʻ NHPʻ H NP+

H Gʻ HP M9O Tʻ !ʻ /JK PKP%7MKPʻ MGʻ GPP!
QJPOʻ ATʻ APMJNT%Gʻ PO ʻ M!Oʻ NJP%Gʻ H NPʻ
17ʻ K NHP %Gʻ K 9 J ʻ MGʻ NHPʻ NHP ʻ]JPP!+
- !Qʻ7 Iʻ 9O%Gʻ I ! NTʻ NHL ʻ QHN
4 PNʻ NHP ʻ M I A N !ʻ I MUPGʻ NHP I ʻ GN 99ʻ N ʻ7 QHN8
HPʻ G P P Q!NTʻ 7ʻ P NHP ʻ AP !Qʻ G ʻ Q PMN+
HMNʻ 7Nʻ NHPTʻ !NP KHM!QPʻ PMKHʻ NHP %Gʻ GPMN+

H Gʻ G 9P!Nʻ M ʻ 7ʻ9 9 PGʻ M!Oʻ 7ʻ GPGʻ
X H KHʻ M]J !ʻ P %Oʻ !ʻ HP ʻ7M ʻ7MKP%Gʻ7 P9O
2!ʻ NHP ʻLJ Pʻ M!UGʻ H Gʻ N M N ʻ PTPʻ P!K9 GPG8
X HP P ʻ9PGNʻ APN PP!ʻ NHP I ʻ A NHʻ Nʻ GH J9Oʻ APʻ U 99%O
HPʻ K M Oʻ KMLN Pʻ M!]J GHPOʻ O NHʻ T P9Oʻ
ʻ NH GPʻ N ʻ M I PGʻ NHMNʻ J9Oʻ 9PNʻ H I ʻ Q +
&MNHP ʻ NHM!ʻ N J I LHʻ !ʻ G ʻ7M9GPʻ M ʻ7 P+

ʻ NH !UGʻ HPʻ NHMNʻ HP ʻ HJGAM!O%Gʻ GHM99 ʻ N !QJPʻ
8 HPʻ ! QQM Oʻ L O QM9ʻ NHMNʻ L M G%Oʻ HP ʻ G ʻ
!ʻ NHMNʻ H QHʻ NMGUʻ HMNHʻ O !Pʻ HP ʻ APMJNTʻ !Q+
X H KHʻ 7M ʻ PWKPPOGʻ H Gʻ AM P!ʻ GU 99ʻ N ʻ GH ʻ
HP P7 Pʻ NHMNʻ L M GPʻ H KHʻ 99MN !Pʻ O NHʻ P ʻ
3!KHM!NPOʻ M]J !ʻ M!G P Gʻ NHʻ GJ I GP+
2!ʻ G 9P!Nʻ !OP ʻ 7ʻ GN 99 QMC !Qʻ PTPG+

H Gʻ PM NH9Tʻ GM !N ʻ MO POʻ ATʻ NH Gʻ OP 9+
/ NN9Pʻ GJGLPKNPNHʻ NHPʻ 7M9GPʻ GH LLP 8
O ʻ J!GNM !%Oʻ NH JQHNGʻ O ʻ GP9O I ʻ O PM I ʻ !ʻ P 98
OGʻ !P P ʻ9 I %Oʻ ! ʻ GPK PNʻ AJGHPGʻ 7PM ʻ
ʻ QJ 9N9PGGʻ GHPʻ GPKJ P9Tʻ Q PGʻ Q Oʻ KHPP ʻ
#!Oʻ P P P!Oʻ P9K I Pʻ N ʻ HP ʻ L !KP9Tʻ QJPGN+
X H GPʻ ! M Oʻ 99ʻ ! ʻ JN M Oʻ HM I ʻ PWL PGG%O+

O ʻ NHMNʻ HPʻ K 9 J %Oʻ NHʻ H Gʻ H QHʻ PGNMNP+
" O !Qʻ AMGPʻ G !ʻ !ʻ L9M NGʻ 7ʻ I MEPGNTʻ8
HMNʻ ! NH !Qʻ !ʻ H I ʻ GPP I %Oʻ ! O !MNP+
M Pʻ G I PN I Pʻ N ʻ I JKHʻ !OP ʻ 7ʻ H Gʻ PTP+
X H KH ʻ HM !Qʻ M99 ʻ M99ʻ K J9Oʻ ! Nʻ GMN G7T8
JN ʻ L 9Tʻ KH ʻ G ʻ M!NPNHʻ !ʻ H Gʻ GN Pʻ
HMNʻ K9 T%Oʻ NHʻ I JKHʻ HPʻ L !PNHʻ GN 99ʻ7 ʻ I P+

JNʻ GHP ʻ NHMNʻ !P P ʻ K L%Oʻ NHʻ GN M!QP ʻ PTPG+
J9Oʻ L KUʻ ! ʻ I PM! !Qʻ7 Iʻ NHP ʻLM 9 !QDʻ9 UG
ʻ PMOʻ NHPʻ GJAN9P GH ! !Qʻ GPK PK PG

ʻ ʻ HPʻ 9 !Pʻ JGJM99Tʻ GNM!OGʻ NHJG S
6 NJPʻ J9Oʻ GNM !ʻ N9 MNʻ 0 ʻ NHʻ G 9 P ʻ H NP+R
HPʻ Q !M9ʻ HMGʻ ʻ M9 !Pʻ HMGʻ GJQQPGNPO ʻ AJNʻ HPʻ O PGʻ ! Nʻ MKNʻ JL !ʻ NHPʻ GJQQPGN !ʻ NHMNʻ 6ʻ NHPʻ Oʻ !NP!OPOʻ MGʻ LP HMLGʻ ≠ ʻ Q 9N?ʻ N ʻ H KHʻ NHPʻ L PNʻ K I LM PGʻ NHPʻ OPPL'K 9 J ʻ 7ʻ Mʻ A9JGH+Rʻ HPʻ9 !PGʻ !ʻ NHPʻ GJAGP]JP!Nʻ GNM!CMʻ K I _ L9PNPʻ NHPʻ HP M9O Kʻ M99JG !
6ʻ HP!ʻ NJPʻ K9M I Gʻ7 Iʻ AP!JNTʻ APMJNT%Gʻ
X H KHʻ NJPʻ QM Pʻ NHPʻ ' ʻ MQP ʻ N ʻ ' ʻ
HP ʻ% '! ʻ KHPPUG ʻ M!Oʻ KM99%Oʻ Nʻ NHP!ʻ NHP ʻGH P9O+R
' SHM !Qʻ Mʻ N N9Pʻ N ʻ ʻ !+
ʻ HPʻ AEPKNʻ 7ʻ L M GPʻ H KHʻ 99MN !Pʻ O NHʻ L GGPGG+
ʻ SGLPMU !Q+
F PPʻ & I P ʻ M!Oʻ ?J9 PN ʻ 299JGN MN !Gʻ 7ʻ # Kʻ 2+ ʻ LL≠ ʻ +
≠ ʻ D S !NP L PN+

X Nʻ !ʻ NHPʻ Q9MGGTʻ I M QP!NGʻ 7ʻ GJKHʻ A UGʻ8
HPʻ N JKH%Oʻ ! ʻ J!U! !ʻ AM NG ʻ ! ʻ7PM %Oʻ ! ʻ H UGʻ8
ʻ K J9Oʻ GHPʻ I M9 CPFʻ H Gʻ M!N !ʻ G QHN+
Pʻ NHM!ʻ H Gʻ PTPGʻ P Pʻ LP!%Oʻ N ʻ NHPʻ9 QHN+

" Pʻ GN PGʻ N ʻ HP ʻ PM Gʻ HP ʻ HJGAM!O%Gʻ 7M I P+
X !ʻ !ʻ NHPʻ7 P9OGʻ 7ʻ7 J N7J9ʻ 2NM9T8
#!Oʻ OPKUGʻ NHʻ L M GPGʻ 99MN !P%Gʻ H QHʻ !M I P+
MOPʻ Q9 JGʻ ATʻ H Gʻ I M!9Tʻ KH M9 T+
X NHʻ A J GPOʻ M I Gʻ M!Oʻ PMNHGʻ 7ʻ KN T8
" P ʻE Tʻ NHʻ HPM %O JLʻ HM!Oʻ GHPʻ O NHʻ PWL PGG+
#!Oʻ O9PGG ʻ G ʻ Q PPNGʻ HPM P!ʻ7 ʻ H Gʻ GJKKPGG+

OM ʻ7 Iʻ NHPʻ LJ L GPʻ 7ʻ H Gʻ K I !Qʻ NH NHP ʻ
" Pʻ I MUPGʻ PWKJGPGʻ7 ʻ H Gʻ AP !Qʻ NHP P+
ʻ K9 JOTʻ GH ʻ 7ʻ GN I Tʻ A9JGNP !Qʻ PMNHP ʻ
5 NHʻ TPNʻ !ʻ H Gʻ 7M ʻ P9U !ʻ !KPʻ MLLPM 8
99ʻ GMA9Pʻ QHN ʻ I NHP ʻ 7ʻ5 PMOʻ M!Oʻ OPM
L !ʻ NHPʻ 9Oʻ O I ʻ OM U!PGGʻ O NHʻ O GL9MT+
#!Oʻ !ʻ HP ʻ MJ9NTʻ L G !ʻ GN Gʻ NHPʻ OMT+

0 ʻ NHP!ʻ Gʻ M]J !ʻ A JQHNʻ J!N ʻ H Gʻ APO+
2!NP!O !Q$ ʻ PM !PGGʻ NHʻ HPM Tʻ GL QHN8
0 ʻ M7NP ʻ GJLLP ʻ9 !Qʻ HPʻ]JPGN !POʻ
X NHʻ I OPGNʻ /JK PKP ʻ M!Oʻ Pʻ JNʻ NHP ʻ ! QHN8
ʻ9PMOP!ʻ G9J I AP ʻ NHʻ9 7P%Gʻ GN P!QNHʻ O NHʻ7 QHN8
#!Oʻ P P Tʻ !Pʻ N ʻ PGNʻ NHP I GP9 PGʻ APNMUP+
M Pʻ NH P PG ʻ M!Oʻ KM PG ʻ M!Oʻ N JA9POʻ I !OG ʻ NHMNʻ MUP+

#Gʻ !Pʻ 7ʻ H KHʻ O NHʻ M]J !ʻ9 Pʻ P 9 !Qʻ
HPʻ GJ!O Tʻ OM!QP Gʻ 7ʻ H Gʻ 99%Gʻ ANM ! !Q8
4 PNʻ P P ʻ N ʻ ANM !ʻ H Gʻ 99ʻ PG 9 !Q+
H JQHʻ PMU AJ 9Nʻ H LPGʻ LP GJMOPʻ H I ʻ N ʻ MAGNM ! !Q8
5 PGLM ʻ N ʻ QM !ʻ O NHʻ N M79 Kʻ 7Nʻ7 ʻ QM ! !Q8
#!Oʻ HP!ʻ Q PMNʻ N PMGJ Pʻ Gʻ NHPʻ I PPOʻ L L G%O+
H JQHʻ OPMNHʻ APʻ MOEJ!KN ʻ NHP P%Gʻ ! ʻ OPMNHʻ GJLL G%O+

H GPʻ NHMNʻ I JKHʻ K PNʻ M Pʻ NHʻ QM !ʻ G ʻ7 !Oʻ
HMNʻ HMNʻ NHPTʻ HM Pʻ ! N ʻ NHMNʻ XH KHʻ NHPTʻ L GGPGGʻ
HPTʻ GKMNNP ʻ M!Oʻ J!9 GPʻ Nʻ7 I ʻ NHP ʻ A !OF
#!Oʻ G ʻ ATʻ H L !Qʻ I P ʻ NHPTʻ HM Pʻ AJNʻ 9PGG8
1 ʻ QM ! !Qʻ I P ʻ NHPʻ L 7Nʻ 7ʻ PWKPGGʻ
2Gʻ AJNʻ N ʻ GJ 7P N ʻ M!Oʻ GJKHʻ Q P7Gʻ GJGNM !+
HMNʻ NHPTʻ L Pʻ AM!U JLNʻ !ʻ NH Gʻ L KHʻ QM !+

HPʻ M I ʻ 7ʻ M99ʻ Gʻ AJNʻ N ʻ !J GPʻ NHPʻ9 7P
X NHʻ H ! J ʻ PM9NH ʻ M!Oʻ PMGP ʻ !ʻ M! !Qʻ MQP8
#!Oʻ !ʻ NH Gʻ M I ʻ NHP Pʻ Gʻ GJKHʻ NH M N !Qʻ GN 7P+
HMNʻ !Pʻ7 ʻ M99 ʻ ʻ M99ʻ7 ʻ !Pʻ Pʻ QMQP8
#Gʻ9 7Pʻ7 ʻ H ! J ʻ !ʻ7P99ʻ AMNN9PG% MQPʻ8
" ! J ʻ7 ʻ PM9NH8 M!Oʻ 7Nʻ NHMNʻ PM9NHʻ O NHʻ K GNʻ
HPʻ OPMNHʻ 7ʻ M99 ʻ M!Oʻ M99ʻ N QPNHP ʻ9 GN+

ʻ NHMNʻ !ʻ P!N% !Qʻ 99ʻ Pʻ 9PM Pʻ N ʻ APʻ
HPʻ NH !QGʻ Pʻ M P ʻ7 ʻ NHMNʻ H KHʻ Pʻ PWLPKN8
#!Oʻ NH Gʻ M I A N JGʻ7 J9ʻ !7 I NT+
2!ʻ HM !Qʻ I JKH ʻ N I P!NGʻ JGʻ NHʻ OP7PKNʻ
17ʻ NHMNʻ Pʻ HM Pʻ ʻ G ʻ NHP!ʻ Pʻ O ʻ !PQ9PKNʻ
HPʻ NH !Qʻ Pʻ HM P ʻ M!Oʻ M99ʻ7 ʻ M!Nʻ 7ʻ N+
MUPʻ G I PNH !Qʻ ! NH !Qʻ ATʻ MJQ I P!N !Qʻ N+

%ʻ SL PNP!O !Q+
F : % SK ! P GPO+
F H Gʻ Gʻ NHPʻ PMO !Qʻ 7ʻ NHPʻ Q !M9ʻ PO N !ʻ 7ʻ)= ≠ HMNʻ 7ʻ ʻ PMO\S
6ʻ M Pʻ NHʻ QM !ʻ G ʻ7 !O+
HMNʻ ʻ NHPTʻ HM Pʻ ! Nʻ NHMNʻ H KHʻ NHPTʻ L GGPGGʻ
HPTʻ GKMNNP ʻ M!Oʻ J!9 GPʻ N+R

M9 !Pʻ MO LNGʻ NHPʻ PMO !Qʻ 7ʻ NHPʻ Q !M9ʻ M!Oʻ HPʻ NHJGʻ PWL9M !Gʻ N S6 - PN KM99Tʻ GLPMU !Q ʻ NHPTʻ I MTʻ APʻ GM Oʻ N ʻ GKMNNP ʻ8$ ʻ $ 2ʻ$ ʻ ≠ ʻ HMNʻ NHPTʻ KM ! ! Nʻ APʻ '2ʻ GM Oʻ N ʻ HM P8 HMNʻ NHPTʻ O ʻ ! Nʻ A 2≠ NH JQHʻ - %% %% ʻ 7ʻ N+Rʻ H Gʻ Gʻ K9PM 9Tʻ Mʻ I G !NP L PNMN !≠ HPʻ PMG ! !Qʻ 7ʻ NHPʻ N ʻ7 99 !Qʻ GNM!CMGʻ Gʻ O PKNPOʻ MQM !GNHPʻ7 99Tʻ 7ʻ P!NJ !Qʻ Mʻ KP NM !NTʻ7 ʻ M!ʻ PWLPKNMN !ʻ ATʻ H KHʻ Pʻ6ʻ I MUPʻ G I PNH !Qʻ ! NH !QH+Rʻ HPʻ I PM! !Q ʻ NHP! ʻ NH JQHʻ AGKJ P9Tʻ PWL PGGPO ʻ Gʻ NHMNʻ NHPʻ K PN JGʻ M Pʻ G ʻ7 !Oʻ 7ʻ QM ! !Qʻ HMNʻ NHPTʻ HM Pʻ ! N ʻ NHMNʻ NHPTʻ GKMNNP ʻ M!Oʻ J!9 GPʻ 7 I ʻ NAP ʻ A !Oʻ @GM7Pʻ H 9O ʻ NHMNʻ H KHʻ NHPTʻ L GGPGG+
1/≠ 22+ ʻ V ʻ

JKHʻ HMCM Oʻ ! ʻ I JGNʻ O N !QʻM] J !ʻ I MUP
-M ! !QʻH GʻH ! J ʻN ʻ ANM !ʻH Gʻ9JGN8
! Oʻ7 ʻH I GP97ʻH I GP97ʻHPʻ I JGNʻ7 GMUPʻ
HP !ʻ HP Pʻ GʻN JNHʻ 7ʻNHP PʻAPʻ ! ʻG7P97 N JGNʻ\
X HP !ʻGHM99ʻHPʻNH !UʻN ʻ7 !OʻMʻGN M !QP ʻEJGN
X HP !ʻHPʻH I GP97ʻH I GP97ʻK !7 J!OG DʻAPN MTGʻ
ʻG9M !OP JGʻN !QJPGʻM !Oʻ PNKHPOʻHMNP7J9ʻOMTGʻ\

ʻGN 9PʻJL !ʻNHPʻN I PʻNHPʻOPMOʻ 7ʻ! QHN+
X HP !ʻHPM TʻG9PPLʻHMOʻK9 G%OʻJLʻ I NM9ʻPTPGʻ8
ʻK I7 NMA9PʻGNMʻO Oʻ9P !Oʻ H Gʻ9 QHN
ʻ! GPʻAJNʻ 9G% M !Oʻ 9 PG% OPMNH A O !QʻK PGʻ8
ʻGP PGʻNHPʻGPMG !ʻNHMNʻNHPTʻ I MTʻGJ L GPʻ
HPʻG 99Tʻ9M I AGʻ8 LJ PʻNH JQHNGʻM PʻOPMOʻM !Oʻ GN 99ʻ
X H 9Pʻ9JGNʻM !Oʻ I J OP ʻ MUPʻN ʻGNM !ʻM !Oʻ U 99+

! Oʻ ! ʻNH Gʻ9JGN7J9ʻ9 Oʻ9PML%Oʻ7 Iʻ H GʻAPO+
H !QʻH Gʻ I M !N9Pʻ JOP9Tʻ %P ʻH GʻM I 8
2Gʻ I MO9Tʻ N GG%OʻAPN PP !ʻOPG Pʻ M !Oʻ O PMO8
H% !Pʻ G PPN9Tʻ79MNNP GʻNH% NHP ʻ7PM PNHʻHM Iʻ8
JNʻH !PGNʻOPM ʻAP NKH%Oʻ NHʻ9JGN%Gʻ7 J9ʻKHM I+
5 NHʻN ʻN ʻ 7NʻAPNMUPʻH Iʻ N ʻ PN P+
PMNP !ʻM MTʻATʻA M ! G KUʻ JOPʻ5PG P+

" Gʻ7M9KH !ʻ !ʻMʻ79 !NʻHAʻG 7N9Tʻ G I NPNH+
HMNʻ7 Iʻ NHPʻK 9Oʻ GN !Pʻ GLM UGʻ 7ʻ7 Pʻ O ʻ79T
X HP PMNʻMʻ MWP !ʻN KHʻ7 NH NHʻHPʻ9 QHNPNH+
X H KHʻ I JGNʻAPʻ9 OP GNM ʻN ʻH Gʻ9JGN7J9ʻPTP8
! Oʻ N ʻNHPʻ79M I PʻNHJGʻGLPMUGʻMO GPO9Tʻ
6ʻ#Gʻ7 Iʻ NH Gʻ K 9Oʻ79 !Nʻ2ʻP !7 K%Oʻ NH Gʻ7 P+
ʻ/JK PKPʻ I JGNʻ2ʻ7 KPʻN ʻ I Tʻ OPG P+R

" P Pʻ LM9Pʻ NHʻ7PM ʻHPʻO NHʻL P I PO NMNPʻ
HPʻOM !QP Gʻ 7ʻH Gʻ9 MNHG I Pʻ P !NP L GP+
! Oʻ !ʻH Gʻ ! M Oʻ I !Oʻ HPʻO NHʻOPAMNPʻ
X HMNʻ7 99 !QʻG ʻ I MTʻ !ʻNH Gʻ M GP8
HP !ʻ9 U !QʻGK !7J99TʻHPʻO NHʻOPGL GPʻ
" Gʻ !MUPOʻM I J ʻ 7ʻGN 99 G9MJQHNP %Oʻ9JGN+
! Oʻ EJGN9Tʻ NHJGʻK !N 9GʻH Gʻ NH JQHNGʻJ !EJGN

6ʻOM ʻN KHʻAJ !ʻ JNʻNHTʻ9 QHNʻM !Oʻ9P !Oʻ Nʻ ! Nʻ
ʻOM UP !ʻHP ʻ H GPʻ9 QHNʻPWKP99PNHʻNH !P[
! Oʻ O Pʻ J !HM99 %Oʻ NH JQHNGʻAP7 PʻT Jʻ A9 Nʻ
X NHʻT Jʻ J !K9PM ! !PGGʻNHMNʻ H KHʻ Gʻ O !P[
177Pʻ LJ Pʻ !KP !GPʻN ʻG ʻLJ Pʻ Mʻ GH !Pʻ
/PNʻ7M ʻHJ I M ! NTʻMAH ʻNHPʻOPPO
HMNʻGL NGʻM !Oʻ GNM !Gʻ9 P%Gʻ I OPGNʻG ! H NPʻ PPO+D

6ʻ1ʻGHM I Pʻ N ʻU ! QHNH Oʻ M !Oʻ N ʻGH ! !QʻM I Gʻ[
1ʻ7 J9ʻO GH ! Jʻ N ʻ I Tʻ H JGPH 9O%GʻQ M Pʻ[
1ʻ I L JGʻMKN ʻ !K9JO !QʻM99ʻ7 J9ʻHM I Gʻ[
#ʻ I M N M9ʻ I M !ʻN ʻAPʻG 7N7M !KT%Gʻ G9M Pʻ
JPʻ M9 J ʻGN 99ʻMʻN JPʻ PGLPKNʻGH J9Oʻ HM Pʻ8
HP !ʻ I TʻO Q PGG !Dʻ GʻG ʻ 9P ʻG ʻAMGP+
HMNʻ Nʻ 99ʻ9 Pʻ P !Q M P !ʻ !ʻ I Tʻ7MKP+

6ʻ4PM ʻNH JQHʻ2ʻO P ʻNHPʻGKM !OM9ʻ 99ʻGJ P+
! Oʻ APʻM !ʻPTPG Pʻ !ʻ I Tʻ Q 9OP !ʻK MN8
I Pʻ9 MNHG I Pʻ OMGHʻNHPʻHP M9Oʻ 99ʻK !N P F

ʻ %ʻ M9 !Pʻ !NP L PNGʻNH GʻMGʻ % 2%ʻ;ʻ AJNʻNHPʻ I PM ! !Qʻ GʻGJ7 K P !N9Tʻ K9PMʻ7ʻ Pʻ MKKPLNʻ(% !ʻ NGʻJGJM9ʻGP !GP+
& SQM I P !Nǂ HPʻ Oʻ Gʻ I Pʻ K I I !9Tʻ JGPOʻ !ʻNHPʻL9J M9ʻMGʻ !ʻ ʻ
N !%Gʻ6ʻ-M MO GPʻ&PQM !POʻʻR S
6ʻ JNʻ ! ʻM !ʻMQPOʻ I M !ʻ !ʻ J M9ʻ8 %00
JNʻ !ʻNHPʻGM I Pʻ GKP !Pʻ 7ʻ 9MJJGʻ@#KNʻ22+ǂ K+ǂ222+ʻ Pʻ HM Pʻ A NHʻ8 ʻM !Oʻ
8 %
M F (20%'%', S9 P%Gʻ G9M P+
ʻ %% Gʻ HP Pʻ JGPOʻ !ʻNHPʻGP !GPʻ 7ʻ % %%
ʻ"P Pʻ Gʻ !Pʻ 7ʻNHPʻ7 P] JP !Nʻ PWM I L9PGʻ NHʻ H KHʻNHPʻ UGʻ 7ʻ HMUGLP Pʻ M !Oʻ
H GʻK !NP I L M PGʻMA J !Oʻ 7ʻMLL9T !QʻNHPʻJGMQPGʻ 7ʻKH M9 TʻN ʻNHPʻ I Pʻ P I NPʻ
M !N] J NTʻ 7ʻ : PPKPʻM !Oʻ & I Pǂ HPʻL P I ʻ 7ʻ/JK PKPʻK !NM !Gʻ I M !TʻGJKHʻM99J_
G !Gǂ 2 !ʻLM N KJ9M ʻN M OGʻNHPʻK9 GPʻ Pʻ HM Pʻ NH Gʻ9 !P S
07 $% ATʻNHP ʻ MNHGʻGH J9Oʻ QHNʻL ʻ9MO PG% HM I G+R
H Gʻ MGʻ !OPPOʻ M !ʻ M !N K LMN !ʻ 7ʻKH M9 T8 AJNʻNHPʻL PNʻK J9Oʻ !ʻ ! ʻ MTʻG ʻ
7 K A9Tʻ PWL PGGʻNHPʻGL Nʻ H KHʻM ! I MNPOʻNHPʻM P !QP Gʻ 7ʻ/JK PKPʻM !Oʻ H KHʻNHPʻ
!EJ POʻ 9MOTʻHP Pʻ ! UPGʻMGʻATʻP I L9 T !QʻNHPʻ9M !QJMQPʻ 7ʻKH M9 Tǂ HPʻJGPʻ 7ʻ
NHPʻ Oʻ ' % !ʻNH Gʻ9 !Pʻ Gʻ MGʻ I JKHʻM !ʻ M !MKH ! G I ʻMGʻNHMNʻ 7ʻ) $%;ʻ AJNʻ
HMNʻ NHP ʻ OGʻ 9ʻPWL PGGʻNHPʻ I PM ! !Qʻ !NP !OPOʻ\

ʻK LHPʻ I Pʻ H ʻ7 !O9Tʻ2ʻO Oʻ O NP8
HMNʻ I Tʻ L GNP NTʻGHM I %Oʻ NHʻNHPʻ ! NP+
HM99ʻKJ GPʻ I Tʻ A !PGʻM !Oʻ H 9Oʻ Nʻ7 ʻ ! ʻG !ʻ
ʻ GHʻNHMNʻ2ʻNHP ʻ7MNHP ʻHMOʻ ! Nʻ APP !+

6ʻX HMNʻ !ʻ2ʻ 7ʻ2ʻQM !ʻNHPʻNH !Qʻ2ʻ GPPUʻ\
#ʻO PM I ʻMʻA PMNHʻMʻ7 NHʻ 7ʻ79PPN !QʻE T
X H ʻAJTGʻMʻ I !JNP%Gʻ I NHʻN ʻ M 9+Mʻ PPUʻ\
1 ʻGP99GʻPNP ! NTʻN ʻQPNʻMʻN Tʻ\
0 ʻ !PʻG PPNʻQ MLPʻ H ʻ 99ʻNHPʻ !PʻOPGN Tʻ\
1 ʻ HMNʻ7 !Oʻ APQQM ʻAJNʻN ʻN JKHʻNHPʻK !ǂ
X J9Oʻ NHʻNHPʻGKPLN PʻGN M QHNʻAPʻGN JKUP !ʻO !ʻ\

6ʻ27ʻ 99MN !JGʻO PM I ʻ 7ʻ I Tʻ !NP !N+
X 99ʻHPʻ ! Nʻ MUPʻM !Oʻ !ʻMʻOPGLP MNPʻ MQP+
- GNʻH NHP ʻNH Gʻ 9PʻLJ L GPʻN ʻL P P !Nʻ\
H GʻG PQPʻNHMNʻHMNHʻP !Q Nʻ H Gʻ I M MQP+
H GʻA9J ʻN ʻT JNHʻNH GʻG ʻN ʻNHPʻGMQP
ʻ H GʻOT !Qʻ NJPʻNH GʻGJ !QʻGHM I P
X H GPʻK I Pʻ 99ʻAPM ʻM !ʻP P OJ !QʻA9M I Pʻ\

6ʻ1ʻ HMNʻPWKJGPʻKM !ʻ I Tʻ ! P !N !ʻ I MUPʻ
X HP !ʻNH Jʻ GHM9NʻKHM QPʻ I Pʻ NHʻG ʻA9MKUʻMʻOPPOʻ\
X 99ʻ ! Nʻ I Tʻ N !QJPʻAPʻ I JNPʻ I Tʻ7 M 9ʻE !NGʻGHMUPʻ\
!Pʻ PTPGʻ7 PQ ʻNHP ʻ9 QHNʻ I Tʻ7M9GPʻHPM NʻA9PPOʻ\
HPʻQJ 9NʻAP !QʻQ PMNʻNHPʻ7PM ʻO NHʻGN 99ʻPWKPPO8
! Oʻ PWN P I Pʻ7PM ʻKM !ʻ !P NHP ʻ7 QHNʻ ! ʻ79T+
JNʻK M O 9 UPʻ NHʻN P I A9 !QʻNP ʻO P+

6ʻ" MOʻ 99MN !JGʻU 99%Oʻ I Tʻ G !ʻ ʻG P+
1 ʻ9M !ʻ !ʻM I AJGHʻN ʻAPN MTʻ I Tʻ9 7P
1 ʻ P PʻHPʻ ! Nʻ I Tʻ OPM ʻ7 P !Oʻ NH GʻOPG Pʻ
QHNʻHM Pʻ PWKJGPʻN ʻ UʻJL !ʻH Gʻ 7P8
#Gʻ !ʻ P P !QPʻ ʻ] J NNM9ʻ 7ʻGJKHʻGN 7Pʻ
JNʻMGʻHPʻ Gʻ I Tʻ U !G I M !ʻ ! Tʻ OPM ʻ7 P !O+
HPʻGHM I Pʻ M !Oʻ 7MJ9Nʻ7 !OGʻ ! ʻPWKJGPʻ ! ʻP !O+

6ʻ HM I P7J9ʻ Nʻ Gʻ MTʻ 7ʻNHPʻ7MKNʻAPʻU ! !
" MNP7J9ʻ Nʻ Gʻ NHP Pʻ Gʻ ! ʻHMNPʻ !ʻ9 !Q8
2%9ʻAPQʻHP ʻ9 P8SAJNʻGHPʻ Gʻ ! Nʻ HP ʻ !ʻ8F
HPʻ GNʻ GʻAJNʻOP ! M9ʻM !Oʻ PL !Qʻ8
Tʻ 99ʻ GʻGN !Qʻ LMGNʻ PMG !%Gʻ PMUʻ P I !Q+
X H ʻ7PM Gʻ MʻGP !NP !KPʻ ʻM !ʻ 9Oʻ I M !%GʻGM +
HM99ʻATʻMʻLM !NPOʻK9 NHʻ APʻUPLNʻ !ʻM P+R

HJGʻQ MKP9PGGʻH 9OGʻHPʻO GLJNMN !ʻ
% PP !ʻ7 CP !ʻK !GK P !KPʻM !Oʻ H NDAJ ! !Qʻ 99+
# ! Oʻ NHʻQ Oʻ NH JQHNGʻ I MUPGʻO GLP !GMN !+
Q !QʻNHPʻ GP ʻGP !GPʻ7 ʻ M !NMQPʻGN 998
X H KHʻ !ʻMʻ I I P !Nʻ O NHʻK !7 J !Oʻ M !Oʻ U 99ʻ
#99ʻLJ Pʻ P77PKNGʻM !Oʻ O NHʻG ʻ7M ʻL KPPO+
HMNʻ HMNʻ Gʻ 9PʻGH Gʻ9 UPʻMʻ NJ JGʻOPPO+

>J NHʻHP H P ʻN Uʻ I Pʻ U !O9Tʻ ATʻNHPʻHM !O+
! Oʻ QMC%Oʻ7 ʻN O !QGʻ !ʻ I Tʻ PMQP ʻPTPG+
OPM !QʻG I PʻHM Oʻ !P G 7 Iʻ NHPʻ M 9 UPʻAM !Oʻ
X HP PʻHP ʻAP9 POʻ 99MN !JGʻ9 PG+
1ʻH ʻHP ʻ7PM ʻO Oʻ I MUPʻHP ʻK 9 J ʻ GP[
O GNʻ POʻMGʻ GPGʻNHMNʻ !ʻ9M !ʻ Pʻ 9MT+
HP !ʻ H NPʻMGʻ9M !ʻNHPʻ GPGʻN UʻM MT+F

6ʻ# ! Oʻ H ʻHP ʻHM !Oʻ !ʻ I Tʻ HM !Oʻ AP !Qʻ9 KU%Oʻ
O K%Oʻ Nʻ N ʻN P I A9Pʻ NHʻHP ʻ9 TM9ʻ7PM ʻ8
X H KHʻGN JKUʻHP ʻGMOʻM !Oʻ NHP !ʻ Nʻ7MGNP ʻ KU%O
!N 9ʻHP ʻHJGAM !O%Gʻ P97M Pʻ GHPʻO Oʻ HPM ʻ8
X HP PMNʻGHPʻG I 9POʻ NHʻG ʻG PPNʻMʻKHPP +

F M9 !Pʻ GMTGʻNHPʻ OGʻGJKHʻMGʻ %$ '' ʻ %M Pʻ 6ʻGJLL GPOʻN ʻAPʻGL UP !ʻ
ATʻG I Pʻ M Tʻ I ! N +Rʻ J P9Tʻ NHPʻ L PNʻ !9Tʻ I PM !Nʻ N ʻ PWL PGGʻNHMNʻK !NPGNʻ 7ʻ
NH JQHNGʻ H KHʻ Q PGʻ 7 M Oʻ !ʻ Mʻ I !Oʻ O GN MKNPOʻAPN PP !ʻ PMG !ʻM !Oʻ LMGG !ʻ
M !Oʻ H KHʻNHPʻ O M I MN Kʻ L PNʻKM !ʻ !9Tʻ PL PGP !NʻATʻG 9 9] JTʻMGʻ Nʻ GHP Pʻ PL P_
GP !NPO+
%ǂ PPʻ#Gʻ4 Jʻ/ UPʻ2N ʻ299JGN MN !Gʻ 7ʻ#KNʻ222+ʻ 9+ǂ +Lǂ +
)ʻ 8 2SAP !QʻNMUP !ʻM MT+

HMN HMO M K GGJG GPP!' HP ' MG GHP GN O
P97 9 P HMO !P P ' O !$O H I ' !' NHP 79 O+

6 X HT HJ!N 2' NHP!' 7 ' K 9 J ' ' PWKJGPG \
#99 MN G M P OJ I A HP!' APMJNT L9PMOPNH8
- ' PNKHPG HM P P I GP !' L ' MAJGPG 8
/ P NH PG ! N !' NHP HPM N NHMN GHMO G O PMOPNH'
#77PKN !' G I T KMLNM ! ' M!O HP 9PMOPNH8
!O HP!' H G QMJOT AM! !P ' G O GL9MT%O+
HP K M O 7 QHNG ' M!O 99 ! N AP O G I MT%O+

6 HP!' KH 9O GH 7PM ' M MJ!N[OPAMN !Q ' O P[
&PGLPKN ÐM!O PMG !' M N !' !U9PO MQP [
T HPM N GHM99 !P P ' K J!NP I M!O I !P PTP8
MO ÐLMJGP M!O OPPL PQM O APGPP I NHP GMQP8
T LM N G T JNH ' M!O APMNG NHPGP 7 I ' NHP GNMQP '
5PG P I T L 9 N G ' APMJNT I T L CP 8
HP!' H ' 7PM G G !U !Q HP P GJKH N PMGJ P 9 PG \R

#G K !' %P Q !' AT PPOG ' G ' HPPO7J9 7PM '
2G M9 I GN KH U%O AT J! PG GNPO 9JGN+
MT HP GNPM9G NH LP!' 9 GNP! !Q PM '
LJ99 !.'7 J9 H LP ' M!O 7J99 7 7 !O I GN JGN8
NH H KH ' MG GP N G N ' NHP J!EJGN+
' K GG H I ' NH NHP ' LL G NP LP GJMG !+
HMN ! ' HP G M 9PMQJP ' M!O ! ' ! MG !+

X NH !' H G NH JQHN HP ' HPM P!9T I MQP G NG+
#!O !' NHP GP97GM I P GPMN G NG 99MN !P
HMN PTP H KH 9 UG !' HP ' K !7 J!OG H G NG8
HMN PTP H KH H I ' APH 9OG ' MG I P O !P+
!N ' M P ' G ' 7M9GP 99 ! N !K9 !P 8
JN NH M LJ P MLLPM9 GPPUG N ' NHP HPM N+
X H KH !KP K JLNPO NMUPG NHP GP ' LM N8

#!O NHP P !' HPM NP !G JL H G GP 9P L P G+
X H ' 79MNNP %O AT NHP ' 9PMOP %G E KJ!O GH
NJ77 JL H G 9JGN ' MG I !JNPG 7 99 JL H J G 8
#!O MG NHP ' KMLNM ! ' G ' NHP ' L OP O NH Q +
-MT !Q I P G9M GH N AJNP NHM!' NHPT P
T PL AMNP OPG P NHJG I MO9T 9PO+
HP & I M!' 9 O I M KHPNH N ' / JK PKP% APO+

HP 9 KUG APN PP!' HP ' KHM I AP ' M!O H G 99+
3MKH !P AT H I ' P!7 K%O' PN PG H G M O 8
JN MG NHPT LP!' NHPT M99 MNP H G 99+
X H KH O PG NHP K PPL !Q NH P7 N ' G I P PQM O 8
HP NH PGH 9O Q MNPG NHP O ' N ' HM P H I ' HPM O8
QHN M!O% !Q PMGP9G GH PU N ' GPP H I ' NHP P 8
HPT 7 QHN H I ' TPN HP GN 99 LJ GJPG H G 7PM +

#G PMKH J! 99 !Q L NM9 T P9OG H I ' MT+
H JQH 9 NN9P P!NG M!O K M!! PG 7 NHP L9MKP
HP !O M G NH H G N KH ' N ' I MUP H I ' GNMT+
#!O A9 G NHP G I UP 7 N !N ' H G 7MKP
3WN !QJ GH !Q H G K !OJKN F. !' NH G KMGP 8
JN H G H N HPM N ' H KH 7 !O OPG P O NH GK KH
-J77G 7 NH M! NHP ' !O NHMN 7 PG NHP N KH

#!O AP !Q 9 QHNPO ' AT NHP 9 QHN HP GL PG
/JK PN M%G Q9 P ' HP P !' HP ' !PPO9P GN KUG 8
"P NMUPG N 7 I ' NHP JGHPG HP P N 9 PG+
#!O Q L !Q N ' NHP !PP9O ÐH G 7 !QP ' L KUG 8
#G H ' GH J9O GMT ' NH G Q9 P N ' M!N !' N KUG
2G ! N !J %O 8 PNJ !' MQM !' !' HMGNP8
H J GPPGN J ' I GN PGG% !M I P!NG M P KHMGNP+

' %- (SL JOP!KP S !' NHP GP!GP 7 NHP Q !M9 / MN !' ') ' *
' 4 SQ M P+
' (SK !OJKN +
H ' <
f S AGN JKN+
' 4 - SKHPKUPO ' !' / P%G / MA J %G / GN ' # KN 2' K ' 2 S
6 !' G 9 UP M!' P! JG % - ' 7 GN
HMN A NPG N9 P 7 GN A !' !7M!NG 7 NHP GL !Q+R

JN M99 NHPGP L ' 7 A OO !QG K J9O ! N GNMT H I ' 8
" P !' NHP GN GP!GP K !GN JPG NHP ' OP! M9 8
HP O G ' NHP !O ' NHP Q9 P NHMN O O OP9MT H I +
" P NMUPG 7 ' MKK OP!NM9 NH !QG 7 N M98
1 ' MG NH GP AM G H KH GN L ' NHP H J 9T O M9+
X H ' NH M 9 !QP !Q GNMT H G K J GP O NH 9PN F
99 P P T I !JNP LMTG NHP H J ' H G OPAN+

6 ' G %%]J NH HP ' 6 NHPGP 9PNG MNNP!O NHP N I P+
/ UP 9 NN9P 7 GNG NHMN G I PN I P NH PMN NHP GL !Q+
' MOO M I P PE K !Q N ' NHP L I P
#!O Q P NHP G!PMLPO FA OG I P KMJGP N ' +G !Q+
-M !' LMTG NHP !K I P 7 PMKH L$ PK JG NH !Q 8
" JQP KUG ' H QH !OG ' GN !Q L MNPG ' GHP9 PG M!O
GM!OG+
HP I P KHM!N 7PM G ' P P KH MN H I P HP 9M!OG+R

' G HP K I P J!N ' NHP KHM I AP ' O '
Y HMN GHJNG H I ' 7 I ' NHP HPM P!' 7 H G NH JQHN+
X H KH NH M T P9O !Q 9MNKH ' M!O NH ! ' I P+
" MNH AM %O H I ' 7 I ' NHP A9PGGPO NH !Q HP G JQHN+
' 7 I ' H I GP97 I L PNT HMNH JQHN+
HMN 7 ' H G L PT N ' L MT HP O NH APQ !+
#G 7 NHP HPM P!' GH J9O K J!NP!M!KP H G G !+

JN !' NHP I OGN 7 H G J!7 J N7J9 L MTP +
" M !Q G 9 K NPO NHP PNP !M9 L P +
HMN H G 7 J9 NH JQHNG I QHN K I LMGG H G 7M ' 7M +
#!O NHPT J9O GNM!O MJGL K JG N ' NHP H J +
3 P!' NHP P HP GNM NG S]J NH HP ' 6 2' I JGN OP79 P 8
HP L P G N ' H I ' 2' L MT MAH ' NH G 7MKN+
" ' KM!' NHPT NHP!' MGG GN I P !' NHP MKN \

6 HP!' / P M!O O NJ!P AP I T Q OG ' I T QJ OP [
T 99 G AMKU%O NH PG 9JN !
H JQHNG M P AJN O PM I G N 99 NHP ' P77PKNG AP N PO+
HP A9MKUPGN G !' G K9PM %O NH MAG 9JN !' 8
#QM !GN 9 P%G 7 P 7PM %G 7 GN HMNH O GG 9JN !+
HP PTP 7 HPM P!' G JN ' M!O I GNT ! QHN
P G NHP GHM I P NHMN 7 99 G G PPN OP9 QHN+R

H G GM O ' H G QJ 9NT HM!O L9JKU%O JL ' NHP 9MNKH+
#!O NH H G U!PP NHP O ' HP LP!G OP
HP O P G9PPLG 7MGN NHMN NH G ! QHN 9 99 KMNKH #
HJG N PMG !' UG P P N M N G AP PGL PO+
X H ' GPPG NHP 9J U !Q GP LP!N GNPLG MG OP8
JN GHP ' G J!O G9PPL !Q ' 7PM !Q ! ' GJKH NH !Q
/ PG MN NHP I P KT 7 H G I NM9 GN !Q+

2!N ' NHP KHM I AP ' KUPO9T HP GNM9UG %%
#!O QMCPNH !' HP ' TPN J!GNM !PO APO+
HP KJ NM !G AP !Q K9 GP ' MA JN HP M9UG+
& 99 !Q H G Q PPOT PTPAM99G !' H G HPMO
T NHP ' H QH N PMG !' G H G HPM N I G9PO 8
X H KH Q PG NHP MNKH O N ' H G HM!O 7J99 G !
' O M ' NHP K9 JO NHMN H OPG NHP G 9 P ' I !+

/ U ' MG NHP 7M ' M!O 7 P T L !NPO GJ!+
&JGH !Q 7 I 7 NH M K9 JO ' AP PM PG J ' G QHN8
3 P!' G ' NHP KJ NM !' O M !' H G PTPG APQJ!'
' !U ' AP !Q A9 !OPO NH M Q PMNP ' 9 QHN8
X HPNHP ' N G NHMN GHP P79PKNG G ' A QHN

% 4 ')% M9 !P GMTG ' 6 HMN NHP L PN I PM!N AT NHP O % ')N ' K ! PT
NHP ! N !' ! N 7 M A GNP JG ' AJN]J PN I P I P!N ' MLLPM G 7 I M GJAGP]JP!N
LMGGMQP S
; YO ' !' NHP O PMO7J9 OM U 7 OPPL I O! QHN
X NH GH ! !Q 7M9KH !' !' I T KHM I AP ' KM I P +
#' (- ' K PMNJ P+% R

M9 !P MLLPM G 7 I M GJAGP]JP!N LM N 7 G ! NP ' N ' K !7 J!O % ')
" P GMTG ' 6 #' LP G !' MLL PHP!G P 7 AP !Q O GK P PO !MNJ M99T NMUPG ' %
NHP G !P ' N ' M P MN H G L !N+R JN 9 !Q GNPLG M P ! GT GNPLG8 M!O NHP P9 P
6 M]J !%G M GH !Q % %R KM!' N AP NHP N JP PMO !Q 7 NHP 7M I JG LMGGMQP
!' MKAPNH JN % ')* !' NHP K !N M T '9 NP M99T I PM!G ' '8 '2 % '2 2N
G NHP #!Q9 MW !' % '(<- HP +7 9P ' H ' K PPLG JL !' NHP
A OG % ')%* M!O H G % ') !0 S OP PG NG !M I P 7 I ' NHP KHM MKNP ' 7 NHP
7 9P %G I P I P!N+

HMN OMCC9PNH NHPI ' 'P9GP'G IP GHMI P'GJLL GPO8
JN A9 IO NHPT M P'MIO UPPL'NHPI GP9 PG pIK9 GPO+

$ 'HMO NHPT' I'NHMN OM UG IP L G I'O PO+
HPI' HMO NHPT GPPI'NHP'LP O' 7NHP ' 99[
2I'H G K9PM'APO' I QHN HM P' PL GPO' GN 99
JN NHPT' I JGN LP';NH G A9PGGPO' 9PMQ'JP'N 'U 998
#IO'H 9T NH 7QHNPO' /JK PKP'N 'NHP 'G QHN'
JGN GP99 HP 'E T'HP'9 7P'HP ' 9O%'G OP9 QHN+

"P'9 9T'HMIO'HP ' GT'KHPPU'9 PG'JIOP +
CPI'Q NHP'L 99 ' 7M'9M 7J9'U GG8
XH'NHP P7 P'MIQ T'GPPI'G'N 'LM N' I'GJIOP
XHP P'NH J' NH'LMN PIKP'I JGN'I T' 99'MA OP+
T' 99'NHMN' I M UG'NHPP'7 'I T'PM NH%G'OP9 QHN+
XH KH'2'N 'K I]JP'G JQHN' NH'M99'I T'I QHN8
JN'MG PL '7MIO' PMG I'APMN' N'OPMO+
T'NHT'A QHN' APMJNT' MG'N'IP 9T'A PO+

S2'GPP' HMN'K GGPG'I T'MNNPI L'N' 99'A IQ8
2'UI ' HMN'NH IG'NHP'Q IQ' GP'OP7PIOG8
2'NH IU'NHP'H IPT'QJM OPO' NH'M'GN IQ'
#99NH G'AP7 PHMIO'K JIGP9'K IL PHPIOG8
JN' 99 G OPM7'MIO'HPM G'I 'HPPO7J9'7 PIOG'8

X ML L%O'MIO'K I7 JIOPO' I'M'NH JGMIO'7PM G+
/ UP'N 'M'IP U 99%O'A O'GHP'N PI A9 IQ'9 PG'8
HP'OM PG'I N'9 U8 TPN' IU'IQ'NHP'P'ML LPM G'
>J KU GH 7N IQ'MIN KG'JQ9T' I'HP'PTPG'
JKH'GHMO G'M P'NHP' PMU'A M I%G'7 QP PG
X H 'MIQ T'NHMN'NHP'PTPG'79T'7 I'NHP '9 QHNG+
2I'OM UIPGG'OMJING'NHPI' NH' I P'O PMO7J9'G QHNG+

" G'HMIO'NHMN'TPN' PIM IG'JL I'HP'A PMGN
@&JOP' MI 'N 'AMNNP'GJKH'MI' T' M99[
MT'7PP9'HP'HPM N'L 'K N CPI'O GN PGG%O+
X J IO IQ' NGP97N 'OPMNH' GP'JL'MIO'7M99+
PMN IQ'HP'AJ9U D'NHM'H G'HMIO'GHMUPG' NHM9+
H G' I PG' I'H I' P' MQP'MIO'OPMNH'I'9 7P+

JN'NHM'9 7P'9 %O' I'OPMNH'MIO'OPMNH' I'9 7P+

' SGMN MNPO'Q9JNNPO'MG M'7M9K I' %' I'" %'L PT+
YR>

' >'?

, , >'?

1i9T HP'HMNH'Mi'pTP'N 'QMCP' i'APMJNT
O'O NPG' i' HM'HP'9 UG'%Q i6N'9M ' 'OJNT+

6?'HM P'OPAMNPO'p pi' i'T'G J9' +
X HMN' iQ' HMN'GHM I p' HMN'G '?'GHM99'A PPO8
JN' NH iQ'KMi'#77PKN i%G K J GP'K iN 9+
1 'GN L'NHP'HPMO9 iQ'7J T' 7H G'GLPPO+
2'UI ' PLPiNMiN'NPM G piGJP'NHP'OPPO+
&PL MKH'O GOM i'Mi0'OPMO9T'pi I NT8
4PN'GN P?'N 'pIA MKP I ip' i7M I T+R

H G GM O'HP'GHMUPG'M9 7N'H G& I Mi'A9MOP+
XH KH'9 UP'M'7M9K i'N p iQ' i'NHP'GU PG
JKHPNHD'NHP'7 g'AP9 ' NH'H G iQ%G GHMOP+
XH GP'K UPO'APMU'NH pMNG' 7HP' I JiN'HP'O PG
'JiOP'H G' iGJ9N iQ'7M9KH i'9 PG
"M I 9PGG'/JK pN M'I M U iQ' HMN'HP'NP99G
X NH'N pIA9 iQ'7PM 'MG'7 g HPM'7M9K i%G'AP99G+D

6'/JK pKP R'] J NH'HP'6%H G'i QH"?' I JG%'piE T'NHPP8
27'NH J'OPIT'NHPi'7 KP'I JG%' U' I T' MT+
O ' i'NHT'APO'?'LJ L GP'N 'OPGN T'NHPP8
HMN'O ip'G I P' NH9PGG'G9M P' 7'NH ip'2%9G G9MT+
'U 99'NH ip'H i J ' NH'NHT'9 7P%G OPKMT8
#io' i'NHT'OPMO'M I G O '2' IPMi'N 'L9MKP'H I +'
PM iQ'2'G9P 'H I 'GPPiQ'NHP'PIA MKP'H I +

6' 'NHT'GJ iQ'HJGAMiO'GHM99' piM i'
HP'GK i7J9' I M U' 7P p T' LPi'pTP8
HT'U iG Ipi'HMiQ'NHP 'HPMOG'MN'NH G'O GOM i+
HT' GGJP'A9J %O' NH'iMIp9PGG'AMGNM OT
#iO'NH J'NHP'MJNH ' 7NHP ' A9]JT
HM9N'HM P'NHT'N pGLMGG'K NPO'JL' i' HTIPG
#iO'GJiQ'AT'KH 9O pi' i'GJKKPPO iQ'N IPG+

HPi'7 'NHT'HJGAMiO'MiO'NHT'KH 9O piG'GMUP+
piOP F'IT'GJ N'AP]JPMNH'i N'N 'NHP '9 N'
HP'GMI P'NHMN'7 I'NHPI'i 'OP KP'KMi'NMUP+
HP'A9PI GH'NHMN' 99'ip p'AP7 Q N8
X GP'NHMi'M'G9M GH' LP' 'A NH H J %G A9 N'@
O 'IM UG'OPGK PO'i'IpI%G'iMN NT'
P'iMNJ P%G'7MJ9NG'i N'NHP ' i'i7MI T+R

"P P' NH'M'K KUMN KP%'OPMO U 99 iQ'PTP'
"P' JGPNH'JL'H I GP97'MiO' IMUPG'M'LMJGP8
XH 9P'GHP'NHP'L KNJ P' 7LJ P'L PNT+
/ UP'M' H NP'H iO'JiOP'NHP'Q TLP%GF'GHM L'K9M G+'
-9PMOG'i'M' 9OP ipGG' HP P'M P'i 9M G+
'NHP' JQH'APMGN'NHMN'UI G i 'QPiN9P' QHN+
'MJQHN' APTG'AJN'H G'7 J9'MLLPN NP

($ $SKMJGPG N 'K JKH+
XP'HM P'NHP'GMIP'IMQP'i'"pi T' 2+'-M N'222+ S

6' p'NHP'NHP'UiQ'i 'HP'NHMN'9 PG'H I'APGN+
HP'L JOPGN'HP'NHMN'H 9OG'JL'/MiKMGNP '
5M P'GN 'N' Q'7XM KU'%$) '$%"' '%B

' HPPO' PQM O+
'3 i =%"'' SK L M9'A9PI GH+ 'i'#' OGJ I I P' QHN%G 5 PM I' S

6'#iO'NHP'"' %'7'iMNJ P%G'HMiO'
HMH'i N'i'NHP 'GGJP'GNMiO8 +
P P'I 9P'HM P 9L'i 'GKM+
'IM U'L O Q JG+R

F NPP PiG'GMTG'NHP' 2-'GL LP 9T'NHP'Q 77 i+ JN i'NHP'LMGGMQP'AP7 P'JG'
MG' i'NHP'PM 9T'3iQ9 GH' NP G'NHP' O'G MLL9 PO N 'A OG 7L PT'NHP'PMQ9P
PGLPK M99T+

F M9 ip' H'HMG'KP NM i9T'I MOP'P T'7P 'OP MN iG'7 I'NHP' Q iM9'NPWN 7
NH'G L PI' HP P'KMiQPG" 'N ',)#'6'NHP P'Ap iQ' i ' LL G N i' HMNG P p

H J' !Q%GN' H G' H ! J ' J!O%GN' H G' L !KP9T' !M I P+'
H J' M N' ! N' HMN' NH J' GPP I %GN8 M!O' 7' NHP' GM I P+'
H J' GPP I %GN' ! N' HMN' NH J' M N ' M' Q O ' M' U !Q8
O 'U !QG' 9 UP' Q OG' GH J9O' Q P !' P P TNH !Q+

6' " ' 99' NHT' GHM I P' AP' GPPOPO' !' NH ! P' MQP+
X HP !' NHJG' NHT' KPG' AJO' AP7 P' NHT' GL !Q' [
27' !' NHT' H LP' NH J' OM %GN' O ' GJKH' JN MQP+
X HMN' OM %GN' NH J' ! N' HP !' !KP' NH J' M N' M' U !Q [
' AP' P I P I AP %O' ! ' JN MQP JG' NH !Q'
O I ' MGGM9' MKN G' KM !' AP' L%O' M MT8
HP !' U !QG% I GOPPOG' KM ! ! N' AP' H O' !' K9MT+

6 H G' OPPO' 99' I MUP' NHPP' !9T' 9 %O' 7 '7PM +
JN' HMLLT' I !M KHG' GN 99' M P' 7PM %O' 7 '9 P'
X NH' 7 J9' 77P!OP G' NH J' LP 7 KP' I JGN' APM +
X HP !' NHPT' !' NHPP' NHP' 9 UP' 77P!KPG' L P'
27' AJN' 7 '7PM ' 7' NH G' NHT' 99' P I P8
'L !KPG' M P' NHP' Q9MGG ' NHP' GKH 9 ' NHP' A U+'
X HP P' GJAEPKNG% PTPG' O ' 9PM ! ' O ' PMO ' O ' 9 U+

6' # !O' 9N' NH J' AP' NHP' GKH 9' HP P' / JGN' GHM99' 9PM !' \
JGN' HP' !' NHPP' PMO' 9PKNJ PG' 7' GJKH' GHM I P' \
X 9N' NH J' AP' Q9MGG ' HP P !' N' GHM99' O GKP !'
JNH NT' 7 ' G ! ' M M!N' 7 ' A9M I P
'L 9PQP' O GH ! J ' !' NHT' !M I P' \
H J' AMKU%GN' PL MKH' MQM !GN' 9 !Q 9 PO' 9MJO+
!O' I MU%GN' 7M ' PLJNMN !' AJN' M' AM O+

6' " MGN' NH J' K I I M!O' \ AT' H I ' NHMN' QM P' N' NHPP+
O I ' M' LJ P' HPM N' K I I M!O' NHT' PAP9' 99
5 M ' ! N' NHT' G O' N ' QJM O' !] J NT
O ' N' MG' 9P!N' NHPP' M99' NHMN' A O' N ' U 99+
HT' L !KP9T' 79BKP' H ' KM!GN' NH J' 7J97 9
X HP !' LMNNP !%O' AT' NHT' 7MJ9N' 7 J9' !' I MT' GMT+
" P' 9PM I %O' N ' G ! ' M!O' NH J' O OGN' NPMKH' NHP' MT' \

6' H !U' AJN' H ' 9P' M' GLPKNMK9P' N' P P'
' P ' NHT' L PGP!N' N PGLMGG' !' M! NHP +
P!%G' 7MJ9NG' O ' GP9O I ' N ' NHP I GP9 PG' MLLPM 8
HP ' !' N M!GQ PGG !G' LM N M99T' NHPT' G I NHP ' ' ,
H G' QJ 9N' J9O' GPP I ' OPMNH NHT' !' NHT' A NHP +
1' H ' M P' NHPT' MLL%O' !' NH' !7M I PG
$ HMN' 7 I ' NHP ' !' I GOPPOG' MGUMJ!KP' NHP ' PTPG[

6' ' NHPP ' N ' NHPP ' I T' HPM %O JL' HM!OG' MLLPM9+
N' N ' GPOJK !Q' 9JGN ' NHT' MGH' P9 P 8
' GJP' 7 ' PW 9%O' I MEPGNT%G' PLPM9
/ PN' H I ' PNJ !' M!O' 79MNNP !Q' NH JQHNG' PN P'
" G' N JP' PGLPKN' 99' %L G !' 7M9GP' OPG P
!O' LP' NHP' O I ' I GN' 7 I ' NHT' O N !Q' PT!P+
HMN' NH J' GHM9N' GPP' NHT' GNMNP ' M!O' L NT' L !P+R

6' " M P' O !P R'] J NH' HP' 8 6' I T' J!K !N 99PO' N OP'
J !G' ! N ' AJN' G P99G' NHP' H QHP ' AT' NH G' 9PN+'
I M99E9 QHNG' M P' G !' A9 !' JN ' HJQP' 7 PG' MA OP+
!O' NH' NHP' !O' !' Q PMNP ' 7J T' 7 PN
HP' LPNNT' GN PM I G' NHMN' LMT' M' OM 9T' OPAN
' NHP ' GM9N' G P P Q!' NH' NHP ' 7 PGH' 7M99G% HMGNP+'
#OO' N ' H G' 79 ' AJN' M9NP ' ! N' H G' NMGNP+R

6' H J' M N R'] J NH' GHP ' 6' M' GPM ' M' G P P Q!' U !Q8
!O' 9 ' NHP P' 7M99G' !N ' NHT' A J!O9PGG' 79 O'
9MKU' 9JGN ' O GH ! J ' GHM I P' I GQ P ! !Q
X H ' GPPU' N ' GNM !' NHP' KPM!' 7' NHT' A9 O+
27' M99' NHPGP' LPNNT' 99G' GHM99' KHM!QP' NHT' Q O+
HT' GPM' NH !' M' LJOO9P%G' I A' G' HPM G%O+
!O' ! N' NHP' LJOO9P' !' NHT' GPM' O GLP G%O+

6' ' GHM99' NHPGP' G9M PG' AP' U !Q ' M !O' NH J' NHP ' G9M P8
H J' ! A9T' AMGP ' NHPT' AMGP9T' O Q ! 7 PO8
H J' NHP ' 7M ' 9 7P ' M!O' NHPT' NHT' 7 J9P ' Q M P8

H J' 9 MNHPO' !' NHP ' GHM I P ' NHPT' !' NHT' L OP'
HP' 9PGGP ' NH !Q' GH J9O' ! N' NHP' Q PMNP ' H OP8
HP' KPOM ' GN LG' ! N' N ' NHP' AMGP' GH JA%G' 7 N+
JN' 9 ' GH JAG' NHP ' MN' NHP' KPOM %G' N+

6' ' 9PN' NHT' NH JQHNG ' 9 ' MGGM9G' N ' NHT' GNMNP' R S
S' ' I P R'] J NH' HP8 6' AT' HPM P! ' 2' 99' ! N' HPM ' NHPP8
4 P9O' N ' I T' 9 P' 8 7' ! N ' P!7 KPO' HMNP+
2!GNPMO' 7' 9 P%G' K T' N JKH ' GHM99' JOP9T' NPM ' NHPP8
HMN' O !P ' OPGL NP7J99T' 2' I PM!' N ' APM ' NHPP'
!N ' NHP' AMGP' APO' 7' G I P' MGKM9' Q I +
' AP' NHT' LM N!P ' !' NH G' GHM I P7J9' O I +R

H G' GM O ' HP' GPNG' NHP' 7 N' JL !' NHP' 9 QHN $
O ' 9 QHN' M!O' 9JGN' M P' OPMO9T' P!P I PG8
HM I P' 7 9OPO' JL' !' A9 !O' K !KPM9 !Q' ! QHN
X HP !' I GN' J!GPP!' NHP!' I GN' O NH' NT M!! CP+
HP' 97' HMNH' GP C%O' H G' L PT ' NHP' L ' 9M I A' K PG'
99' NH' HP ' !' H NP' 79PPKP' HP ' KP' K !N 99%O'
3!N I AG' HP ' JNK T' !' HP ' 9 LG% G PPN' 7 9O'

O ' NH' NHP' ! QHN9T' 9 !P!' NHMN' GHP' PM G'
" P' LP!G' HP ' L NP JG' K9M I J G' !' HP ' HPMO8
9 !Q' H G' H N' 7MKP' !' NHP' KHMGNPGN' NPM G'
HMN' P P ' I OPGN' PTPG' NH' G ' GHPO+
1 ' NHMN' L !P'D9JGN' GH J9O' GNM !' G ' LJ P' M' APO' '
HP' GL NG' HP P 7' K J9O' PPL !Q' LJ 7T
" P ' NPM G' GH J9O' O L' !' NHP I ' LP LPNJM99T+

JN' GHP' HMNH' 9 GN' M' OPM P ' NH !Q' NHM!' 9 7P+
#!O' HP' HMNH' !' HMN' HP' J9O' 9 GP' MQM !+
H G'$7 KPO' 9PMQJP' O NH' 7 KP' M' 7J NHP ' GN 7P+
H G' I I P!NM T' E T' A PPOG' I !NHG' 7' LM !+
H G' H N' OPG P' K ! P NG' N ' K 9O' O GOM !'
-J P' HMGN NT' G' 79PO' 7' HP ' GN P+
!O' / JGN ' NHP' NH P7 ' 7M '$L P ' NHM!' AP7 P+

/ U ' MG' NHP' 7J99 7PO' H J!O' ' Q QPO' HM U+
!ML N' 7 ' NP!OP ' G I P99' ' GLPPOT' 79 QHN
MUP' G9 ' LJ GJ N ' ' M9N QPNHP ' AM9U'
HP' L PT' HP P !' AT' !MNJ P' NHPT' OP9 QHN8
' GJ 7P N NMU !Q' M] J !' 7M PG' NH G' ! QHN
" G' NMGNP' OP9 K JG ' !' O QPGN !' G J !Q
5P J G' H G' 99' NHMN' 9 %O' AT' 7 J9' OP J !Q

1' OPPLP ' G !' NHM!' A NN !9PGG' K !KP N'
M!' K I L PHP!O' !' GN 99' I MQ !MN !' [
5 J!UP!' OPG P' I JGN' I N' H G' PKP LN+
3 P' HP' KM!' GPP' H G' !' MA I !MN !+
X H 9P' 9JGN' G' !' H G' L OP' ! ' PWK9M I MN !'
M!' KJ A' H G' HPMN ' ' P Q!' H G' MGH' OPG P+
99 ' 9 UP' M' EMOP ' GP97 99' H I GP97' O NH' N P+

#!O' NHP!' NH' 9M!U' M!O' 9PM!' O GK 9 J %O' KHPPU+
X NH' HPM T+PTP ' U! N' A ' M!O' GN P!QNH9PGG' LMKP+'
OPPA9P' OPG P ' M99' PK PM!N ' L ' M!O' I PPU+
/ UP' N ' M' AM!U JLN' APQQM ' M 9G ' H G' KMGP
HP' 79PGH' AP !Q' L JO ' OPG P' O NH' 7 QHN' NH' Q MKP+
O 'NHP P' N' P P9G' 8 M!O' HP!' NHMN' OPKMTG+
HP' QJ 9NT' PAP9' 7 ' P I GG !' L MTG+

' 7M PG' N' NH' NH G' 7MJ9N7J9' 9 O' 7' & I P
X H ' NH G' MKK I L9 GH I P!N' G ' H N9T' KHMG%O' 8
O ' ! ' MQM !GN' H I GP97' HP' G J!OG' NH G' O I ' $
HMN' NH JQH' NHP' 9P!QNH' 7' N I PG' HP' GNM!OG' O GQ MK%O\'
PG OPG ' H G' G J9%G' 7M ' NP I L9P' G' OP7MK%O 8
' H GP' PMU' J !G' I JGNP ' N LG' 7' KM PG+
' MGU' NHP' GL NNPO' L !KPGG' H ' GHP' 7M PG+

HP' GMTG ' HP ' GJAEPKNG ' NH' 7 J9' !GJ PKN !'
" M P' AMNNP %O' O !' HP ' K !GPK MNPO' M99
#!O' AT' NHP ' I NM9' 7MJ9N' A JQHN' !' GJAEPKN !

- 'S PKM998' 7 I ' NHP' O P!KH' -
*))

' SHM !Q' !K9 !MN !' 'L LP!G NT' M!O' G ' GP97 99PO' HPMOGN !Q+

" P ʻ I I NM9 NTʻ M!Oʻ I MUPʻ HP ʻ NH M99ʻ
ʻ 9 !Qʻ OPMNH ʻ M!Oʻ LM !ʻ LP LPNJM98
X H KHʻ !ʻ HP ʻ L PGK P!KPʻ GHPʻ K !N 99POʻ GN 99
JNʻ HP ʻ 7 PG QHNʻ K J9Oʻ ! Nʻ 7 PGNM99ʻ NHP ʻ 99+

3 P!ʻ !ʻ NH Gʻ NH JQHNʻ NH JQHʻ NHPʻ OM Uʻ ! QHNʻ HPʻ GNPM9PNH ʻ
#ʻ KMLN Pʻ KN ʻ NHMNʻ HMNHʻ 9 GNʻ !ʻ QM !ʻ 8
PM !Qʻ M MTʻ NHPʻ J!Oʻ NHMNʻ ! NH !Qʻ HPM9PNH
HPʻ GKM ʻ NHMNʻ 99ʻ OPGL NPʻ 7ʻ KJ Pʻ P I M !+
/ PM !Qʻ H Gʻ GL 9ʻ LP L9PW%Oʻ !ʻ Q PMNP ʻ LM !+
HPʻ APM Gʻ NHPʻ 9 MOʻ 7ʻ 9JGNʻ HPʻ 9P7Nʻ APH !O+
#!Oʻ HPʻ NHPʻ AJ NHP!ʻ 7ʻ Mʻ QJ 9NTʻ I !O+

" Pʻ 9 UPʻ Mʻ NH P GHʻ O Qʻ K PPLGʻ GMO9Tʻ NHP!KP8
HPʻ 9 UPʻ Mʻ PM POʻ 9M I Aʻ 9 PGʻ LM!N !Qʻ NHP P8
" Pʻ GK 9Gʻ M!Oʻ HMNPGʻ H I GP97ʻ 7 ʻ H Gʻ 77P!KP8
HPʻ OPGLP MNPʻ NHʻ HP ʻ !M 9Gʻ HP ʻ 79PGHʻ O NHʻ NPM 8
" Pʻ 7M !N9Tʻ 79 Phʻ G PMN !Qʻ NHʻ QJ 9NTʻ 7PM 8
HPʻ GNMTGʻ PWK9M I !Qʻ !ʻ NHPʻ O P7J9ʻ ! QHN8
" Pʻ J!Gʻ M!Oʻ KH OPGʻ H Gʻ M! GH%Oʻ 9 MNH%Oʻ OP9 QHN+

" Pʻ NHP!KPʻ OPLM NGʻ Mʻ HPM Tʻ K ! P N NP8
HPʻ NHP Pʻ P I M !Gʻ Mʻ H LP9PGGʻ KMGNM MT
" Pʻ !ʻ H Gʻ GLPPOʻ 9 UGʻ 7 ʻ NHPʻ I ! !Qʻ 9 QHN8
HPʻ L MTGʻ GHPʻ !P P ʻ I MTʻ APH 9Oʻ NHPʻ OMT8
6ʻ O ʻ OMT R] J NHʻ GHPʻ 6ʻ ! QHN%Gʻ GKMLPGʻ O NHʻ LP!ʻ 9MT8
#!Oʻ I Tʻ N JPʻ PTPGʻ HM Pʻ !P P ʻ L MKN G%Oʻ H ʻ
ʻ K9 MUʻ 77P!KPGʻ NHʻ Mʻ KJ!! !Qʻ A +

6ʻ HPTʻ NH !Uʻ ! Nʻ AJNʻ NHMNʻ P P Tʻ PTPʻ KM!ʻ GPPʻ
HPʻ GM I Pʻ O GQ MKPʻ H KHʻ NHPTʻ NHP I GP9 PGʻ APH 9O8
#!Oʻ NHP P7 Pʻ J9Oʻ NHPTʻ GN 99ʻ !ʻ OM U!PGGʻ AP+
ʻ HM Pʻ NHP ʻ J!GPP!ʻ G !ʻ P I M !ʻ J!N 9Oʻ 8
O ʻ NHPTʻ NHP ʻ QJ 9Nʻ NHʻ PPL !Qʻ 99ʻ J!7 9O+
#!Oʻ Q M P ʻ 9 UPʻ MNP ʻ NHMNʻ O NHʻ PMNʻ !ʻ GNPP9+
L !ʻ I Tʻ KHPPUGʻ HMNʻ HP9L9PGGʻ GHM I Pʻ 2ʻ 7PP9+R

" P Pʻ GHPʻ PWK9M I Gʻ MQM !GNʻ PL GPʻ M!Oʻ PGN+
#!Oʻ A OGʻ HP ʻ PTPGʻ HP PM7NP ʻ GN 99ʻ APʻ A9 !O+
HPʻ MUPGʻ HP ʻ HPM Nʻ ATʻ APMN !Qʻ !ʻ HP ʻ A PMGN+
#!Oʻ A OGʻ Nʻ 9PML ʻ 7 Iʻ NHP!KP ʻ HP Pʻ Nʻ I MTʻ 7 !Oʻ
I Pʻ LJ P ʻ KHPGN ʻ N ʻ K9 GPʻ G ʻ LJ Pʻ Mʻ I !Oʻ
N$ M!N Kʻ NHʻ Q P7ʻ NHJGʻ A PMNHPGʻ GHPʻ 7 NHʻ HP ʻ GL NPʻ
#QM !GNʻ NHPʻ J!GPP!ʻ GPK PKTʻ 7ʻ ! QHN

6ʻ 1ʻ K I 7 N U 99 !Qʻ ! QHNʻ I MQPʻ 7ʻ HP99$
5 Iʻ PQ GNP ʻ M!Oʻ ! NM Tʻ 7ʻ GHM I P[
9MKUʻ GNMQPʻ 7 ʻ N MQPO PGʻ M!Oʻ I J OP Gʻ 7P99ʻ ʻ
MGNʻ G ! K !KPM9 !Qʻ KHM Gʻ [!J GPʻ 7ʻ A9M I Pʻ [
9 !Oʻ I J779POʻ AM Oʻ [OM Uʻ HM A J ʻ 7 ʻ OP7M I Pʻ [
: Iʻ KM Pʻ 7ʻ OPMNH ʻ H GLP !Qʻ K !GL MN +
X NHʻ K9 GP N !QJPOʻ N PMG !ʻ M!Oʻ NHPʻ M GHP ʻ

6ʻ $ʻ HMNP7J9ʻ ML JGʻ M!Oʻ 7 QQTʻ ! QHN+
!KPʻ NH Jʻ M Nʻ QJ 9NTʻ 7ʻ I Tʻ KJ P9PGGʻ K I P+
JGNP ʻ NHTʻ I GNGʻ N ʻ I PPNʻ NHPʻ PMGNP !ʻ 9 QHN+
MUPʻ Mʻ MQM !GNʻ L L N !%Oʻ K J GPʻ 7ʻ N I Pʻ [
1 ʻ 7ʻ NH Jʻ 9Nʻ LP I Nʻ NHPʻ GJ!ʻ N ʻ K9 I Aʻ
" Gʻ !NPOʻ HP QHN ʻ TPNʻ P Pʻ HPʻ Q ʻ N ʻ APO
! Nʻ L G ! JGʻ K9 JOGʻ MA JNʻ H Gʻ Q 9OP!ʻ HPMO+

6ʻ X NHʻ NNP!ʻ OM I LGʻ M GHʻ NHPʻ I ! !Qʻ M 8
/ PNʻ NHP ʻ PWHM9%Oʻ J! H 9PG I Pʻ A PMNHGʻ I MUPʻ G KUʻ
HPʻ 9 7Pʻ 7ʻ LJ NT ʻ NHPʻ GJL P I Pʻ 7M +
3 Pʻ HP$M Pʻ H Gʻ PM Tʻ ! !N OPʻ L KUʻ 8D
#!Oʻ 9PNʻ NHTʻ I GNTʻ ML J Gʻ I M KHʻ G ʻ NH KU+

HMNʻ !ʻ NHgP ʻ G I UTʻ M!UGʻ H Gʻ G I NHP %Oʻ 9 QHNʻ
MTʻ GPNʻ MNʻ ! !ʻ M!Oʻ I MUPʻ LP LPNJM9ʻ ! QHN+

6ʻ X P Pʻ M] J !ʻ ! QHNʻ @MGʻ HPʻ Gʻ AJNʻ ! QHN%Gʻ KH 9O +
HPʻ G 9 P GH ! !Qʻ] JPP!ʻ HPʻ J9Oʻ O GNM !ʻ 8
" P ʻ N !U9 !Qʻ HM!O I M OGʻ N ʻ ATʻ H Iʻ OP7 9%O+
H JQHʻ ! QHN%Gʻ A9MKUʻ A G Iʻ GH J9Oʻ ! Nʻ LPPLʻ MQM !ʻ 8
ʻ GH J9Oʻ 2ʻ HM Pʻ K LM N!P Gʻ !ʻ I Tʻ LM !ʻ
#!Oʻ 7P99 GH Lʻ !ʻ Pʻ O NHʻ Pʻ MGGJMQP+
#Gʻ LM9 I P G% KHMNʻ I MUPGʻ GH Nʻ NHP ʻ L 9Q I MQP+

6ʻ X HP Pʻ Đ ! ʻ 2ʻ HM Pʻ ! ʻ !Pʻ N ʻ A9JGHʻ NHʻ I P+
ʻ K GGʻ NHP ʻ M I Gʻ M!Oʻ HM!Qʻ NHP ʻ HPMOGʻ NHʻ I !P
ʻ I MGUʻ NHP ʻ A G ʻ M!Oʻ H OPʻ NHP ʻ !7M I T8
JNʻ 2ʻ M9 !Pʻ M9 !Pʻ I JGNʻ G Nʻ M!Oʻ L !P
PMG ! !Qʻ NHPʻ PM NHʻ NHʻ GH P Gʻ 7ʻ G 9 P ʻ A !Pʻ
!Q9 !Qʻ I Tʻ NM9Uʻ NHʻ NPM Gʻ I Tʻ Q P7ʻ NHʻ Q M!Gʻ
- ʻ MGN !Qʻ I !J I P!NGʻ 7ʻ 9MGN !Qʻ I M!G+

6ʻ 1ʻ ! QHN ʻ NH Jʻ 7J !MKPʻ 7ʻ 7 J9 PPU !Qʻ G I UP+
/ PNʻ ! Nʻ NHPʻ EPM9 JGʻ OMTʻ APH 9Oʻ NHMNʻ 7MKPʻ
X H KHʻ J!OP !PMNHʻ NHTʻ A9MKUʻ M99 H O !Qʻ K9 MUʻ
2 I I OPGN9Tʻ 9 PGʻ I M NT %Oʻ NHʻ O GQ MKP[
PPLʻ GN 99ʻ L GGPGG !ʻ 7ʻ NHTʻ Q9 I Tʻ L9MKP
HMNʻ M99ʻ NHPʻ 7MJ9NGʻ H KHʻ !ʻ NHTʻ P Q!ʻ M Pʻ I MOPʻ
MTʻ 9 UP GPʻ APʻ GPLJ9KH POʻ F !ʻ NHTʻ GHMOP[

ʻ 6ʻ MUPʻ I Pʻ ! Nʻ AEPKNʻ N ʻ NHPʻ NP99 NM9Pʻ OMT[
HPʻ 9 QHNʻ 99ʻ GH ʻ KHM MKNP %Oʻ Đ !ʻ I Tʻ A +
HPʻ GN Tʻ 7ʻ G PPNʻ KHMGN NT%Gʻ OPKMT+
HPʻ I L JGʻ A PMKHʻ 7ʻ H 9Tʻ PO9 KUʻ ʻ 8
4PM ʻ NHPʻ 99 NP MNP ʻ NHMNʻ U! ʻ ! Nʻ H ʻ
ʻ %K LHP ʻ HMNʻ Gʻ Nʻ !ʻ 9PM !POʻ A UG+
X 99ʻ] J NPʻ F I Tʻ 9 MNHG I Pʻ N PGLMGGʻ !ʻ I Tʻ 9 UG+

6ʻ HPʻ ! J GP ʻ N ʻ GN 99ʻ HP ʻ KH 9Oʻ 99ʻ NP99ʻ I Tʻ GN T+
#!Oʻ 7 QHNʻ HP ʻ K T !Qʻ AMAPʻ NHʻ M] J !%Gʻ ! M I P8
HPʻ MN ʻ N ʻ OPKUʻ H Gʻ MN T+
X 99ʻ K JL9Pʻ I Tʻ PL MKHʻ N ʻ M] J !%Gʻ GHM I Pʻ
OPMGN 7 !O !Qʻ I !GN P9G ʻ NJ! !Qʻ I Tʻ OP7M I P+
X 99ʻ N Pʻ NHPʻ HPM P Gʻ N ʻ MNNP!Oʻ PMKHʻ 9 !P+
" ʻ M] J !ʻ !QPOʻ I Pʻ 2ʻ 99MN !P+

6ʻ / PNʻ I Tʻ Q Oʻ !M I Pʻ NHMNʻ GP!GP9PGGʻ PLJNMN !+
O ʻ 99MN !P%Gʻ OPM ʻ 9 Pʻ APʻ UPLNʻ J!GL NNPO
27ʻ NHMNʻ APʻ I MOPʻ Mʻ NHP I Pʻ 7 ʻ O GLJNMN !+
HPʻ A M!KHPGʻ 7ʻ M! NHP ʻ Nʻ M Pʻ NNPO+
#!Oʻ J!OPGP %Oʻ PL MKHʻ N ʻ H Iʻ M99 NNPO+
HMNʻ Gʻ MGʻ K9PM ʻ 7 Iʻ NH Gʻ MNNM !Nʻ 7ʻ I !P+
#Gʻ 2ʻ P Pʻ NH Gʻ MGʻ LJ Pʻ N ʻ 99MN !P+

6ʻ 1ʻ J!GPP!ʻ GHM I Pʻ [! G A9Pʻ O GQ MKP[
1ʻ J!7P9Nʻ G P[K PGN J!O !Qʻ L MNPʻ GKM [
&PL MKHʻ Gʻ GNM I L%Oʻ !ʻ 99MN !JG% 7MKP+
#!Oʻ M] J !%Gʻ PTPʻ I MTʻ PMOʻ NHPʻ I NF 7M +
" ʻ HPʻ !ʻ LPMKPʻ Gʻ J!OPOʻ ! Nʻ !ʻ M +
#9MGʻ H ʻ I M!Tʻ APM ʻ GJKHʻ GHM I P7J9ʻ A9 G
X H KHʻ ! Nʻ NHP I GP9 PGʻ AJNʻ HPʻ NHMNʻ Q PGʻ NHP I ʻ U! Gʻ [

Sʻ 27ʻ$ 99MN !Pʻ NH !Pʻ H ! J ʻ 9MTʻ !ʻ I P+
O Iʻ I Pʻ ATʻ GN !Qʻ MGGMJ9Nʻ Nʻ Gʻ AP P7N+
Tʻ H !PTʻ 9 GNʻ M!Oʻ 2ʻ Mʻ O !P 9 UPʻ APP+
" M Pʻ ! ʻ LP 7PKN !ʻ 7ʻ I Tʻ GJ I I P ʻ 9P7N+
JNʻ AA%Oʻ M!Oʻ M!GMKU%Oʻ ATʻ !EJ JGʻ NHP7N8
2!ʻ NHTʻ PMUʻ H Pʻ Mʻ M!OP !Qʻ MGLʻ HMNHʻ K PLN+
#!Oʻ GJKU%Oʻ NHPʻ H !PTʻ H KHʻ NHTʻ KHMGNPʻ APPʻ UPLN+

ʻ ʻ ʻ () SNHPʻ L !Nʻ 7ʻ ! !+
ʻ &$ S 9P PMG+
% 4 - '($ ʻ 9N !ʻ JGPGʻ NHPʻ , Oʻ NHʻ NHPʻ GM I Pʻ MKKP!Nʻ !ʻ H Gʻ 9 !PGʻ !ʻ HMU ʻ
GLP P8S
6ʻ #!Oʻ G ʻ GPLJ9KH POʻ !ʻ GJKHʻ L IL ʻ O PGʻ 9 P+
HMNʻ U !QGʻ 7 ʻ GJKHʻ Mʻ N I Aʻ J9Oʻ GHʻ N ʻ O P+R

ʻ $ (0 ʻ "P Pʻ MQM !ʻ Gʻ M!ʻ MKKP!NJMN !ʻ O NOP P!Nʻ 7 Iʻ NHPʻ L PGP!Nʻ AJNʻ
, HKH Gʻ K I I !ʻ N ʻ M99ʻ HMUGLP P%Gʻ K !NP I L M PG+ M9 !Pʻ HMGʻ AGP POʻ N9 MNʻ
NH Gʻ GN 99ʻ NHPʻ L !J!K MN !ʻ 7ʻ NHPʻ 2 GHʻ LP L9P8 M!Oʻ HPʻ MOOGʻ NH Q PMNʻ N JNH ʻ
NHMNʻ I JKHʻ 7ʻ NHPʻ L !J!K MN !ʻ 7ʻ >JPP!ʻ 39 CMAPNH%GMQPʻ GTPNʻ PNM !POʻ !ʻ 2 P9M!O+
ʻ : S AGP P+
F S I NN +

*))

6 '7 99 NF I H 9PG GNMNP9T I iJIpING
'7PPO A9 i NF OPKMT 7NH iQG
'A9 N 9O'A UG'MiO'M9NP'NHP 'K iNPiNG+
'L9JKU'NHP]J 99G7 I'MiKpiN M piG% iQG
'O T'NHP' 9O' MU%G GML'MiO'KHP GH'GL iQG8Y
'GL 9MiN]J N PG 7HMI I P %O'GNPP9+ HPP98
#iO'NJ i'NHP'Q OOT' JiO' 7O NJIP%G

6' 'GH 'NHP'AP9OM I P'OMJQHNP G' 7HP'OMJQHNP +
'IMUP'NHP'KH 9O'M I ML'NHP' IMi'M'KH 9O+
'G9MT'NHP'N QP'NHMN'O NH'9 P'AT'G9MJQHNP +
'NM I P'NHP'JI K i'MiO'9 i' 9O+
' I KU'NHP'GJAN9P' i'NHP I GP9 PG'APQJ 9%O'8
'KHPP'NHP'L9 JQH I MI' NH'iK PMG7J9'K LG+
#iO' MGNP'HJQP'GN IPG NH'9 NN9P' MNP O LG+

6'XHT' U%GN'NH J'I GKH P7 i'NHT'L 9Q IMQP+
i9PGG'NH J'K J9OGN'PNJ i'N 'IMUP'MIPiOG\
1IPL 7 PN iQD'I iJNP' i'MI'MQP
X J9O'LJ KHMGP'NHPP'M'NH JGMiO'NH JGMiO'7 PiOG+
/PiO iQ'H I' N'NHMN'N 'AMO'OPAN G'9PiOG
1'NH G'O PMO'i QHN' J9OGN'NH J' IP'H J'K IPAMKU
2'K J9O'L P PiN'NH G'GN I'MiO'GHJI'NHT' MKU[

6' H J'KPMGP9PGG'9MKUPT'N 'PNP i NT+
X NF'G IP'I GKHMiKP'K GG M]J i'i'H G'79 QHN
5P GP'PWN PIPG'APT iO'PWN PI NT+
'IMUP'H I'KJ GP'NH G'KJ GPO'K IP7J9'i QHN
/PN'QHMGN9T'GHMO G'H G'9P O'PTPG'M77 QHN+
#iO'NHP'O P'NH J'QHN' 7H G'K I I NNPO'P 9
HMLP'P P T'AJGH'M'H OP JG'GHMLP9PGG'OP 9+

6'5 GNJ A'H G'H J G' 7 PGN' NH' PGN9PGG'N MiKPG+
#779 KN'H I' i'H G'APO' NH'APO O'Q MiG8
/PN'NHP P'APKHMiKP'H I'L N 7J9 I GKHMiKPG+
'IMUP'H I' MI'AJN'L NT'i N'H G' I MiG
N iP'H I' NH'HM OPi%O'HPM NG'HM OP'NHMI'GN iPG8

6 HP' PM9NHT'(' ';OM 9 iQG' 7 J'iMN i+R

'4- % SGH NG'GML9 iQG+$ Ip' H K'H O PG JL'NHP' 9O' MUNG GML'KHP GHPG
NHP'T JiQ'L9MiNG+
' G'HP P'JGPO' i'NHP'GPiGP 7('$ ()'
F ' '$ '% NHP'KHM MKNP GNK'7 M]J i'MG N' MG 7M99 IPi' 7H QH' MiU
i' HMUGLP P%G N I P+ -P HMLG N' IL9PO'M i N i' 7 9JWJ JGiPGG+ 2i'NH G MT'
P'HM P'6'NHP'(' '#iN iT' MiO' i'1NHP99 S

H G GM O'7 I'HP'APNJI A9PO'K JK'GHP'GNM NPNH+
'7 iO'G IP'OPGLP MNP' iGN JIPiN' 7OPMNH'
JN'NH G'i G9MJQHNP H JGP'i'N 9 ILM NPNH+
'IMUP'I P' piN'7 'LMGGMQP' 7HP'A PMNH+'
XHKH'NH iQiQ'NH JQH'HP'9LG'G' Mi GHPNH'
#G'GI UP'7 I'+D3NiM'NHMN' i'M 'K iGJIPG+
1'NHMN' HKH'7 I'O GKHM QPO'KMii i'7JIPG+$

6'2i' M i R]J NH'GHP'6'2'9 P'MiO'GPPU i' M i'
IP'HMLLT IPMi'N 'piO'M'HML9PGG 9 7P+
2'7PM %O'AT' M]J i%G 7M9KH i'N 'AP'G9M i+
4N'7'NHP'GP97 GM IP'LJ L GP'GPPU 'Ui 7P'
JN' HPi'2'7PM %O' MG M'9 TMg' 7P8
'MI'2'i Si'i 'NHMN'KMii N'AP8
17NHMN'N JP'NTLP'HMNH' M]J i' 79PO' IP+

6' [' NHMN' G'Q ip'7 ' HKH'2'G JQHN'N '9 P+
#iO'NHP P7 P'i '2'ippO'i N'7PM'N 'O P+
'K9PM'NH G'GL N'AT'OPMNH'MN'9PMG N'2'Q P'
#'AMOQP' 7'7MIP'N 'G9MiOP %G 9 P T8
5PAMNP' HP P'9P GJ P'GP PG' NH'OJ99 OPAMNP G8
'N PIA9 iQ'K9 piNG'AP'T J'IPO MN G'
O 'IP'2'7 KP'i N'M QJIPiN'M'GN M +
iKP'NHMN'IT'KMGP' G'LMGN'NHP'HP9L' 79M +

6' 1JN' O9P' OG'GP MiNG'N 'GHM99 '7 9G[
iL 7'NMA9P'G JiOG' PMU'M A N MN G[
JGT'T J GP9 PG' i'GU 99 K iNPiO iQ'GKH 9G+
5PAMNP' HP P'9P GJ P'GP PG' NH'OJ99'OPAMNP G8
'N PIA9 iQ'K9 piNG'AP'T J'IPO MN G'
O 'IP'2'7 KP'i N'M QJIPiN'M'GN M +
iKP'NHMN'IT'KMGP' G'LMGN'NHP'HP9L' 79M +

6' 'JM'NHP'KMGP' G'JiOG' PMU'M A N MN G[
'7PPO A9 i NF OPKMT 7NH iQG
'A9 N 9O'A UG'MiO'M9NP'NHP 'K iNPiNG+
'L9JKU'NHP]J 99G7 I'MiKpiN M piG% iQG
'O T'NHP' 9O' MU%G GML'MiO'KHP GH'GL iQG8Y
'GL 9MiN]J N PG 7HMI I P %O'GNPP9+ HPP98
#iO'NJ i'NHP'Q OOT' JiO' 7O NJIP%G

6' HP'K 'IMT'AMNHP'H G'K M9 A9MKU' iQG' i'I P+
#iO'JILP KP %O'79T' NF'NHP'7 9NH'M MT+
JN'7'NHP'9 UP'NHP'Gi H NF G Mi'OPG P+
HP'GNM i'JL i'H G G 9 P'O iGaT 99'GNMT+
- 'Q I G M P'G QHN9PGG' i QHN'U iQG'Q9 JG OMT+'
:'MNG'M P'JIi NPO' HP PG P%P'NHPT'79T+
JN'PMQ9PG'QMC%O'JL i' NF'P P T'PTP+

HMN'IMUPG'H I'H i J %O' 'APQPNG'H I'HMNP8
O 'Q PMNPGN'GKMiOM9' M NG' i'Q PMNPGN'GNMNP+
HP'I i'Ap iQ'K9 JOPO'L PGPiN9T'G I GG%O+
JN'9 NN9P'GNM G'IMT'H OP'NHPI' HPi'NHPT'9 GN+

6' HP'K 'IMT'AMNHP'H G'K M9 A9MKU' iQG' i'I P+
#iO'JILP KP %O'79T' NF'NHP'7 9NH'M MT+
JN'7'NHP'9 UP'NHP'Gi H NF G Mi'OPG P+
HP'GNM i'JL i'H G G 9 P'O iGaT 99'GNMT+
- 'Q I G M P'G QHN9PGG' i QHN'U iQG'Q9 JG OMT+'
:'MNG'M P'JIi NPO' HP PG P%P'NHPT'79T+
JN'PMQ9PG'QMC%O'JL i' NF'P P T'PTP+

6' 1JN' O9P' OG'GP MiNG'N 'GHM99 '7 9G[
iL 7'NMA9P'G JiOG' PMU'M A N MN G[
JGT'T J GP9 PG' i'GU 99 K iNPiO iQ'GKH 9G+
5PAMNP' HP P'9P GJ P'GP PG' NH'OJ99'OPAMNP G8
'N PIA9 iQ'K9 piNG'AP'T J'IPO MN G'
O 'IP'2'7 KP'i N'M QJIPiN'M'GN M +
iKP'NHMN'IT'KMGP' G'LMGN'NHP'HP9L' 79M +

6' 'JM'NHP'KMGP' G'JiOG' PMU'M A N MN G[
'7PPO A9 i NF OPKMT 7NH iQG
'A9 N 9O'A UG'MiO'M9NP'NHP 'K iNPiNG+
'L9JKU'NHP]J 99G7 I'MiKpiN M piG% iQG
'O T'NHP' 9O' MU%G GML'MiO'KHP GH'GL iQG8Y
'GL 9MiN]J N PG 7HMI I P %O'GNPP9+ HPP98
#iO'NJ i'NHP'Q OOT' JiO' 7O NJIP%G

S‘ ‘ GHM99‘ HP‘ G I 9P‘ MN‘ NHPP‘ !‘ GPK PN‘ NH JQHN
‘ 9MJQH‘ NH‘ H G‘ K I LM! !G‘ MN‘ NHT‘ GNMNP8
JN‘ NH J‘ GHM9N‘ U! ‘ NHT‘ !NP PGN‘ MG‘ ! N‘ A JQHN
MGP9T‘ NH‘ Q 9O‘ AJN‘ GN 9P!‘ 7 I‘ 7 NH‘ NHT‘ QMNP+
O ‘ I P‘ 2‘ M I‘ NHP‘ I GN PGG‘ 7‘ I T‘ 7MNP+
! O‘ NH‘ I T‘ N PGLMGG‘ !P P ‘ 99‘ O GLP!GP+
99‘ 9 7P‘ N ‘ OPMNH‘ MK] J N‘ I T‘ 7 K%O‘ 77P!KP+

6‘ 2‘ 99‘ ! N‘ L G !‘ NHPP‘ NH‘ I T‘ MNNM !N+
‘ 7 9O‘ I T‘ 7MJ9N‘ !‘ K9PM!9T K !%O‘ PWKJGPG8
T‘ GMA9P‘ Q J!O‘ 7‘ G !‘ 2‘ 99‘ ! N‘ LM !N+
‘ H OP‘ NHP‘ N JNH‘ 7‘ NH G‘ 7M9GP‘ ! QHN%G‘ MAJGPG‘
T‘ N !QJP‘ GHM99‘ JNNP ‘ M998 I !P‘ PTPG‘ 9 UP‘ G9J KPG+
#G‘ 7 I‘ M‘ I J!NM ! GL !Q‘ NHMN‘ 7PPOG‘ M‘ OM9P+
HM99‘ QJGH‘ LJ P‘ GN PM I G‘ N ‘ LJ QP‘ I T‘ I LJ P‘ NM9P+R

T‘ NH G‘ 9M I P!N !Q‘ -H 9 I P9‘ HMO‘ P!OPO‘
HP‘ P99 NJ!%O‘ M A9P‘ 7‘ HP ‘ ! QHN9T‘ G +
! O‘ G 9P I !‘ ! QHN‘ NH‘ G9 GMO‘ QM N‘ OPGKP!OPO‘
‘ JQ9T‘ HP998 HP!‘ 9 ‘ NHP‘ A9JGH !Q‘ I ‘
/ P!OG‘ 9 QHN‘ N ‘ M99‘ 7M ‘ PTPG‘ NHMN‘ 9 QHN‘ 99‘ A
JN‘ K9 JOT‘ / JK PKP‘ GHM I PG‘ HP GP97‘ N ‘ GPP+
! O‘ NHP P7 P‘ GN 99‘ !‘ ! QHN‘ J9O‘ K9 GNP %O‘ AP+

&P PM9 !Q‘ OMT‘ NH JQH‘ P P T‘ K M! !T‘ GL PG+
! O‘ GPP I G‘ N ‘ L !N‘ HP ‘ JN‘ HP P‘ GHP‘ G NG‘ PPL !Q8
‘ H I‘ GHP‘ G AA !Q‘ GLPMUG8 6‘ 1‘ PTP‘ 7‘ PTPG+
X HT‘ L TPGN‘ NH J‘ NH JQH‘ I T‘ !O ‘ \ 9PM P‘ NHT‘ LPPL !Q8
KU‘ NH‘ NHT‘ N KU9 !Q‘ APM I G‘ PTPG‘ NHMN‘ M P‘ G9PPL !Q‘
M!O‘ ! N‘ I T‘ 7 PHPMO‘ NH‘ NHT‘ L P K !Q‘ 9 QHN+
O ‘ OMT‘ HMNH‘ ! MJQHN‘ N ‘ O ‘ HMN%G O !P‘ AT‘ ! QHN+R

HJG‘ KM 9G‘ GHP‘ NH‘ P P TNH !Q‘ GHP‘ GPPG‘
JP‘ Q P7‘ G‘ 7 !OD‘ M!O‘ NPGNT‘ MG‘ M‘ KH 9O+
X H ‘ MT M O‘ !KP‘ H G‘ I O‘ NH‘ ! MJQHN‘ MQ PPG+
1 9O‘ PG‘ ! N‘ !7M!N‘ G G‘ APM ‘ NHP I‘ I 9O8
!N ! JM! KP‘ NM I PG‘ NHP‘ ! P8 NHP‘ NHP ‘ 9O+
/ UP‘ M!‘ J!L MKN G%O‘ G I I P‘ L9J!Q !Q‘ GN 99‘
X NH‘ N ‘ I JKH‘ 9MA J‘ O !G‘ 7 ‘ M!N‘ 7‘ GU 99+

‘ GHP‘ OPPL O P!KHPO‘ !‘ M‘ GPM‘ 7‘ KM P+
" 9OG‘ O GLJNMN !‘ NH‘ PMKH‘ NH !Q‘ GHP‘ P G
! O‘ N ‘ HP GP97‘ M99‘ G ‘ O NH‘ K I LM P‘ 8
‘ AEPKN‘ AJN‘ HP ‘ LMGG !%G‘ GN P!QNH‘ P!P G8
! O‘ MG‘ !P‘ GH 7NG‘ M! NHP ‘ GN M QHN‘ P!GJPG
‘ I PN I P‘ HP ‘ Q P7‘ G‘ OJ I A‘ M!O‘ HMNH‘ ! ‘ OG8
I PN I P‘ %N G‘ I MO‘ M!O‘ N ‘ I JKH‘ NM9U‘ M77 OG+

HP‘ 9 NN9P‘ A OG‘ NHMN‘ NJ!P‘ NHP ‘ I ! !Q%G‘ E T‘
MUP‘ HP ‘ I M!G‘ I MO‘ NH‘ NHP ‘ G PPN‘ I P9 OT+
O ‘ I NH‘ O NH‘ GPM KH‘ NHP‘ A NN I‘ 7‘ M!! T8
MO‘ G J9G‘ M P‘ G9M !‘ !‘ I P T‘ K I LM!T
: P7‘ APGN‘ G‘ L9PMG%O‘ NH‘ Q P7%G‘ G K PNT
JP‘ G ‘ NHP!‘ G‘ 7PP9 !Q9T‘ GJ77 K%O‘
X HP!‘ NH‘ 9 UP‘ GP I A9M!KP‘ N‘ G‘ GT I LMNH C%O+

% G‘ O JA9P‘ OPMNH‘ N ‘ O !‘ !‘ UP!‘ 7‘ GH P8
" P‘ NP!‘ N I PG‘ L !PG‘ NHMN‘ L !PG‘ APH 9O !Q‘ 7 O8
‘ GPP‘ NHP‘ GM9 P‘ O NH‘ I MUP‘ NHP‘ J!O‘ MKHP‘ I P‘ 8
: PMN‘ Q P7‘ Q P PG‘ I GN‘ MN‘ NHMN‘ J9O‘ O ‘ N‘ Q O8
5PPL‘ PG‘ 99‘ 7 M O‘ 9 UP‘ M‘ QP!N9P‘ 79 O+
X H ‘ AP !Q‘ GN LL%O‘ NHP‘ A J!O !Q‘ AM!UG‘ %P 79 G‘ 8
: P7‘ OM99 PO‘ NH‘ ! ‘ 9M ‘ ! ‘ 9 I N‘ U! G+

6‘ 4 J‘ I KU !Q‘ A OG R‘] J NH‘ GHP‘ 6‘ T J ‘ NJ!PG‘ P!N I A‘
X NH !‘ T J ‘ H 99 G P99 !Q‘ 7PMNHP %O‘ A PMGNG+
! O‘ !‘ I T‘ HPM !Q‘ AP‘ T J‘ I JNP‘ M!O‘ OJ I A[
@ T‘ PGN9PGG‘ O GK O‘ 9 PG‘ ! ‘ GN LG‘ ! ‘ PGNG8
#‘ P7J9‘ H GNPGG‘ A UG‘ ! N‘ I P T‘ QJPGNG

&P9 GH‘ T J ‘ ! I A9P‘ ! NPG‘ N ‘ L9PMG !Q‘ PM G8
5 GN PGG‘ 9 UPG‘ OJ I LG‘D HP!‘ N I P‘ G‘ UPLN‘ NH‘ NPM G+

6‘ I P‘ -H 9 I P9‘ NHMN‘ G !Q%GN‘ 7‘ M GH I P!N+
MUP‘ NHT‘ GMO‘ Q P‘ !‘ I T‘ O GHP P99%O‘ HM +
#G‘ NHP‘ OM!U‘ PM NH‘ PPLG‘ MN‘ NHT‘ 9M!QJ GH I P!N+
‘ 2‘ MN‘ PMKH‘ GMO‘ GN M !‘ 99‘ GN M !‘ M‘ NPM +
! O‘ NH‘ OPPL‘ Q M!G‘ NHP‘ O MLMG !‘ APM
O ‘ AJ NHP! GP‘ 9‘ HJ I‘ !‘ M] J !‘ GN 99+
X H 9P‘ NH J‘ !‘ P PJG‘ OPGKM!N%GN APNNP ‘ GU 99+%

6‘ # ! O‘ H 9PG‘ MQM !GN‘ M‘ NH !‘ NH J‘ APM %GN‘ NHT‘ LM N+
‘ UPPL‘ NHT‘ GHM L‘ PG‘ MU !Q ‘ PNKHPO‘ 2
‘ I NMNP‘ NHPP‘ P99 ‘ MQM !GN‘ I T‘ HPM N‘
X 99‘ 7 W‘ M‘ GHM L‘ U! 7P ‘ N ‘ M77 QHN‘ I !P‘ PTP8
X H ‘ 7‘ N‘ !U‘ GHM99‘ NHP P !‘ 7M99‘ M!O‘ O P+
HPGP‘ I PM!G‘ MG‘ 7 PNG‘ JL !‘ M!‘ !GN J I P!N+
HM99‘ NJ!P‘ J ‘ HPM NGN !QG‘ N ‘ N JP‘ 9M!QJ GH I P!N+

6‘ # ! O‘ 7 ‘ L ‘ A O ‘ NH J‘ G !Q%GN‘ ! N‘ !‘ NHP‘ OMT+
#G‘ GHM I !Q‘ M!T‘ PTP‘ GH J9O‘ NHPP‘ APH 9O+
I P‘ OM U‘ OPPL‘ OPGP N ‘ GPMNPO‘ 7 I ‘ NHP‘ X MT
HMN‘ U! G‘ ! ‘ LM KH !Q‘ HPMN‘ ! ‘ 7 PPC !Q‘ K 9O+
X P‘ 99‘ 7 !O‘ JN8 M!O‘ NHP P‘ P‘ 99‘ J!7 9O‘
‘ K PMNJ PG‘ GNP I ‘ GMO‘ NJ!PG ‘ N ‘ KHM!QP‘ NHP ‘ U !OG‘ 8
!KP‘ I P!‘ L P‘ APMGNG ‘ 9PN‘ APMGNG‘ APM ‘ QP!N9P‘ I !OG+R

#G‘ NHP‘ L ‘ 7 QHNPO‘ OPP ‘ NHMN‘ GNM!OG‘ MN‘ QMCP
X 9O9T‘ OPNP I ! !Q‘ H KH‘ MT‘ N ‘ 79T+
1 ‘ !P‘ P!K I LMGG%O‘ NH‘ M‘ !O !Q‘ I MCP+
HMN‘ KM!! N‘ N PMO‘ NHP‘ MT‘ JN‘ PMO 9T8
‘ NH‘ HP GP97‘ G‘ GHP‘ !‘ I JN !T+
‘ 9 P‘ ‘ O P‘ H KH‘ 7‘ NHP‘ N M !‘ P P‘ APNNP
X HP!‘ 9 7P‘ G‘ GHM I %O‘ M!O‘ 5PMNH+ PL MKH%G‘ OPAN +

6‘ ‘ U 99‘ I TGP97 R‘] J NH‘ GHP‘ 6‘ M9MKU[HMN‘ P P‘ N+
JN‘ NH‘ I T‘ A OT‘ T‘ L ‘ G J9%G‘ L 99JN !‘ ‘
HPT‘ NHMN‘ 9 GP‘ HM97‘ NH‘ Q PMNP ‘ LMN P!KP‘ APM ‘ N‘
HM!‘ NHPT‘ H GP‘ H 9P‘ G‘ G M99 %O‘ !‘ K !7JG !+
HMN‘ I NHP ‘ N PG‘ M‘ I P K 9PGG‘ K !K9JG !‘
X H ‘ HM !Q‘ N ‘ G PPN‘ AMAPG ‘ HP!‘ OPMNH‘ NMUPG‘ !P+‘
X 99‘ G9MT‘ NHP‘ NHP ‘ M!O‘ AP‘ !J GP‘ N ‘ ! !P+

6‘ T‘ A OT‘ ‘ I T‘ G J9‘ H KH‘ MG‘ NHP‘ OPM P ‘ \
X HP!‘ NHP‘ !P‘ LJ P‘ NHP‘ NHP ‘ I MOP‘ O !P+
X H GP‘ 9 P‘ 7‘ P NHP ‘ N ‘ I TGP97‘ MG‘ !PM P ‘ \
X HP!‘ A NH‘ P P‘ UPLN‘ 7 ‘ HPM P!‘ M!O‘ 99MN !P+
#H‘ I P[NHP‘ AM U‘ LPP9%O‘ 7 I ‘ NHP‘ 9 7NT‘ L !P+
" G‘ 9PM PG‘ 99‘ NHP ‘ M!O‘ H G‘ GML‘ OPKMT8
‘ I JGN‘ I T‘ G J9‘ HP ‘ AM U‘ AP !Q‘ LPP9%O‘ M MT+

6‘ " P ‘ H JGP‘ G‘ GMKU%O‘ HP ‘] J PN‘ !NP JLNPO+
" P ‘ I M!G !‘ AMNNP %O‘ AT‘ NHP‘ P!P I T8
" P ‘ GMK PO‘ NP I L9P‘ GL NNPO‘ GL 9PO‘ K I LNPO+
: GG9T‘ P!Q N‘ NH‘ OM !Q‘ !7M I T
HP!‘ 9PN‘ N‘ ! N‘ AP‘ KM99%O‘ I L PNT‘
27‘ !‘ NH G‘ A9P I GH%O‘ 7 N‘ 2‘ I MUP‘ G I P‘ H 9P‘
H JQH‘ H KH‘ 2‘ I MT‘ K ! PT‘ NH G‘ N JA9PO‘ G J9+

6‘ 4 PN‘ O P‘ 2‘ 99‘ ! N‘ N 99‘ I T‘ 99MN !P‘
" M P‘ HPM O‘ NHP‘ KMJGP‘ 7‘ I T‘ J!N I P9T‘ OPMNH‘ 8
HMN‘ HP‘ I MT‘ ‘ !‘ NHMN‘ GMO‘ H J ‘ 7‘ I !P+
&P P!QP‘ !‘ H I ‘ NHMN‘ I MOP‘ I P‘ GN L‘ I T‘ A PMNH+
T‘ GNM !PO‘ A9 O‘ N ‘ M] J !‘ 2%99‘ AP] JPMNH+
X H KH‘ AT‘ H I ‘ NM !NPO‘ GHM99‘ 7 ‘ H I ‘ AP‘ GLP!N
! O‘ MG‘ H G‘ OJP‘ N‘ !‘ I T‘ NPGNM I P!N+

6‘ T‘ H ! J ‘ 2%99‘ AP] JPMNH‘ J!N ‘ NHP‘ U! 7P‘
HMN‘ J!OG‘ I T‘ A OT‘ G ‘ O GH ! J PO+
% G‘ H ! J ‘ N ‘ OPL P‘ O GH ! J %O‘ 9 7P8

HP' !P' 99' 9 P ' NHP' NHP ' AP !Q' OPMO
' 7' GHM I P%G' MGHPG' GHM99' I T' 7M I P' AP' A PO8
O ' !' I T' OPMNH' 2' I J NHP ' GHM I P7J9' GK !'
T' GHM I P' G ' OPMO ' I !P' H ! J ' G' !P A !+

S' 5PM ' 9 O' 7' NHMN' OPM ' EP P9' 2' HM P' 9 GN+
X HMN' 9PQMKT' GHM99' 2' AP] JPMNH' N ' NHPP' \
T' PG 9JN !+' / P ' GHM99' AP' NHT' A MGN+
T' H GP' PWM I L9P' NH J' P P !Q%O' I MT%GN' AP+
" ' M] J !' I JGN' AP' JGPO ' PMO' N' !' I P
TGP97 ' NHT' 7 P!O ' 99' U 99' I TGP97 ' NHT' 7 P8
! O ' 7 ' I T' GMUP ' GP P' NH J' 7M9GP' M] J !' G +

S' H G' A P7' MA OQ I P!N' 7' I T' 99' 2' I MUP
T' G J9' M ! O' A OT' N ' NHP' GU PG' M ! O' Q J ! O8
T' PG 9JN ! ' HJGAM ! O ' O ' NH J' NMUP8
!P' H ! J ' AP' NHP' U ! 7P%G' NHMN' I MUPG' I T' J ! O8
T' GHM I P' AP' H G' NHMN' O O' I T' 7M I P' K !7 J ! O8
! O' M99' I T' 7M I P' NHMN' 9 PG' O GAJ GPO' AP'
' NH GP' NHMN' 9 P ' M ! O' NH ! U' ! ' GHM I P' 7' I P+

6' H J ' 99MN ! P ' GHM9N' P GPP' NH G' 998D
" ' MG' 2' P GPP !' NHMN' NH J' GHM9N' GPP' N [
T' A9 O' GHM99' MGH' NHP' G9M ! OP ' 7' I !P' 998
T' 9 7P%G' 7 J9' OPPO' I T' 9 7P%G 7M ' P ! O' GHM99' 7 PP' N+
OM !N' ! N ' 7M !N' HPM N ' AJN' GN JN9T' GMT ' Y ' AP' N+%
4 P9O' N ' I T' HM ! O8 I T' HM ! O' GHM99' K !] JP ' NHPP8
', H J' OPMO ' A NH' O P ' M ! O' A NH' GHM99' KN G' AP+R

H G' L9 N' 7' OPMNH' HP !' GMO9T' GHP' HMO' 9M O+
! O' L%O' NHP' A ! GH' LPM 9' 7 I ' HP ' A QHN' PTPG+
X NH' J ! NJ ! %O' N !QJP' GHP' H M GP9T' KM99%O' HP ' I M O+'
X H GP' G 7N APO P ! KP' N ' HP ' I GN PGG' H PG8
O ' 79PPN !Q%O' OJNT' NH' NH JQHN%G' 7PMNHP G' 79 PG+
- ' / JK PKP% KHPPUG' J ! N ' HP ' I M O' GPP I ' G '
G' !NP ' I PMOG' HP !' GJ !' O NH' I P9N' NHP ' ! +

" P ' I GN PGG' GHP' O NH' Q P' OP I J P' Q O I +
X NH' G 7N G9 ' N !QJP ' N JP' I M U' 7' I OPGNT+
! O' G NG' M' GMO' 9 U' N ' HP ' 9MOT%G' G
@O ' HT' \ HP ' 7MKP' P' G %G' 9 P T
JN' OJ GN' ! N' MGU' 7' HD ' MJOMK JG9T'
X HT' HP ' N ' GJ ! G' P P' K9 JO PK9 LGPO' G +
' HT' HP ' 7M ' KHPPUG' P MGH%O' NH' P+

JN' MG' NHP' PM NH' O NH' PPL ' NHP' GJ !' AP !Q' GPN D
3MKH' 79 P ' I GNP ! %O' 9 UP' M' I P9N !Q' PTP8
3 P !' G ' NHP' I M O' NH' G P99 !Q' O LG' %QM !' PN'
" P ' K K9PO' PT ! P ' P ! 7 K%O' AT' GT I LMNHT'
17' NH GP' 7M ' GJ ! G ' GPN' !' HP ' I GN PGG% GUT+
X H ' !' M' GM9N M %O' KPM !'] JP ! KH' NHP ' 9 QHN+
X H KH' I MUPG' NHP' I M O' PPL ' 9 UP' NHP' OP T' ! QHN+

' L PNNT' H 9P' NHPGP' L PNNT' K PMNJ PG' GNM ! O+
/ UP' T' K !OJ NG' K MG' K GNP !G' 7 99 !Q
1 ! P' EJGN9T' PPLG8 NHP' NHP ' NMUPG' !' HM ! O'
' KMJGP ' AJN' K I LM ! T ' 7' HP ' O LG' GL 99 !Q
HP ' QP ! N9P' GPW' N ' PPL ' M P' 7NP !' 99 ! Q8
: P !Q' NHP I GP9 PG' N ' QJPGG' MN' NHP G% G I M NG+
! O' NHP !' NHPT' O !' NHP ' PTPG ' ' A PMU' NHP ' HPM NG+

O ' I P !' HM P' I M A9P ' I P !' MWP !' I !OG+
! O' NHP P7 P' M P' NHPT' 7 I %O' MG' I M A9P' 998
HP' PMU' LL PGG%O ' NHP' I L PGG !' 7' GN M ! QP' U ! OG

2G' 7 I %O' !' NHP I ' AT' 7 KP ' AT' 7 MJO ' ' GU 998
HP !' KM99' NHP I ' ! N' NHP' MJNH G' 7' NHP ' 99
' I P' NHM !' MW' GHM99' AP' MKK J ! NPO' P 9+
X HP P !' G' GNM I L%O' NHP' GP ! A9M ! KP' 7' M' OP 9+

HP ' G I NH ! PGG ' 9 UP' M' Q O9T' KHM I LM Q !' L9M !+
/ MTG' LP !' M99' NHP' 9 NN9P' I G' NHMN' K PPL8
2 !' I P !' MG' !' M' JQH Q !' Q P ' P I M !'
M P UPPL !Q' P 9G' NHMN' AGKJ P9T' G9PPL
H JQH' K TGNM9' M99G' PMKH' 9 NN9P' I NP' 99' LPPL
H JQH' I P !' KM !' K P ' K I PG' NH' A 9O' GNP I ' 9 UG+'
- ' I P ! %G' 7MKPG' M P' NHP ' !' 7MJ9N%G% A UG+

' I M !' ! P QH' MQM ! GN' NHP' NHP %O' 79 P +
JN' KH OP' JQH' ! NP ' NHMN' NHP' 79 P ' HMNH' U 99%O' [
N' NHMN' OP J %O' AJN' NHMN' H KH' O NH' OP J '
2G' NHT' A9M I P+' 1 ' 9PN' N' ! N' AP' H 9O
- ' I P ! %G' 7MJ9NG' NHMN' NHPT' M P' G ' 7J97 99%O
X NH' I P ! %G' MAJGPG [NH GP' L JO' 9 OG ' N ' A9M I P+
MUP' PMU I MOP' I P !' NP ! M ! NG' N ' NHP ' GHM I P+

HP' L PKPOP ! N' HP P 7' !' / JK PKP' P +
GGM 9%O' AT' ! QHN' NH' K KJ I GNM ! KPG' GN !Q'
17' L PGP ! N' OPMNH ' M ! O' GHM I P' NHMN' I QHN' P ! GJP'
T' NHMN' HP ' OPMNH ' N ' O ' HP ' HJGAM ! O' !Q
JKH' OM ! QP ' N ' PG GNM ! KP' O O' AP9 !Q+
HMN' OT !Q' 7PM ' NH JQH' M99' HP ' A OT' GL PMO8
! O' H ' KM ! ! N' MAJGP' M' A OT' OPMO' \

T' NH G ' I 9O' - MN P ! KP' A O' 7M ' / JK PKP' GLPMU'
' NHP' L ' K J ! NP 7P NF' 7' HP ' K I L9M ! !Q
6' T' Q 9 R'] J NH' GHP ' 6' !' HMN' KKMG !' A PMU'
H GP' NPM G' 7 I ' NHPP ' NHMN' O ! ' NHT' KHPPUG' M P' M ! !Q'
27' NH J' O GN' PPL' 7 ' Q P7' 7' I T' GJGNM ! !Q
H ' QP ! N9P' P ! KH ' N' G I M99' M M 9G' I T' I O
27' NPM G' K J9O' HP9L ' I !P' !' J9O' O ' I P' Q O+

6' JN' NP99' I P ' Q 9 ' HP !' P ! N' %%S @M ! O' NHP P' GHP' GNMT%O'
99' M7NP ' M' OPPL' Q M ! ' 6' M] J !' 7 I ' HP ! KP' \R
6' MOM I ' P P' 2' MG' JL R' PL9 PO' NHD' I M O
6' HP' I P' N ' A9M I P' I T' G9JQQM O' ! PQ9 QP ! KP
4 PN' NH' NHP' 7MJ9N' 2' NHJG' 7M ' KM ! ' O GLP ! GP8
TGP97' MG' GN !Q' P P' NHP' A PMU' 7' OMT+
! O ' P P' 2' GP ' MG' M] J !' Q !P' M MT+

6' JN ' 9MOT ' 7' T J ' I M O' I MT' AP' G ' A 9O+
HP' J9O' P] JPGN' N ' U ! ' T J ' HPM !PGG+
6' 1' LPMKP [R'] J NH' / JK PKP' 8 6' 7' N' GH J9O' AP' N 9O+
HP' PLPN N !' KM ! ! N' I MUP' N' 9PGG8
O ' I P' N' G' NHM !' 2' KM !' P99' PWL PGG
! O' NHMN' OPPL' N NJ P' I MT' AP' KM99%O' M' HP99
X HP !' I P' G' 7P9N' NHM !' ! P' HMNH' L P ' N ' NP99+

6' : ' QPN' I P' H NHP ' LMLP ' !U ' M ! O' LP ! S
4 PN' GM P' NHMN' 9MA J ' 7 ' 2' HM P' NHP I ' HP P+
X HMN' GH J9O' 2' GMT' \S 1 ! P' 7' I T' HJGAM ! O%G' I P !'
O' NH J' AP' PMOT ' AT' M ! O' AT ' N ' APM '
' 9PNNP ' N ' I T' 9 O ' I T' 9 P ' I T' OPM 8
O' H I ' NH' GLPPO' L PLM P' N ' KM T' N
HP' KMJGP' K M PG' HMGNP ' M ! O' N' 99' G !' AP' N+R

" P ' I M O' G' Q !P ' M ! O' GHP' L PLM PG' N ' NP+
O GN' H P !Q' %P ' NHP' LMLP ' NH' HP '] J 99
!KP N' M ! O' Q P7' M !' PMQP ' K I AMN' 7 QHN8

' HP' PWPKJN ' 7' M' 99' MG' G I PN I PG' KM99PO' NHP' % ;' AJN' J ' M ! KPGN G'
7NP !' MLL !NPO' P GPP G' MG' P99' MG' PWPKJN G+' HMUGLP P%G' !' 99' K !NM ! G'
GJKH' M !' MLL !N I P !N+'
;
P 2 !' N9 P' 7 ' PO N !' 7' & I P ' M ! O' ?J9 PN ' MG' P99' MG' !' NHP'] JM N ' 7' 2 '
P' 7 !O' NHP' 9 !P S
6' X HP !' NHP' GJ !' GPNG ' NHP' $' O NH' O CC9P' OP +R

" P P' NHP' I MQP' K I L9PNP9T' MQ PPG' NH' NHMN' !' NHP' NPWN' AP7 P' JG+' JN' !' NHP'
J ! OMNPO'] JM N ' H KH' NHP' I OP I ' PO N G' 7 99 ' P' HM P' 6' NHP' ' O NH' O CC9P

OP +R' K P ! KP' MG' 9 !Q' LJCC9PO' N ' OPK OP' HPNHP ' NHP' PM NH' ' NHP' M ' L OJKPO'
OP 8 AJN' N' MG' PGP PO' 7 ' NHP' MKKJ MNP' PWLP I P ! NG' 7' I OP I ' N I PG' N ' GH '
NHMN' NHP' PM NH' M ! O' NHP' M ' I JGN' J ! NP' N ' L OJKP' NH G' P77PKN' J ! OP ' LM N KJ9M ' K KJ I
GNM ! KPG' 7' NP I LP MNJ P' M ! O' MO MN !+' HP' K PKN !' 7' NHP' J ! OMNPO' PO N !' 7'
& I P ' M ! O' ?J9 PN' MG' KP NM !9T' J ! ! PKPGGM T+
' ' ' HP P' GNM ! OG' 7 ' I P !' H GP' I !OG' HM P' EJGN' APP !' K I LM PO' N ' I M A9P+
' 9 ' *SHP9O+' JKH' M' KHM ! QP' 7 ' NHP' GMUP' 7' HT I P' G' 7 P] JP ! N' !' LP ! GP +
F F ' ' SK I L9PNP9T' 7 99PO+
F SM' 9 UP ! PGG' ' K LT+

*)

XHMN NʻGPNGʻO !ʻ GʻA9 NNPOʻGN M QHNʻ NHʻ 998
HGʻGʻN ʻKJ JG Q Oʻ NH GʻA9J!NʻM!Oʻ 99
JKHʻ9 UPʻMʻL PGGʻ 7ʻLP L9PʻMNʻMʻO +
H !QʻHPʻ ʻ ! P!N !Gʻ ʻ H KHʻGHM99ʻAPʻAP7 P+

#Nʻ9MGNʻGHPʻNHJGʻAPQ !G S6ʻ H Jʻ NHTʻ9 Oʻ
1ʻNHMNʻJ! NHTʻ 7PʻNHMNʻQ PPNPNHʻNHPP+
"PM9NHʻN ʻNHTʻLP G ![!PWNʻ JKHGM7PʻN ʻM77 Oʻ
@27ʻP P ʻ+9 Pʻ NHTʻ/JK PKPʻNH Jʻ 9Nʻ GPP
IPʻL PGP!NʻGLPPOʻN ʻK IPʻM!Oʻ G Nʻ IPʻ
ʻ2ʻK I IP!Oʻ IPʻ7 Iʻ JʻH JGPʻ !ʻQ P78D
Tʻ PGM PʻNPO JGʻNH JQHʻ ITʻ OGʻM PʻA P7+R

"P Pʻ7 9OGʻGHPʻJLʻNHPʻNP! ʻ 7ʻHP ʻ P+
"Pʻ KP NM !ʻG ʻ NʻJ!KP NM !9T+
TʻNH GʻGH NʻGKHPOJ9Pʻ 99MN !Pʻ I MTʻU! ʻ
"Pʻ Q P7ʻAJNʻ ! NʻHP ʻQ P7%GN JPʻ]JM9 NT8
HPʻOM PG ! NʻNHP P 7ʻ I MUPʻO GK P T+
/PGNʻHPʻGH J9OʻH 9Oʻ NʻHP ʻ !ʻQ GGʻMAJGP
ʻ3 Pʻ GHPʻ NHʻA9 Oʻ HMOʻGNM !%Oʻ HP ʻGNM !%Oʻ PWKJGP+

PG OPGʻNHPʻ9 7PʻM!Oʻ7PP9 !Qʻ 7ʻHP ʻLMGG !ʻ
HPʻH M OGʻN ʻGLP!Oʻ XHP!ʻHPʻ GʻATʻN ʻHPM ʻHP 8
XHP!ʻG QHGʻM!Oʻ Q M!GʻM!Oʻ NPM Gʻ I MTʻQ MKPʻNHPʻ7MGH !
%17ʻHP ʻO GQ MKPʻNHPʻAPNNP ʻG ʻN ʻK9PM ʻHP
O IʻNHMNʻGJGL K !ʻ H KHʻNHPʻ 9Oʻ I QHNʻAPM ʻHP +
ʻGHJ!ʻNH GʻA9 N ʻGHPʻ J9Oʻ ! NʻA9 NʻNHPʻ9PNNP ʻ
X NHʻ OGʻN 99ʻMKN !ʻ I QHNʻAPK IPʻNHP IʻAPNNP +

ʻGPPʻGMOʻG QHNGʻ I PGʻ I Pʻ NHM!ʻHPM ʻNHP IʻN 9O8
O ʻNHP!ʻNHPʻPTPʻ !NP L PNGʻN ʻNHPʻPM ʻ +
HPʻHPM Tʻ I N !\ʻNHMNʻNʻO NHʻAPH 9O+
XHP!ʻP P Tʻ LM NʻMʻLM Nʻ 7ʻ Pʻ O NHʻAPM +
% GʻAJNʻMʻLM Nʻ 7ʻG ʻNHMNʻ Pʻ HPM ʻ8
5PPLʻG J!OG ʻ I MUPʻ9PGGP ʻ! GPʻNHM!ʻGHM99 ʻ7 OG+
#!Oʻ G ʻPAAGʻAP !QʻA9 !ʻ NHʻ !Oʻ 7ʻ OG+

"P ʻ9PNNP ʻ! ʻ GʻGPM9%Oʻ M!Oʻ !ʻ Nʻ N
6ʻ#Nʻ# OPMʻN ʻ I Tʻ9 Oʻ NHʻ I PʻNHM!ʻHMGNPʻ ʻR
HPʻL GNʻMNNP!OG ʻM!Oʻ GHPʻOP9 P Gʻ N+
HM Q !QʻNHPʻG J 7MK% ʻQ IʻN ʻH Pʻ MGʻ7MGNʻ
#Gʻ9MQQ !Qʻ7 9GʻAP7 PʻNHPʻ! NHP !ʻA9MGN+
LPPOʻ I PʻNHM!ʻGLPPOʻAJNʻOJ99ʻM!Oʻ G9 ʻGHPʻOPP I Gʻ
3WN P I NTʻGN 99ʻJ QPNHʻGJKHʻPWN P I PG+

HPʻH I P9Tʻ 99M !ʻK J N%G PGʻN ʻHP ʻ9 8
#!Oʻ A9JGH !Qʻ !ʻHP ʻ NHʻMʻGNPMO7MGNʻPTPʻ
&PKP PGʻNHPʻGK 99ʻ NH JNʻ ʻTPMʻ ʻ! +
#!Oʻ7 NHʻ NHʻAMGH7J9ʻ !! KP!KPʻO NHʻH P+
JNʻNHPTʻ H GPʻQJ 9Nʻ NH !ʻNHP ʻA G IG9 Pʻ
2 I MQ !Pʻ P P Tʻ PTPʻAPH 9OGʻNHP ʻA9M I Pʻ8
O ʻ/JK PKPʻNH JQHNʻHPʻA9JGH%Oʻ N ʻGPPʻHP ʻGHM I P8

XHP!ʻG 99Tʻ Q Iʻ[: Oʻ Nʻ Nʻ MGʻOP7PKNʻ
17ʻGL Nʻ9 7Pʻ M!Oʻ A 9Oʻ MJOMK NT+
JKHʻHM I 9PGGʻK PMNJ PGʻHM PʻMʻN JPʻ PGLPKNʻ
ʻNM9Uʻ !ʻOPPOG+ XH 9Pʻ NHP Gʻ GMJK 9Tʻ
- I GPʻ I Pʻ GLPPOʻAJNʻO ʻ Nʻ9P GJ P9Tʻ
3 P!ʻG ʻNH GʻLMNNP !ʻ 7ʻNHPʻ ! JNʻMQPʻ
-M !%OʻH !PGNʻ9 UGʻAJNʻ9M Oʻ ! ʻ OGʻN ʻQMQP+

" GʻU !O9POʻOJNTʻU !O9POʻHP ʻ I GN JGN+
HMNʻN ʻ POʻ7 PGʻ !ʻA NHʻNHP ʻ7MKPGʻA9MC%Oʻ8
HPʻNH JQHNʻHPʻA9JGH%Oʻ MGʻU! !Qʻ M]J !%Gʻ9JGN

#!Oʻ A9JGH !Qʻ NHʻH I ʻ GN9Tʻ !ʻH I ʻQMC%O 8
" P ʻPM !PGNʻPTPʻO Oʻ I MUPʻH I ʻ I PʻM I MC%O
HPʻ I PʻGHPʻGM ʻNHPʻA9 Oʻ H GʻKHPPUGʻ PL9P! GH
HPʻ I PʻGHPʻNH JQHNʻHPʻGL POʻ !ʻHP ʻG I PʻA9P I GH+

JNʻ9 !QʻGHPʻNH !UGʻN 99ʻHPʻ PNJ !ʻMQM !+
#!Oʻ TPNʻNHPʻOJNP JGʻ MGGM9ʻGKM KPʻ GʻQ !P+
HPʻ PM Tʻ N I PʻGHPʻKM!! NʻP!NP NM !+
O ʻ! ʻ%N GʻGNM9PʻN ʻG QHʻN ʻ PPLʻM!Oʻ Q M!
ʻ PʻHMNHʻ PM POʻ Pʻ I M!ʻN POʻ I M!+
HMNʻGHPʻHP ʻL9M !NGʻMʻ9 NN9Pʻ H 9PʻO NHʻGNMT+
-MJG !Qʻ7 ʻ I PM!GʻN ʻ I J !ʻG I Pʻ!P P ʻ MT+

#Nʻ9MGNʻGHPʻKM99GʻN ʻ I !Oʻ HP PʻHM!QGʻMʻL PKPʻ
17ʻGU 97J9ʻLM !N !Qʻ I MOPʻ7 ʻ- M I %Gʻ T8
P7 PʻNHPʻ H KHʻ GʻO M !ʻDNHPʻL Pʻ 7ʻ: PPKP
O ʻ"P9P!%Gʻ MLPʻNHPʻK NTʻN ʻOPGN T
H PMN%! !Qʻ K9 JO U GG !Qʻ29 !ʻ NHʻM!! T8
XH KHʻNHPʻK !KP NPOFʻLM !NP ʻO P ʻG ʻL JO+
#GʻHPM P!ʻ@NʻGPP I %Oʻ N ʻU GGʻNHPʻNJ PNGʻA %O+

#ʻNH JGM!Oʻ9M I P!NMA9Pʻ AEPKNGʻNHP P+
2!ʻGK !ʻ 7ʻ MNJ Pʻ# NʻQM Pʻ9 7P9PGGʻ9 7P
M!TʻMʻO Tʻ O Lʻ GPP I %Oʻ Mʻ PPL !QʻNPM +
HPOʻ7 ʻNHPʻG9MJQHNP %Oʻ HJGAM!OʻATʻNHPʻ 7Pʻ8
HPʻ POʻA9 Oʻ PPU%Oʻ N ʻGH ʻNHPʻLM !NP %GʻGN 7P8
#!Oʻ OT !QʻPTPGʻQ9PM I %Oʻ7 NHʻNHP ʻMGHTʻ9 QHNG+
/UPʻOT !QʻK M9GʻAJ !Nʻ JNʻ !ʻNPO JGʻ! QHNG+

HP Pʻ I QHNʻT JʻGPPʻNHPʻ9MA J !QʻL !PP ʻ
PQ I %Oʻ NHʻG PMNʻM!Oʻ G I PM POʻM99ʻ NHʻOJGN8
#!Oʻ7 IʻNHPʻN P Gʻ 7ʻ Tʻ NHP Pʻ J9Oʻ MLLPM ʻ
HPʻ P Tʻ PTPGʻ 7ʻ I P!ʻNH JQHʻ9 LH 9PGʻNH JGN+
:MC !QʻJL !ʻNHPʻ: PPUGʻ NHʻ9 NN9Pʻ9JGN
JKHʻG PPNʻ AGP M!KPʻ !ʻNH Gʻ Uʻ MGʻHMO+
HMNʻ !Pʻ I QHNʻGPPʻNH GPʻ7M 77ʻPTPGʻ9 Uʻ GMO+

2!ʻQ PMNʻK I IM!OP Gʻ Q MKPʻM!Oʻ I MEPGNTʻ
4 Jʻ I QHNʻAPH 9OʻN J I LH !Qʻ !ʻNHP ʻ7MKPGʻ8
2!ʻT JNHʻ]J KUʻAPM !QʻM!Oʻ OPWNP NT8
#!Oʻ HP Pʻ M!Oʻ NHP Pʻ NHPʻLM !NP ʻ !NP 9MKPGʻ
-M9Pʻ K M OGʻ I M KH !Qʻ !ʻ NHʻN P I A9 !QʻLMKPG8
XH KHʻHPM N9PGGʻLPMGM!NGʻO Oʻ G ʻ P99ʻ PGP I A9P+
HMNʻ !Pʻ J9Oʻ G PM ʻHPʻGM ʻNHP Iʻ]JMUPʻM!Oʻ N P I A9P+

2!ʻ#EMWʻM!Oʻ 9TGGPGʻ1ʻ HMNʻM Nʻ
17ʻLHTG Q! I Tʻ I QHNʻ !PʻAPH 9O[
HPʻ7MKPʻ 7ʻP NHP ʻ%K LHP %Oʻ P NHP %GʻHPM N8
HP ʻ7MKPʻNHP ʻ I M!!P Gʻ I GNʻPWL PGG9Tʻ N 9Oʻ8
2!ʻ#EMW%PTPGʻA9J!Nʻ MQPʻM!Oʻ Q J ʻ 99%Oʻ8
JNʻNHPʻ I 9Oʻ Q9M!KPʻNHMNʻG9Tʻ 9TGGPGʻ9P!Nʻ
H %Oʻ OPPLʻ PQM Oʻ M!Oʻ G I 9 !Qʻ Q P ! I P!N+

HP Pʻ L9PMO !Qʻ I QHNʻT JʻGPPʻQ M Pʻ PGN ʻGNM!O+
#Gʻ%N P Pʻ P!K J MQ !QʻNHPʻ: PPUGʻN ʻ7 QHN8
MU !QʻGJKHʻG AP ʻMKN !ʻ NHʻH Gʻ HM!Oʻ
HMNʻ NʻAPQJ 9%Oʻ MNNP!N !ʻKHM I %Oʻ NHPʻG QHN
2!ʻGLPPKHʻ NʻGPP I %Oʻ H Gʻ APM Oʻ M99ʻG 9 Pʻ H NPʻ
XMQQ%Oʻ JLʻM!Oʻ O !ʻM!Oʻ7 Iʻ H Gʻ9 LGʻO Oʻ79Tʻ
H !ʻ !O !QʻA PMNHʻ H KHʻLJ 9%Oʻ JLʻFN ʻNHPʻGUT+

#A JNʻH Iʻ P Pʻ Mʻ L PGGʻ 7ʻQML !Qʻ7MKPG+
XH KHʻGPP I %Oʻ N ʻG M99P ʻJLʻH Gʻ G J!Oʻ MO KPʻ8
#99ʻE !N9Tʻ9 GNP! !QʻAJNʻ NHʻGP P M9ʻQ MKPG

$ʻ HPʻG I L9 K NTʻ 7ʻNH Gʻ9PNNPʻ Gʻ PW]J G NP9TʻAPMJN 7J98ʻM!Oʻ NGʻLMNH Gʻ GʻOPPLPʻ
7 IʻNHPʻK KJ I GNM!KPʻNHMNʻ Nʻ Gʻ GKM KP9Tʻ M GPOʻMA PʻNHPʻN !Pʻ 7ʻ O !M TʻK P_
GL !OP!KP+
6 9ʻK I IP!Oʻ IPʻ7 Iʻ JʻH JGPʻ !ʻQ P7ʻR

GʻGJKHʻMʻ 7 I J9Mʻ MGʻ Pʻ K !GNM!N9Tʻ7 !Oʻ !ʻM!K P!Nʻ K PGL !OP!KP≠ 2!ʻNHP
6ʻ-MGN !ʻ/PNNP GʻRʻ Pʻ HM Pʻ GJKHʻK !K9JG !GʻMGʻNH Gʻʻ 6ʻX NNP!ʻMN HP!ʻ2
MGʻ! Nʻ P99ʻMNʻPMGP+R
6 SOJ IAʻGH +
F4 %ʻ M9 !Pʻ L L GPGʻN ʻPMOʻ ' %ʻ H Gʻ NPP P!Gʻ PG GNGʻM!Oʻ GMTG
NHMN% ʻGʻGJKHʻMʻLM Nʻ 7ʻNHPʻ GPMʻ MGʻ I MTʻAPʻG J!OPO≠ ʻNH Gʻ M9 !Pʻ PL9 PG
N9 MNʻMʻ G J!Oʻ KM!! Nʻ APʻ OPPLʻM!Oʻ NHP P7 Pʻ % % Gʻ ! Nʻ HP Pʻ !NP!OPO≠ #ʻ

G J!Oʻ GʻMʻAMTʻ ʻ7 NH8 M!Oʻ 5M I L P ʻ H ʻ,GʻAPNNPʻMJNH NTʻNHM!ʻNHPʻK I IP!NM
N Gʻ !ʻ!MJN KM9ʻ I MNNP Gʻ IP!N !GʻM % ʻMGʻ6ʻ9M QPʻM!Oʻ OPPL+Rʻ HPʻGN 99!PGGʻ
7ʻMʻG J!Oʻ !ʻK !GP]JP!KPʻ 7ʻAP !Qʻ9M!O 9 KUPOʻNPGN 7 PGʻN ʻNHPʻK PKN!PGGʻ 7ʻNHPʻ
L PN%Gʻ I MQP+
8 SOM !ʻ JNʻ !N ʻNHPʻ7 P9O+
F (, S !QP! JGʻ I M9Q !MN P+
F '0 ʻ HPʻ I PM! !Qʻ 7ʻ- '* MGʻMLL9 POʻ N ʻMʻ G J!Oʻ Gʻ7M I 9 Mʻ N ʻ M99≠
MK !ʻ !ʻGLPMU !Qʻ 7ʻNHPʻG J!Oʻ 7ʻMʻL LPʻ IP!N !Gʻ6ʻMʻG PPNʻOPQ PPʻ 7ʻG A 9MN !ʻ
ʻLJ !Q+Rʻ HJGʻ !ʻNHPʻLMGGMQPʻ AP7 PʻJGʻNHPʻNH !ʻ !O !QʻA PMNHʻ 7ʻ PGN ʻ
NHPʻG 7N 79 !Qʻ OGʻ- 'GʻJLʻN ʻNHPʻGUT≠ JNʻNHPʻK I IP!NMN Gʻ AP9 P PʻNHMNʻ
- '0 ʻHP PʻPWL PGGPGʻ I N !ʻM!Oʻ! NʻG J!O8 M!Oʻ NPP P!GʻL L GPGʻN ʻGJAGN NJNPʻ
('G

HPˢ P99 GU 99%Oˢ U I M!ˢNH Gˢ I 9Oˢ I MQPˢO P ˢ
O ˢLP EJ %Oˢ ! !ˢ H GPˢP!KHM!N !QˢGN Tˢ
HPˢK POJ9 JGˢ 9Oˢ - M IˢM7NPˢG9P 8
XH GPˢ OGˢ9 UPˢ 9O7 PˢAJ !ᴺNHPˢGH ! !QˢQ9 Tˢ
1Tˢ KH AJ 9ᴺ29 !ˢNHMᴺNHPˢGU PGˢ P PˢG T+
!Oˢ9 NN9Pˢ GNM Gˢ GH ᴺ7 IˢNHP ˢ7 WPOˢL9MKPG+
X HP!ˢNHP ˢQ9MGGˢ7P99ˢ HP P !ˢNHPTˢ P %Oˢ NHP ˢ7MKPG+

H Gˢ L KNJ Pˢ GHPˢ MO GPO9TDˢ LP JG%O
!Oˢ KH Oˢ NHPˢ LM !NP ˢ7 ˢH Gˢ !O JGˢ GU 998
MT !Qˢ G IPˢ GHMLPˢ !ˢ ! !%Gˢ MGˢ MAJG%O+
ˢ7M ˢMᴺ7 Iˢ9 OQ%Oˢ ! ᴺMᴺ I !Oˢ G ˢ 998
!Oˢ GN 99ˢ !ˢH IˢGHPˢ QMC%OˢM!Oˢ QMC !QˢGN 99+ˢ
JKHˢG Q!Gˢ 7ᴺN JNHˢ !ˢ? Gˢ L9M !ˢ7MKPˢ GHPˢ GL PO+ˢ
HMᴺGHPˢK !K9JOPGˢNHPˢL KNJ Pˢ MGˢAP9 PO+

6ˢ2ᴺKM!! ᴺAP Rˢ]J NHˢ GHPˢ 6ˢNHMᴺGˢ I JKHˢQJ 9PˢRSˢ
@ HPˢ J9Oˢ HM PˢGM Oˢ 6ˢKM!ˢ9J Uˢ !ˢGJKHˢ Mˢ9 U8R
JᴺM]J !%GˢGHMLPˢKM I Pˢ !ˢHP ˢ I !Oˢ NHPˢ H 9P+
!Oˢ7 Iˢ HP ˢN !QJPˢ6ˢKM!ˢ9J UˢRˢ7 Iˢ6ˢKM!! ᴺRˢN U8
6ˢ2ᴺKM!! ᴺAPˢRˢGHPˢ !ˢNHMᴺGP!GPˢ7 G U
!Oˢ NJ !%Oˢ ᴺNHJGˢ ˢ 6ˢ2ᴺKM!! ᴺAP ˢ2ˢ7 !O
JᴺGJKHˢMˢ7MKPˢGH J9Oˢ APM ˢMˢ KUPOˢ I !O

6ˢO ˢP P!ˢMGˢGJAN9Pˢ ! !ˢHP Pˢ Gˢ LM !NPO+
ˢG AP GMO ˢG ˢ PM Tˢ M!Oˢ G ˢ I 9O
@#Gˢ 7ˢ NHˢQ P7ˢ ˢN M M 9ˢHPˢHMOˢ7M !NPO
ˢ IPˢKM I Pˢ M]J !ˢM I PO8 G ˢAPQJ 9%Oˢ F
X NHˢ JN M Oˢ H !PGNT ˢAJᴺTPᴺOP7 9%O
X NHˢ ! M Oˢ KP ˢMGˢ - M IˢH IˢO Oˢ KHP GH+ˢ
ˢO Oˢ2ˢ M]J !ˢ8 G ˢ I Tˢ Tˢ O Oˢ LP GH+

6ˢ / Uˢ9 Uˢ H ˢ9 GNP! !Qˢ - M Iˢ PNGˢH Gˢ PTPG+
ˢGPPˢNH GPˢA %Oˢ NPM GˢNHMᴺ ! !ˢGHPOG+
- M Iˢ HTˢM ᴺNH Jˢ 9Oˢ M!Oˢ TPᴺ ! ᴺ GPˢ\
O ˢP P Tˢ NPM ˢHPˢ7M99Gˢ ˢMˢ EM!ˢA9PPOG8
" GˢPTPˢO LGˢ7 Pˢ! ˢ MNP ˢNHP!KPˢL KPPOGˢ8
H GPˢ J!Oˢ K9PM ˢLPM 9Gˢ 7ˢH GˢNHMᴺ I Pˢ NHTˢL NTˢ
PˢAM99Gˢ 7ˢ]JP!KH9PGGˢ7 Pˢ N ˢAJ Iˢ NHTˢK NT+

6ˢ JKHˢOP 9Gˢ GNPM9ˢ P77PKNGˢ7 Iˢ9 QHN9PGGˢHP998
O ˢ ! !ˢ !ˢH Gˢ7 Pˢ O NHˢ]JMUPˢ NHˢK 9O+
!Oˢ !ˢNHMᴺK 9Oˢ H N AJ ! !Qˢ7 Pˢ O NHˢO P99#
HPGPˢK !N M PGˢGJKHˢJ! NTˢO ˢH 9Oˢ
1!9Tˢ N ˢ79MNNP ˢ7 9Gˢ M!Oˢ I MUPˢ NHP Iˢ A 9Oˢ8
ˢ - M I %GˢN JGᴺ7M9GPˢ ! !%Gˢ NPM Gˢ O NHˢ 79MNNP +ˢ
HMᴺHPˢ7 !OGˢ I PM!Gˢ N ˢAJ !ˢH Gˢ Tˢ NHˢ MNP +R

"P Pˢ M99ˢP! MQ%Oˢ GJKHˢLMGG !ˢHP ˢMGGM 9G+
HMᴺLMN P!KPˢ Gˢ]J NPˢAPMNP!ˢ7 Iˢ HP ˢA PMGN+
HPˢNPM GˢNHPˢGP!GP9PGGˢ ! !ˢ NHˢHP ˢ!M 9G+
I LM !QˢH Iˢ N ˢNHMᴺJ!HMLLTˢQJPGᴺ
XH GPˢOPPOˢHMNHˢ I MOPˢHP GP97ˢHP GP97ˢOPNPGN8
#ᴺ9MGᴺGHPˢG I 9 !Q9Tˢ NHˢNH Gˢ Q PGˢ %P 8
6ˢO 9[7 9[R]J NHˢGHP ˢ6ˢH Gˢ J!OGˢ 99ˢ ! ᴺAPˢG P+R

HJGˢPAAGˢM!Oˢ79 GˢNHPˢKJ P!ᴺ 7ˢHP ˢG
!Oˢ N IPˢO NHˢ PM Tˢ N IPˢ NHˢHP ˢK IL9M ! !Qˢ+
HPˢ9 UGˢ7 ˢ! QHNˢM!OˢNHP!ˢGHPˢ9 !QGˢ7 ˢ I +ˢ
!Oˢ A NHˢGHPˢNH !UGˢN ˢ9 !Qˢ NHˢHP ˢ P I M ! !Qˢ
H ᴺN IPˢGPP IGˢ9 !Qˢ !ˢG %GˢGHM Lˢ GJGNM ! !Qˢ+
H JQHˢ PˢAPˢHPM Tˢ TPᴺ ᴺGP9O Iˢ G9PPLGˢ8
!OˢNHPTˢNHMᴺ MNKHˢGPPˢN IPˢH ˢG9 ˢ ᴺK PPLG+

ˢ M9 !Pˢ AEPKNGˢN ˢNH Gˢ IMQPˢ 7ˢ - M I%GˢLM9MKPˢAP !QˢNHPˢ I ˢ !ˢ, HKHˢNHPˢ
7WPOˢGNMˢGˢAPHP9Oˢ NHP IGP9 PGˢ G P99 HMGˢM!G P PO ˢM9 !PˢATˢ]J Nˢ!Q /TO_
QMNP%GˢOPGK LN !ˢ 7ˢNHPˢGM IPˢ !OP 7J9ˢPO 7 KP S

6ˢ HMNˢ P P9Tˢ HP!ˢGˢNHPˢG !!PˢGH !Pˢ
L !ˢNHPˢQ 9OPˢ IPT!ᴺM I !QPˢNHPˢGN !P+
HPTˢQM PˢM 9TQHNˢ NH JNP!ˢM!Tˢ P P
#GˢO NHˢ#L 99 ˢ !ˢHGˢ I O OMTˢGLHP P+R

ˢ "1 - "5SMNNP!N P9T+

X H KHˢM99ˢNH Gˢ N IPˢHMNHˢ P G9 LL%OˢHP ˢNH JQHN+ˢ
HMᴺGHPˢ NHˢLM !NPOˢ I MQPGˢHMNHˢGLP!N8
P !Qˢ7 Iˢ NHPˢ7PP9 !Qˢ 7ˢHP ˢ !ˢQ P7ˢA JQHᴺ
TˢOPPLˢGJ I GPˢ 7ˢ NHP G$ˢOPN I P!N8
/ G !QˢHP ˢ PGˢ !ˢGH Gˢ 7ˢO GK !NP!N+
2ᴺPMGPNHˢG I PˢNH JQHˢ ! !Pˢ ᴺP P ˢKJ %O+
ˢNH !UˢNHP ˢO 9 Jˢ NHP GˢHM PˢP!OJ %O+

JᴺM ! ˢNHPˢ I !O7J9ˢ I PGGP!QP ˢK I Pˢ AMKU+ˢ
!QGˢH I PˢH Gˢ9 Oˢ M!Oˢ NHP ˢK I LM!T8
XH ˢ7 !OGˢH Gˢ /JK PKPˢK9MOˢ !ˢ I J ! !QˢA9MKU8
!Oˢ J!Oˢ MA JᴺHP ˢNPM O GNM !POˢ PTPˢ
9JPˢK K9PGˢGN PM I %Oˢ9 UPˢ M !A Gˢ !ˢNHPˢGUT+ˢ
HPGPˢ MNP QM99Gˢ F !ˢHP ˢO I ˢP9P I P!ᴺ
O PNP99ˢ!P ˢGN I Gˢ N ˢNH GPˢM9 PMOTˢGLP!N+

XH KHˢ HP!ˢHP ˢGMO APH 9O !QˢHJGAM!Oˢ GM ˢ
I MCPO9Tˢ !ˢHP ˢGMOˢ7MKPˢHPˢGNM PG
" P ˢPTPGˢNH JQHˢG Oˢ !ˢNPM Gˢ9 U%Oˢ POˢM!Oˢ M +ˢ
" P ˢ9 P9Tˢ K 9 Jˢ U 99%Oˢ NHˢOPMO9Tˢ KM PG+
" PˢHMNHˢ ! ˢL P ˢN ˢMGUˢHP ˢH ˢGHPˢ7M PG+
JᴺGN Oˢ9 UPˢ 9Oˢ MK]JM !NM!KPˢ !ˢMˢN M!KP+
PᴺM7M ˢ7 Iˢ H I P ˢ !OP !QˢPMKHˢ NHP %Gˢ KHM!KP+

#ᴺ9MGᴺHPˢNMUPGˢHP ˢATˢNHPˢA9 O9PGGˢHM!O
!OˢNHJGˢAPQ !Gˢ 6XHMᴺJ!K JNHˢ 99ˢP P!ᴺ
" MNHˢNHPPˢAP7M99P! ˢNHMᴺNH Jˢ O GᴺN P I A9 !QˢGNM!Oˢ\
PPᴺ9 Pˢ HMᴺGL NPˢHMNHˢNHTˢ7M ˢK 9 Jˢ GLP!ᴺ\
XHTˢM ᴺNH Jˢ NHJGˢMNN %Oˢ !ˢO GK !NP!ᴺˢ
! I MGU ˢOPM ˢOPM ˢNH Gˢ I OTˢHPM !PGG
!OˢNP99ˢNHTˢQ P7ˢNHMᴺ Pˢ I MTˢQ Pˢ PO PGG+R

H PPˢN I PGˢ NHˢG QHGˢGHPˢQ PGˢHP ˢG ˢ7 P+ˢ
3 Pˢ !KPˢGHPˢKM!ˢO GKHM QPˢ !Pˢ Oˢ 7ˢ Pˢ
#ᴺ9P!QNHˢMOO PGG%OˢFN ˢM!G P ˢH GˢOPG P+
HPˢ I OPGN9Tˢ L PLM PGˢN ˢ9PᴺNHP IˢU! ˢ
"P ˢH ! Jˢ GNM%P!ˢL G !P ˢATˢNHPˢ7 Pˢ8
XH 9Pˢ 99MN !PˢM!OˢH GˢK !G NPOˢ9 OG+
X NHˢGMOˢMNNP!N !ˢ9 !QˢN ˢHPM ˢHP ˢ OG+

#!Oˢ! ˢNH GˢLM9Pˢ G M!ˢ !ˢHP ˢ MNP Tˢ!PGᴺ
PQ !GˢNHPˢGMOˢO QPˢ 7ˢHP ˢKP NM !ˢP!O !Q
6ˢOP ˢ OG R]J NHˢGHP ˢ6ˢGHM99ˢ7 ᴺNHPˢN PGLMGGˢAPGN+ˢ
XHP Pˢ! ˢPWKJGPˢKM!ˢQ PˢNHPˢ7MJ9ᴺM I P!O !Q
2!ˢ IPˢ I Pˢ LPGˢNHM!ˢ OGˢM Pˢ! ˢOPLP!O !Q8
#!Oˢ ITˢ9M I P!NGˢ J9Oˢ APˢO M !ˢ JᴺN ˢ9 !Q+
ˢNP99ˢNHP IˢM99ˢ NHˢ !PˢL ˢN POˢN !QJP+

6ˢ HP!ˢAPˢNH Gˢ M99ˢNHPˢNMGUˢ ᴺHMNHˢN ˢGMTˢ Sˢ
5PM ˢHJGAM!Oˢ !ˢNHPˢ !NP PGᴺ 7ˢNHTˢAPOˢ
#ˢGN M!QP ˢKM I Pˢ M!Oˢ !ˢNHMᴺL 99 ˢ9MTˢ
XHP PˢNH Jˢ MGᴺ !ᴺN ˢ PGᴺNHTˢ PM TˢHPMOˢ8
!Oˢ HMNᴺ !Qˢ P9GPˢ I MTˢAPˢ I MQ !POˢ
Tˢ7 J9P!7 KP I P!ᴺ I QHᴺAPˢO !PˢN ˢ I P+ˢ
O Iˢ NHMN ˢM9MG[NHTˢ /JK PKPˢ Gˢ ! ᴺ7 PP+

6ˢO ˢ !ˢNHPˢO PMO7J9ˢOPMOˢ 7ˢOM Uˢ I O! QHN+ˢ
X NHˢGH ! !Qˢ7M9KH !ˢ !ˢ I Tˢ KHM I AP ˢKM I Pˢ
#ˢK PPL !QˢK PMNJ Pˢ NHˢMˢ79M I !Qˢ9 QHN+ˢ
!OˢG 7N9Tˢ K PO+ˢ # MUP ˢNH Jˢ& I M!ˢOM I Pˢ
!OˢP!NP NM !ˢ I Tˢ9 Pˢ8 P9GPˢ9MGN !QˢGHM I Pˢ
1!ˢNHPPˢM!OˢNH !PˢNH Gˢ! QHᴺ2ˢ 99ˢ !79 KN+ˢ
27ˢNH Jˢ I Tˢ9 P%GˢOPG Pˢ O ˢK !N MO KN+

ˢ7!ˢ(3& "ˢ HPˢ Q !M9 HMGˢ !ˢ(3& "ˢ % 3& '" G I MGUPOˢ$ NH7 MJOˢ
2!ˢ HPˢ P KHM!Nˢ 7ˢ P! KPˢ PˢHM PS
6ˢ HJGˢ !M I P!Nˢ GˢAJNᴺNHPˢ3& '"GH Pˢ
ˢMˢ I GᴺOM!QP JGˢGPM+R

ˢ> - SDPPG7M99ˢ
F8 B3 -ˢ NPP P!GˢGMTGˢNHPˢ Oˢ GˢKJ P!ᴺM I !QˢNHPˢGHPLHP OGˢ !ˢ
M9GAJ T -9M !+
F "" --"SL PLM PO+

S'O ' G I P' HM O 7M J %O' Q I ' 7' NH !P ']J NH' HP '
!9PGG' NH J' T UP' NHT' 9 U !Q' N ' I T' 99
2%99' I J OP ' GN M QHN ' M!O' NHP!' 2%99' G9MJQHNP ' NHPP+'
#!O' G PM ' 2' 7 J!O' T J' HP P' T J' O O' 7J97 9'
HP' 9 MNHG I P' MK N' 7' 9JGN ' M!O' G ' O O' U 99'
HP' 9PKHP G' !' NHP ' OPPO' ' NH G' MK N' 99' AP'
T' 7M I P ' M!O' NHT' LP LPNJM9' !7M I T+

S' X NH' NH G' 2' O O' APQ !' N ' GNM N' M!O' K T+
#!O' NHP!' MQM !GN' I T' HPM N' HP' GPN' H G' G O+'
PM !Q ' J!9PGG' 2' N U' M99' LMN P!N9T
2' GH J9O' ! N' 9 P' N ' GLPMU' M! NHP ' O' 8
' GH J9O' I T' GHM I P' GN 99' PGN' JL !' PK O+
#!O' !P P ' AP' 7 Q N' !' I QHNT' & I P
HP' MOJ9NP MNP' OPMNH' 7' / JK PKP' M!O' HP ' Q I +

6' !G' P!P I T' MG' GN !Q ' I T' L ' GP97' PMU+'
#!O' 7M ' NHP' PMUP ' NH' G ' GN !Q' M' 7PM
T' A9 OT' EJOQP' 7 AMOP' I T' N !QJP' N ' GLPMU8
' QHN7J9' L9PM' I QHN' L9PMO' 7 ' EJGN KP' NHP P8
" G' GKM 9PN' 9JGN' KM I P' P OP!KP' N ' G PM '
HMN' I T' L ' APMJNT' HMO' LJ 9 !%O' H G' PTPG'
#!O' HP!' NHP' EJOQP' G' AA%O ' NHP' L G !P ' O PG+

6' 1' NPMKH' I P' H ' N ' I MUP' I !P' !' PWKJGP' [
1 ' MN' NHP' 9PMGN ' NH G' P7JQP' 9PN' I P' 7 !O8
H JQH' I T' Q GG' A9 O' AP' GNM !%O' NH' NH G' MAJGP+'
2 I I MKJ9MNP' M!O' GL N9PGG' G' I T' I !O8
HMN' MG' ! N' 7 K%O 8 NHMN' !P P ' MG' !K9 !%O'
' MKKPGG T' T P9O !QG ' AJN' GN 99' LJ P'
5 NH' !' HP ' L G !%O' K9 GPN' TPN' P!OJ P+R

/ ' HP P ' NHP' H LP9PGG' I P KHM!N' 7' NH G' 9 GG+
X NH' HPMO' OPK9 !%O' M!O' KP' OM I I %O' JL' NH' P+'
X NH' GMO GPN' PTPG ' M!O' PNKHPO' M I G' MK GG
0 I ' 9 LG' !P MWP!' LM9P' APQ !G' N ' A9 '
HP' Q P7' M MT' NHMN' N LG' H G' M!G P ' G '
JN' PNKHPO' MG' HP' G' HP' GN PG' !' M !' 8
X HMN' HP' A PMNHPG' JN' H G' A PMNH' O !UG' JL' MQM !+

#G' NH JQH' M!' M KH' NHP' 9P!N' M !Q' N OP'
1JN J!G' NHP' PTP' NHMN' O NH' APH 9O' H G' HMGNP8
4PN' !' NHP' POOT' A J!OPNH' !' H G' L OP'
MKU' N ' NHP' GN M N' NHMN' 7 K%O' H I ' !' G ' 7MGN8
2!' MQP' GP!N' JN ' PKM99%O' !' MQP ' AP !Q' LMGN'
3 P!' G ' HP' G QHG ' H G' G G' I MUP' M' GM +
' LJGH' Q P7' ! ' M!O' AMKU' NHP' GM I P' Q P7' O M +

X H KH' GLPPKH9PGG' P' 7' H G' L ' GHP' MNNP!OPNH+'
#!O' H G' J!N I P9T' 7 P!CT' NHJG' M MUPNH'
S'5PM ' 9 O ' NHT' G ' N ' I T' G ' 9P!OPNH'
#! NHP ' L P 8 ! ' 79 O' AT' M ! !Q' G9MUPNH+
T' P' N ' GP!G A9P' NHT' LMGG !' I MUPNH'
P' 7PP9 !Q LM !7J9' 9PN' N' NHP!' GJ77 KP'
' O !' !P' P ' !P' LM ' 7' PPL !Q' PTPG+

6'#!O' 7 ' I T' GMUP ' HP!' 2' I QHN' KHM I ' NHPP' G +
0 ' GHP' NHMN' MG' NHT' / JK PKP S! ' MNNP!O' I P8
P' GJOOP!9T' P P!QPO' !' I T' 7 P+
H !P ' I !P ' H G' !8 GJLL GP' NH J' O GN' OP7P!O' I P'
0 I ' HMN' G' L MGN ' NHP' HP9L' NHMN' NH J' GHM9N' 9P!O' I P'
I PG' M99' N ' 9MNP ' TPN' 9PN' NHP' N M N ' O P8
0 ' GLM !Q' EJGN KP' 7PPOG' !]J NT+

6' JN' P P' 2' !M I P' H I ' T J ' 7M ' 9 OG R']J NH' GHP
@ LPMU !Q' N ' NH GP' NHMN' KM I P' NH' 99MN !P
6' HM99' L9 QHN' T J ' H ! J MA9P' 7M NHG' N ' I P+
X NH' G 7N' LJ GJ N' N ' P!QP' NH G' !Q' 7' I !P' 8
0 ' %N G' M' I P N JG' 7M ' OPG Q!'
' KHMGP' !EJGN KP' NH' P P!QP7J9' M I G'
! QHNG ' AT' NHP ' MNHG ' GH J9O' QHN' L '9MO PG%HM I G+R

#N' NH G' P]JPGN ' NH' ! A9P' O GL G N !'
3MKH' L PGP!N' 9 O' APQM!' N ' L I GP' M O+
#G' A J!O' !' U! QHNH O' N ' HP ' I L G N !+'
/ !Q !Q' N ' HPM ' NHP' HMNP7J9' 7 P' AP MT%O+
JN' GHP ' NHMN' TPN' HP ' GMO' NMGU' HMNH' ! N' GM O+
HP' L NPGNMN !' GN LG+' 6' ' GLPMU R']J NH' GHP '
6' " ' I MT' NH G' 7 KPO' GNM !' AP' L%O' 7 I ' I P' 7

6' X HMN' G' NHP']JM9 NT' 7' I !P' 77P!KP+
P !Q' K !GN M !%O' NH' O PMO7J9' K KJ I GNM!KP' \
MT' I T' LJ P' I !O' NH' NHP' 7 J9' MKN' O GLP!GP+'
T' 9 OPK9 !PO' H ! J ' N ' MO M!KP' \
MT' M!T' NP I G' MK]J N' I P' 7 I ' NH G' KHM!KP' \
HP' L G !%O' 7 J!NM !' K9PM G' NGP97' MQM !8
; #!O' HT' ! N' 2' 7 I ' NH G' K I LP99PO' GNM !' \R

X NH' NH G ' NHPT' M99' MN' !KP' APQM!' N ' GMT
" P ' A OT%G' GNM !' HP ' I !O' J!NM !NPO' K9PM G' 8
X H 9P' NH' M' E T9PGG' G I 9P' GHP' NJ !G' M MT'
HP' 7MKP ' NHMN' I ML' H KH' OPPL' I L PGG !' APM G'
17' HM O' I G7 NJ!P ' KM %O' !' N' NH' NPM G+
6 ' ! R']J NH' GHP ' 6' ! ' OM I P ' HP PM7NP ' 9 !Q+'
T' I T' PWKJGP' GHM99' K9M I ' PWKJGP%G' Q !Q+R

" P P' NH' M' G QH ' MG' 7' HP ' HPM N' J9O' A PMU+
HP' NH G' 7 NH' M]J !%G' !M I P8 6' " P ' HP R' GHP' GMTG '
JN' I P' NHM!' 6' HP' R' HP ' L ' N !QJP' K J9O' ! N' GLPMU8
99' M7NP ' I M!T' MKKP!NG' M!O' OP9MTG+
!N I P9T' A PMNH !QG ' G K9K' M!O' GH N' MGGMTG+
HP' JNNP G' NH G' ' 6' " P ' HP ' 7M ' 9 OG ' %N G' HP+
HMN' QJ OPG' NH G' HM!O' N ' Q P' NH G' J!O' N ' I P+R

3 P!' HP P' GHP' GHPMNHPO' !' HP ' HM I 9PGG' A PMGN'
#' HM I 7J9' U! 7P ' NHMN' NHP!KP' HP ' G J9' J!GHPMNH%O' 8
HMN' A9 ' O O' AM 9' N' 7 I ' NHP' OPPL' J! PGN'
17' NHMN' L 99JNPO' L G !' HP P' N' A PMNH%O
" P ' K !N NP' G QHG' J!N ' NHP' K9 JOG' AP]JPMNH%O
" P ' !QPO' GL NP ' M!O' NH JQH' HP ' J!OG' O NH' 79T'
/ 7P%G' 9MGN !Q' OMNP' 7 I ' KM!KP99%O' OPGN !T+

N !P GN 99 ' MGN ! GH%O' 8 NH' NH G' OPMO9T' OPPO+'
N O' 99MN !P' M!O' M99' H G' 9 O9T' K P 8
99' / JK PK %G' 7MNHP ' NHMN' APH 9OG' HP ' A9PPO+'
" I GP97' !' HP ' GP97 G9MJQHNP %O' A OT' NH P 8
#!O' 7 I ' NHP' LJ L9P' 7 J!NM !' JNJG' O P '
HP' I J OP JG' U! 7P ' M!O' MG' N' 9P7N' NHP' L9MKP+'
" P ' A9 O' ' !' L ' P P!QP ' HP9O' N' !' KHMGP' 8

#!O' AJAA9 !Q' 7 I ' HP ' A PMGN ' N' O NH' O OP'
2!' N ' G9 ' P G ' NHMN' NHP' K I G !' A9 O'
K9PG' HP ' A OT' !' !' P P T' G OP+
X H ' 9 UP' M' 9MNP GMKU%O' G9M!O' MGN9T' DGN O'
M P' M!O' J!LP L9PO' !' NH G' 7PM 7J9' 79 O+
I P' 7' HP ' A9 O' GN 99' LJ P' M!O' PO' P I M !%O+
#!O' G I P' 9 U%O' A9MKU ' M!O' NHMN' 7M9GP' M]J !' GNM !%O+

#A JN' NHP' I J ! !Q' M!O' K !QPM9PO' 7MKP'
17' NHMN' A9MKU' A9 O' M' MNP T' Q 9' DQ PG+'
X H KH' GPP I G' N ' PPL' JL !' NHP' NM !NPO' L9MKP '
#!O' P P ' G !KP ' MG' L NT !Q' / JK PKP% PG+'
JLNPO' A9 O' G I P' MNP T' N UP!' GH G' 8
#!O' A9 O' J!NM !NPO' GN 99' O NH' PO' MA OP+'
9JGH !Q' MN' NHMN' H KH' G' G ' LJN P7 PO+

6' 5MJQHNP ' OPM ' OMJQHNP R' 9O' / JK PN JG' K PG
6' HMN' 9 7P' MG' I !P' H KH' NH J' HMGN' HP P' OPL %O+'
27' !' NHP' KH 9O' NHP' 7MNHP %G' I MQP' 9 PG+
X HP P' GHM99' 2' 9 P' ! ' / JK PKP' G' J!9 %O' \
H J' MGN' ! N' N ' NH G' P!O' 7 I ' I P' OP %O+
27' KH 9O P!' L POPKPMGP' L QP! N G+
X P' M P' NHP ' 77GL !Q ' M!O' NHPT' ! !P' 7' J G+

) $" -2%(#'-+2%(@2% ;'%0%(2%' ,@2%-(%
HMN'NHP PAT'APMJNT%G GP'I QHN'IP P'OP
JN'MG'NHP' LP'GH J9O'AT'N IP'OPKPMGP+
" 'G'NPIOP'HP 'I QHN'APM'H'G'IPI T'
JN'NH J'K IN MKNPO'N 'NH IP' I'A QHN'PTPG'
OPPO%GN'N"'T'9 QHN%G'79M IP' NH'GP97 GJAGNMIN M9'7JP9#
MU IQ'M'7MI IP' HP P'MAJIOMIKP'9 PG+
HTGP97'NHT'7 P'N 'NHT'G PPN'GP97'N 'K JP9+
H J'NHMN'M N'I 'NHP' 9O%G'7 PGH' IMIPIN#'
#IO' I9T'HP M9O'N 'NHP'QMJOT'GL IQ+
X NH I'NH IP' I'AJO'AJ PGN'NHT'K INPIN+
#IO'NPIOP'KHJ 9'IMU%GN' MGNP' I'I QQM O IQ+
- NT'NHP' 9O' 'P9GP'NH G'Q9JNN I'AP+
'PMN'NHP' 9O%G'OJP'AT'NHP'Q M P'MIO'NHPP+

i1H 7NT'9 P9 IPGG' HT'O GN'NH J'GLPIO'
L I'NHTGP97'NHT'APMJNT%G'9PQMKT'\
MNJ P%G'AP]JPGN'Q PG'I NH IQ'A JN'O NH'9PIO'
#IO'AP IQ'7 MIU'GHP'9PIOG'N 'NH GP'M P'7 PP+

'$ 8 "SQM IPIN+
}'+ G"F& 'I 3 "$
,'>I "S7 9'G/

HPI'AP IQ'MGU%O' HP P'M99'NHT'APMJNT'9 PG
XHP P'M99'NHP'N PMGJ P' 7'NHT'9JGNT'OMTG8
'GMT' NH I'NH IP' I'OPPL'GJIUPI'PTPG+
XP P'MI'M99 PMN IQ'<HM IP'MIO'NH 7N9PGL'L M GP+
" 'I JKH'I P'L M GP'OPGP %O'NHT'APMJNT%G JGP+
27'NH J'K J9OGN'MIG P S6' H G'7M 'KH 9O' 7 I IP'
HM99'GJI'I T'K JIN'MIO'I MUP'I T' 9O'PWKJGP SR
- IQ'H G'APMJNT'AT' JKKPGG I'NH IP'[
H G' P P'N 'AP'IP IMOP' HPI'NH J'M N' 9O+
#IO'GPP'NHT'A9 O' M I' HPI'NH J'7PP9%GN'N'K 9O+

/ U I'NHT'Q9MGG'MIO'NP99'NHP'7MKP'NH J' P PGN+
' G'NHP'N I P'NHMN'7MKP'GH J9O'7 I'MI NHP 8
XH GP'7 PGH' PLM ' 7I 'NH J'I N' PIP PGN+
H J'O GN'APQJ 9P'NHP' 9O'JIA9PGG G IP'I NHP +'
O ' HP P' G GHP'G '7M ' H GP'JIPM %OD' IA'
5 GOM IG'NHP'N 99MQP' 7'NHT'HJGAMIO T'\
1 ' H ' G'HP'G '7 IO'F 99'AP'NHP'N IA'
1'7H G'GP97 9 P'N 'GN L'L GNP NT'\
H J'M N'NHT'I NHP %G'Q9MGG'MIO'GHP I'NHPP'
M99G'AMKU'NHP'9 P9T'#L 9' 7HP'L IP'
'NH J'NH JQH' IO G' 7NH IP'MQP'GHM99'GPP+
5PGL NP' 7' IU9PG'NH G'NHT'Q 9OPI'N IP+
JN' 7'NH J'9 P' PIPIAP %O'I N'N 'AP+
5 P'G IQ9P'MIO'NH IP' IMQP'O PG' NH'NHPP+

/ ' I'NHP' PIN' HPI'NHP'Q MK JG'9 QHN'
/ 7NG'JL'H G'AJ I IQ'HPMO'PMKH'JIOP'PTP'
5 NH'H IMQP'N 'H G'IP ML'PM IQ'G QHN+'
P IQ' NH'9 UG'H G'GMK PO' IMEPGNT8
#IO'HM IQ'K9 IA%O'NHP'GNPPL JL'HPM PI9T'H 99+'
&PGPI A9 IQ'GN IQ'T JNH' I'H G I OO9P'MQP+'
4PN'I NM'9 UG'MO P'H G'APMJNT'GN 99+'
#NNPIO IQ' I'H G'Q 9OPI'L 9Q IMQP8

q . SM P ASOPL P' 7M IPGG' 7APMJNT+
F?+ - S9 GP+
, ,, -SIMUPG'HMLLT+"Z D

JN' HPi'7 I'H QH I GN'L NKH' NF' $PM T'KM +
/ UP'7PA9P'MQP'HP' PP9PNF'7 I'NHP'OMT+
JN'APMJNT%G MGNP'HMNH'i'NHP' 9O'MI'PIO+
#iO'UPL'Ji JG%O'NHP'JGP'G'OPGN TG' N+
O I'H G'9 'NMKN'MiO'9 U'MI NHP' MT'
'NH J'NHTGP97' JNQ iQ' i'NHT'i i+
i9 U%O' i'O PGN'Ji9PGG'NH J'QPN'M'G i+

7 22

JG K'N 'HPM ' HT'HPM %GN'NH J'I JG K'GMO9T'\D
ppNG' NF'G ppNG' M'i N'E T'OP9 QHNG' i'E T+
XHT'9 %GN'NH J'MNM' H KF'NH J' PKP %GN' i N'Q9MO9T$\
1'p9GP PKP %GN' NH'L9PMGJ P'NH ip'MIi T'\
27'NHP'N JP'K iK O 7 p99 NJipO'G JiOG+
T'Ji iG IM PO'O' 77piO'NH ip'PM +
HPT'O 'AJN'G ppN9T'KH OP'NHPp' H 'K i7 JiOG
2i'G iQ9pipGG'NHP'LM NG'NHMN'NH J'GH J9OGN'APM +
MUH ' ip'GN iQ'G ppN'HJGAMiO'N 'Mi NHP +
N UPG'PMKF' i'pMKH'AT' IJNJMJ OP iQ'
&PGPIA9 iQ'G P'MiO'KH 9O'MiO'HMLLT' I NHP +
XH 'M99' i' ip' ip'L9pMG iQ'i NP'O 'G iQ
XH GP'GLPPKH9PGG G iQ'Ap iQ'I MIT'GPPI iQ' ip'
iQG'NH G'N 'NHPP'6' H J'G iQ9P' 9N'L P' i ip+R

2V+

2G' N'7 '7PM'N ' PN'M' O %G'PTP
HMN'NH J'K iGJI%GN'NHTGP97'2i'G iQ9P'9 7P'\
H 7'NH J' GGJP9PGG'GHM7N'HML'N 'O P
HP' 9O' 99' M 9'NHPP'9 UP'M' IMUP9PGF' 7P'
HP' 9O' 99' AP'NHT' O 'MiO'GN 99' PPL'
HMN'NH J'i '7 I' 7'NHPP'HMGN'9P7N'APH iO+
XHPi'p p T'L MN' O ' p99 I MT'UPPL+
T'KH 9O piG'PTPG'HP 'HJGAMiO%G'GHML' i' I iO+
/ U' HMN'Mi'JiNH7 7N' i'NHP' 9O'O NH'GLPiO'

V+

O 'GHM I P'[OPiT'NHMN'NH J'APM %GN'9 P'N 'MiT+
XH '7 'NHTGP97'M N'G 'JiL OPiN+
: MiN'7NH J' 9N'NH J'M N'AP9 %O' 7 I MiT+
JN'HMN'NH J'i ip'9 %GN'G I GN'p OPiN8
O 'NH J'M N'G 'L GGPGG%O' NF'I J OP JG'HMNP
HMN'%QM iGN'HTGP97'NH J'GN KU%GN'i N'N 'K iGL P'
ppU iQ'NHMN'APMJNP JG' 7N ' J iMNP+
XH KH'N ' pLM 'GH J9O'AP'NHT'KH P7'OPG P+
1'KHMiQP'NHT'NH JQHN'NHMN'2' I MT'KHMiQP' IT' I iO[
HM99'HMNP'AP'7M P'9 OQ%O'NHMI'QPiN9P'9 P'\
P'MG'NHT'L PGPiKP' G'Q MK JG'MiO'U iO
1 'N 'NHTGP97'MN'9PMGN'U iO HPM NPO'L P8
MU'H' NHP'Mi 'GP97'7 '9 P' 7 IP+
HMN'APMJNT'GN 99' I MT'9 P' i'NH iP' 'NHPP+

V2+

#G'7MGN'MG'NH J'GHM9N' Mip'G '7MGN'NH J'Q %GN'
2i' ip' 7NH ip'7 I'NHMN' H KH'NH J'OPLM NPGN8
#iO'NHMN'7 PGH'A9 O H KH'T JiQ9T'NH J'APGN %GN+
H J'I MT%GN'KM99'NH ip' HPi'NH J'7 I'T JNH'K i p NPGN+
"p p i'9 PG' GO I'APMJNT'MiO' iK PMGP8
27'M99' p P I iOPO'G 'NHP'N I PG GH J9O'KPMGP
#iO'NH PPGK P'TPM G' J9O'I MUP'NHP' 9O'M MT+

V i+

1'NHMN'T J' p P'T J GP97[AJN'9 p'T J'M P'
'9 iQP'5i&-' '5i&'5i& - .' ' 1 *
#QM iGN'NH G' i 3' "5i&'- i&"', ,
#iO'T J'G ppN- (' i'-i ' i '31
'GH J9O'NHMN'APMJNT' H KH'T J'H 9O' i'9PMGP'
O iO'i 'OPNP I iMN i8 NHPi'T J' P P'
4 J GP97'MQM i'M7NP'T J GP97%G OPKPMGP+
XHPi'T J'G ppN' GGJP'T J'G ppN'7 I'GH J9O'APM +'
XH '9PNG'G '7M 'N'H J9O'AP'7M99'N 'OPKMT+

V22+

XHPi'2'O 'K JiN'NHP'K9 KU'NHMN'NP99G'NHP'N IP+
#iO'GPP'NHP'A M P'OMT'GJiU' i'H OP JG'i QHN8
XHPi'2'APH 9O'NHP' 9PN'LMGN'L IP
#iO'GMA9P'KJ 9G'M9 'G 9 P %O' %P' NH' H NP8
XHPi'9 7NT'N PPG'2'GPP'AM Pi' 7 9PM PG+
XH KH'P GN'7 I'HPMN'O O'KMi LT'NHP'HP O+
#iO'GJI IP %G'Q PPi'M99'Q OPO'JL' i'GHPM PG+
ip' i'NHP'A P' NH' H NP'MiO'A GN9T'APM O8
HPi' 7NHT'APMJNT'O '2'] JPGN i'IMUP+
HMN'NH J'MI iQ'NHP' MGNPG' 7N IP'I JGN'Q +
iKP'G PPNG'MiO'APMJN PG'O 'NHPI GP9 PG'7 GMUP+
#iO'O P'MG 7MGN'MG'NHPT'GPP' NHP G'Q 8
#iO'i NH iQ'%QM iGN' IP%G KTNHP'KMi'IMUP'OP7PiKP'
M P'A PPO'N 'A M P'H I' HPi'HP'NDUPG'NHPP'HPiKP+

HP1'NHP'K IKP N' 7NH G' IK IGNMIN'GNMT'
PNG'T J'I GN' KH' I'T JNH'AP7 P'IT'G QHN+'
XHP P' MGNP7J9'N I'P'OPAMNPNH' NH'OPKMT
'KHMIQP'T J'OMT' 7T JNH'N 'GJ99 PO'I QHNJ
#IO'TN J'N JP' QHNG'AP'NP I%O'M'L PN%G MQP+
#IO'GN PNKHPO'IPN P' 7MI'MIN]JP'G IQ
JN' P P'G I'P'KH 9O' 7'T J G'M9 P'NHMN'N I P+
4 J'GH J9O'9 P'N KP8S I' N'MIO' I'T HT I P+

V 222+

HM99'2'K ILM P'NHPP'N 'M'GJ1 I P %G'OMT'F
2H J'M N' I P'9 P9T'MIO'I P'NP I LP MNP
&' JQH' IOC'O 'GHMUP'NHP'OM 9 IQ'AJOG' 7 MT'
#IO'GJ1 I P %G'9PMGP'HMNH'M99'N 'GH N'M'OMNP'
IPN I P'N 'H N'NHP'PT P' 7HPM PID'GH IPG+
#IO' 7NPI' G H G'Q 9O'K ILP9PW I'O I I %O J
T'KHMIKP' 'IMNJ P%G KHMIQ IQ'K J GP'JIN I I %O'
JN'NHT'PNP IM9'9 GJ1 I P'GHM99'I N'7MOP+
'9 GP'L GGPGG I' 7NHMN'7M 'NH J' PGNJ
'GHM99'5PMNH'A MQ'NH J' MIOP %GN'I'H G'GHMOP+
XHPI'I'PNP IM9'9 IPG'N 'N I P'NH J'Q PGNJ
'9 IQ'MG I PI'KMI'A PMNHP' 'PTPG'KMI'GPP
'9 IQ'9 PG'NH G'MIO'NH G'Q PG'9 7P'N 'NHPP+

V2V+

5P J IQ' IP'A9JIN'NH J'NHP'9 I%G LM G+
#IO'IMUP'NHP'PM NH'OP J'HP' I'G PPN'A O'J
-9JKU'NHP'UPPI'NPNH'7 I'NHP'7 P K P'N QP %G EM G+'
#IO'AJI'NHP'9 IQ 9 %O'LH PI W'I'HP'A9 OJ
MUP'Q9MO'NHP'G T'GPMG IG'MG'NH J'79PPNG+
#IO'O' HMNP%P'NH J' 9N'G 7N 7 NPO' IP
'NHP' OP' 9O'MIO'M99'HP'7MO IQ'G PPNGJ
JN'2'7 A O'NHPP' IP'I GN'HPI JG'K IP

V2V+

'I ' HP' OIMT'PMOIQ G AN * M9 IP'K IKP IQ'NHMN'A2 ' I'N9'P
Q IM9 G'MI'P ' 7NHP'L PGG+
D SL N M N+
' APMJNT+' HP' O GIGPO'I'NHP'GM I P'GPIGP I'NHP3 QHNPPINH' IIPN'
' ' I'&'KHM O'22+
X XHPI'NHP'GPMKH IQ 2' '$ 'GHO
PHIO'NHP'Q9 AP'MIO'9 QHNG'NHP'9 P' 9OHR

V 22+

XH ' 99'AP9 P P'IT P GP' I'N IP'N 'K IP+
27'N' P P'7 99%O' NH'T J'I GN'H QH'OPGP NG'F
H JQH'TPN+'"PM PI'UI G' N' G'AJN'MG'M'N IA'
XH KH'H OPG'T J'9 7P'MIO'GH G I N'HM97'T J'LM NG+
27'2'K J9O' NP'NHP'APMJNT' 7T J'PTPG+
#IO' I'7 PGH'IJ1AP G'IJ1AP'M99'T J'Q MKPG+
HP'MQP'N 'K IP' J9O'GMT'NH G'L PN'9 PG+
JKH'HPM PI9T'N JKHPG'IP%P'N JKH%O'PM NH9T'7MKPG+

V 2+

JN' HP P7 P'O'I N'T J'M I QHN P' MT'
‡ MUP' M'JL I'NH G'A9 OT'NT MIN+' IPF
#IO'7 N 7T'T J GP97' I'T J'OPKMT
X NH' IPMIG I P'A9PGGPO'NHMI'I'T'AM PI' HTIP'
'GNMIO'T J' I'NHP'N L' 7HMLLT'H J GJ
#IO'IMIT'I M OPI'QM OPIG'TPN'JIGPN+
X NH' NJ JG' GH' J9O'APM'T J D'9 IQ'79 P G+
JKH'9 UP'NHMI'T J'LM INPO'K JINP 7P N'
XH KH'GNPM9G' IPI%G PTPG'MIO' IPI%G G J9G'MI MCPNH+'
#'IMI' I'HJP'M99'HJPG I'H G'K IN 99 IQ+
:9O IQ'NHP' AEPK'N HP PJL I' N'QMCPNH8
#I'PTP I P'A QHN'NHMI'NHP G'9PGG 7M9GP' I' 99 IQ+'
XH KH'I'NHT'A PMGN'O NH'9 P'MG'NH IP' I'PJ
" 'KMI'2'NHPI'AP'P9OP'NHMI'NH J'M N'F
1'NHP P7 P'9 P'AP' 7NHTGP97'G ' M T+
#G'2'I N'7 'ITGP97'AJN'7 'NHPP' 99J
PM IQ'NHT'HPM N' H KH'2' 99'UPPL'G 'KHM T'
#G'NPIOP'IJ GP'HP'AMAP'7 I'7M IQ' 99+
-PGJ1P'I N' I'NHT'HPM N' HPI'I IP' G G9M IJ
H J'QM %GN' IP'NH IP'I N'N 'Q P'AMKU'MQM I+

VV222+

#G'MI'JILP 7PKN'MKN ' I'NHP'GNMQP+
XH ' NH'H G'7PM' G LJN'APG OPG'H G'LM N+
1'G IP'7P KP'NH IQ' PL9PNP' NH'N 'IJKH' MQP+'
XH GP'GN PIQNH%G MAJIOMIKP' PMUPIG'H G' I'HPM N8
'2'7 '7PM'7N JGN'7 QPN'N 'GMT'
HP'LP 7PKN'KP PI IT'79 P%G NP+
#IO' I'IP' I'9 P%G GN PIQNH'GPPI'N 'OPKMT'
1%P KHM Q%O' NH'AJ NHPI' 7'I IP' I'9 P%G I QHN+

)6 0 SJIOPK MPO+
F -' SJI I+' ' I' LPIGP' S
X#5PO NH'AMIOG 7'IJNJMG'(-' B
G SK KJI7PPIKP+
A

'9PN'IP'N JP' I'9 P'AJN'N J9T' NP+
#IO'NHPI'AP9 P P'IP'IT'9 P'G'MG'7M '
#G'MIT'I NHP %G'KH 9O'NH JQH'I N'G'A QHN'
#G'NH GP'Q 9O'KMIO9PG'7W%O' I'HPM PI%G M
/PN'NHPI'GMT' I P'NHN'9 UP' 7HPM GMT' P99J
2' 99'I N'L M GP'NHMN'LJ L GP'I N'N 'GP99+

T'Q9MGG'GHM99'I N'LP GJMOP'IP'2'MI' 9O+
'9 IQ'MG'T JNH'MIO'NH J'M P' 7 IP'OMNPJ
JN' HPI' I'NHPP'N IP%G'7J LG G'2'APH 9O+
HPI'9 U'2'OPMNH'IT'OMTG'GH J9O'PWL MNP+
O '99'NHMN'APMJNT'NHMN'O NH'K P'NHPP'
2G'AJN'NHP'GPPI9T'M IPIN' 7IT'HPM N+
XH KH' I'NHT'A PMGN'O NH'9 P'MG'NH IP' I'PJ
" 'KMI'2'NHPI'AP'P9OP'NHMI'NH J'M N'F
1'NHP P7 P'9 P'AP' 7NHTGP97'G ' M T+
#G'2'I N'7 'ITGP97'AJN'7 'NHPP' 99J
PM IQ'NHT'HPM N' H KH'2' 99'UPPL'G 'KHM T'
#G'NPIOP'IJ GP'HP'AMAP'7 I'7M IQ' 99+
-PGJ1P'I N' I'NHT'HPM N' HPI'I IP' G G9M IJ
H J'QM %GN' IP'NH IP'I N'N 'Q P'AMKU'MQM I+

VV+

#' IMI%G'7MKP' NH'IMNJ P%G I'HMIO'LM INPO+'
"MGN'NH J'NHP'IMGNP I GN PGG' 7'IT'LMGG IJ
#' IMI%G'QPIN9P'HPM N'AJN'I N'MK]JM INPO'
X NH'GH 7N IQ'KHMIQP'MG G'7M9GP' IPI%G 7MGH I'J
#I'PTP I P'A QHN'NHMI'NHP G'9PGG'7M9GP' I' 99 IQ+'
: 9O IQ'NHP' AEPK'N HP PJL I' N'QMCPNH8
#'IMI' I'HJP'M99'HJPG I'H G'K IN 99 IQ+
XH KH'GNPM9G' IPI%G PTPG'MIO' IPI%G G J9G'MI MCPNH+'
#IO'7 'M' IMI' P N'NH J'7 GN'K PMNPOJ
99' MNJ P'MG'GHP' JQHN'NHPP'7P99 M O N IQ+
#IO'ATMOON I'IP' 7NHPP'OP7PMNPO
TMOO IQ' IP'NH IQ'N 'ITLJL GI' NH IQ+
JN'G IKP'GHP'L KU%O'NHPP' JN'7 ' IPI%'LPMGJ P+'
IP'AP'NHT'9 P'MIO'NHT'9 P%G JGP'NHP 'N PMGJ P+

' G N'I N' NH'IP'MG NH'NHMN'IJGP
N %O'AT'M'LM INPO'APMJNT'N 'H G P GP8
XH 'HPM PI' NGP97'7 ' IMIPIN'O NH'JGP+
#IO'P P T'7M ' NH'H G'7M 'O NH' PHPM GP8
MU IQ'M'K JL9PIPIN'P 7L JO'K ILM P+
X NH'GJI'MIO'I I' NH'PM NH'MIO'GPM%G KH'QPIG' '
X NH'#L 9%G'7 GN A I'79 P G'MIO'M99'NH IQG M P'
HMN'HPM PI%G'M ' I'NH G'HJQP' IOJ P%GHPIG+

1'9PN I T A UG AP'NHPI'NHP'P9]JPIKP
#iO'0J1A'L PGMQPG' 7 I T'GLPMU IQ'A PMGN8
X H 'L9PMO'7 '9 P'MIO'9 U'7 ' PK ILPIKP
P'NHMI'NHMN'N IQJP'NHMN' I P'HMNH' I P'PWL PGG%O+
1'9PM I'N ' PMO' HMN'G 9PIN'9 P'HMNH' N
'HPM' NH'PTPG'AP9 IQG'N '9 P%G'7 IP' N+

IP'PTP'HMNH'L9MT%O'NHP'LM INP 'MIO'HMNH'GNP9%O'
HT'APMJNT%G'7 I' I'NMA9P' '7 I T'HPM N8
T'A OT'G NHP'7 M I P% HP P I'%N G'HP9O+
#iO'LP GLPKN P' N' G APGN'LM INP %G M N+
O 'NH JQH'NHP'LM INP 'I JGN'T J'GPP'H G'GU 99+
'7 iO HP P'T J'N JP' I MQP'L KNJ %O'9 PG' +
X H KH' I' I T'A G I%G GH L' G'HMIQ IQ'GN 99+
HMN'HMNH'H G iO G'Q9MCPO' NH'NH IP'PTPG+
'GPP' HMN'Q O'NJ I G'PTPG'7 'PTPG'HM P'O IP8
IP'PTPG'HM P'O M I'NHT'GHMLP'MIO'NH IP'7 'IP'
P' iO G'N 'I T'A PMGN' HP P NH JQH'NHP'GJI'
5P9QHNG'N 'LPPL'N 'QMCP'NHP P I' I'NHPP8
4PN'PTPG'NH G'KJii IQ' MIN'N 'Q MKP'NHP 'M N+
HPT'O M 'AJN' HMN'NHPT'GPP'UI 'I N'NHP'HPM N+

VV +

/PN'NH GP' H 'M P' I'7M J' NH'NHP 'GNM G+
17LJA9 K'H I J'MIO'L JO'N N9PG'A MGN+
XH 9GN'2' H I'7 NJIP' 7GJKH'N J1LH'AM G
I9 U%O'7 'E T' I'NHMN'2'H I J'I GN+
: PMN'L IKPG%'7M J NPG'NHP '7M '9PM PG'GL PMO'
JN'MG'NHP' I M Q 9O'MN'NHP'GJI%G'PTP'8
#iO' I'NHP I GP9 PG'NHP 'L OP'9 PG'AJ PO
OL'MN'M'7 I'NHPT' I'NHP 'Q9 T'O P+
HP'LM I7J9' M '7MI JGPO'7 '7QHN D
#7MP'M'NH JGMIO' KN PG' IKP'7 9%O+
2G'7 I'NHP'A U 7H I J' MCPO']J NP+
#iO'M99'NHP pGN'7 Q N'7 ' H KH'HP'N 9%O'
HPI'HMLLT'2'NHMN'9 P'MIO'MI'AP9 %O'
XHP P'2'IMT'I N' PI P'I 'AP' PI %O+

IP'PTP'HMNH'L9MT%O'NHP'LM INP 'MIO'HMNH'GNP9%O'
HT'APMJNT%G'7 I' I'NMA9P' '7 I T'HPM N8
T'A OT'G NHP'7 M I P% HP P I'%N G'HP9O+
#iO'LP GLPKN P' N' G APGN'LM INP %G M N+
O 'NH JQH'NHP'LM INP 'I JGN'T J'GPP'H G'GU 99+
'7 iO HP P'T J'N JP' I MQP'L KNJ %O'9 PG' +
X H KH' I' I T'A G I%G GH L' G'HMIQ IQ'GN 99+
HMN'HMNH'H G iO G'Q9MCPO' NH'NH IP'PTPG+
'GPP' HMN'Q O'NJ I G'PTPG'7 'PTPG'HM P'O IP8
IP'PTPG'HM P'O M I'NHT'GHMLP'MIO'NH IP'7 'IP'
P' iO G'N 'I T'A PMGN' HP P NH JQH'NHP'GJI'
5P9QHNG'N 'LPPL'N 'QMCP'NHP P I' I'NHPP8
4PN'PTPG'NH G'KJii IQ' MIN'N 'Q MKP'NHP 'M N+
HPT'O M 'AJN' HMN'NHPT'GPP'UI 'I N'NHP'HPM N+

VV +

/PN'NH GP' H 'M P' I'7M J' NH'NHP 'GNM G+
17LJA9 K'H I J'MIO'L JO'N N9PG'A MGN+
XH 9GN'2' H I'7 NJIP' 7GJKH'N J1LH'AM G
I9 U%O'7 'E T' I'NHMN'2'H I J'I GN+
: PMN'L IKPG%'7M J NPG'NHP '7M '9PM PG'GL PMO'
JN'MG'NHP' I M Q 9O'MN'NHP'GJI%G'PTP'8
#iO' I'NHP I GP9 PG'NHP 'L OP'9 PG'AJ PO
OL'MN'M'7 I'NHPT' I'NHP 'Q9 T'O P+
HP'LM I7J9' M '7MI JGPO'7 '7QHN D
#7MP'M'NH JGMIO' KN PG' IKP'7 9%O+
2G'7 I'NHP'A U 7H I J' MCPO']J NP+
#iO'M99'NHP pGN'7 Q N'7 ' H KH'HP'N 9%O'
HPI'HMLLT'2'NHMN'9 P'MIO'MI'AP9 %O'
XHP P'2'IMT'I N' PI P'I 'AP' PI %O+

IP'PTP'HMNH'L9MT%O'NHP'LM INP 'MIO'HMNH'GNP9%O'
HT'APMJNT%G'7 I' I'NMA9P' '7 I T'HPM N8
T'A OT'G NHP'7 M I P% HP P I'%N G'HP9O+
#iO'LP GLPKN P' N' G APGN'LM INP %G M N+
O 'NH JQH'NHP'LM INP 'I JGN'T J'GPP'H G'GU 99+
'7 iO HP P'T J'N JP' I MQP'L KNJ %O'9 PG' +
X H KH' I' I T'A G I%G GH L' G'HMIQ IQ'GN 99+
HMN'HMNH'H G iO G'Q9MCPO' NH'NH IP'PTPG+
'GPP' HMN'Q O'NJ I G'PTPG'7 'PTPG'HM P'O IP8
IP'PTPG'HM P'O M I'NHT'GHMLP'MIO'NH IP'7 'IP'
P' iO G'N 'I T'A PMGN' HP P NH JQH'NHP'GJI'
5P9QHNG'N 'LPPL'N 'QMCP'NHP P I' I'NHPP8
4PN'PTPG'NH G'KJii IQ' MIN'N 'Q MKP'NHP 'M N+
HPT'O M 'AJN' HMN'NHPT'GPP'UI 'I N'NHP'HPM N+

VV +

/PN'NH GP' H 'M P' I'7M J' NH'NHP 'GNM G+
17LJA9 K'H I J'MIO'L JO'N N9PG'A MGN+
XH 9GN'2' H I'7 NJIP' 7GJKH'N J1LH'AM G
I9 U%O'7 'E T' I'NHMN'2'H I J'I GN+
: PMN'L IKPG%'7M J NPG'NHP '7M '9PM PG'GL PMO'
JN'MG'NHP' I M Q 9O'MN'NHP'GJI%G'PTP'8
#iO' I'NHP I GP9 PG'NHP 'L OP'9 PG'AJ PO
OL'MN'M'7 I'NHPT' I'NHP 'Q9 T'O P+
HP'LM I7J9' M '7MI JGPO'7 '7QHN D
#7MP'M'NH JGMIO' KN PG' IKP'7 9%O+
2G'7 I'NHP'A U 7H I J' MCPO']J NP+
#iO'M99'NHP pGN'7 Q N'7 ' H KH'HP'N 9%O'
HPI'HMLLT'2'NHMN'9 P'MIO'MI'AP9 %O'
XHP P'2'IMT'I N' PI P'I 'AP' PI %O+

JN'NHPI'APQ IG'M'E J IPT' I' I'THPMO
' U'I'I IO' HPI'A OT%G U%G'PWL %O
O 'NHPI' I'NH JQHNG'@7 I'7M' HP P'2'MA OP
4PN' I'NHPGP'NH JQHNG' I'TGP97'MQI GN'OPGL G IQ+
X NH' HMN'2' I GN'PIE T'K INPINPO'9PMGN'8
"'ML9T'2'NH IU' I' NHPP SMIO'NHPI' I'T'GMNP'
@/ UP'N 'NHP'9M U'MN'A PMU' 7OMT'M G IQ'
O 1'GJ99P'PM NH 'G IQG'HTI IG'MN'HPM PIG'QMNP'
O 'NHT'G PPN'9 P' PIPIAP %O'GJKH' PM9NH'A IQG+
HMN'NHPI'2'GK I'N 'KHMIQP' I'T'GNMNP' NH'U IQG+

VVV+

XHPI'N 'NHP'GPGG IG' 7G PPN'G 9PIN'NH JQHN'
2'GJII I'JL'PIPIA MIKP' 7NH IQG'LMGN
2'G QH'NHP'9MKU' 7 IMIT'M'NH IQ'2'G JQHN+
#iO' NH' 9O' PG'IP ' M 9'I T'OPM'N IPG% MGNP
HPI'KMI'2'O I'MI'PTP'JIJG%O'N '79 +
O 'L PK JG'7 PIOG'H O' I'OPMNH%G'OMNP9PGGF'I QHN
#+iO' PPL'M7 PGH'9 P%G'9 IQ G IKP'KMIK99%O' P+
#iO' I MI'NHP'PWLPIGP' 7 IMIT'M' MI GH%O'G QHN+F
HPI'KMI'2'Q P P'MN'Q P MIKPG'7 PQ IP+
#iO'HPM 9T'7 I' P'N ' P'NP99' %P'
HP'GMO'MKK JIN' 77 P API MIPO' I MI+
XH KH'2'IP 'LMT'MG' 7I N'LM O'AP7 P+

MLLPM'MN' INP JMG+R' "P'MOOG'6' 2 'GH'J9O'I N'HM P'APPI'GJ77P PO'N'O '
AG 9PNP'7 ' P'HM PI ' O'I ' I'JGP'NHMN'KMI'MNUP' NG'L9MKP' 'AP'K IG OP PO'
MGL PK GP9T'GTI IT1 JG' NH' N' I' GPIGP '9PP'MIO'N IU9P'M P'IP P9T'GHMOPG' 7
N+R' :'77 O']J NPG'GP M9'LMGGMQPG'7 I'?'IG I'MIO' PMJ'JI IN'MIO'O9PMKHP'
I'K I7 'IMN 'I' 7HG LI I+' JN'NHP P'M P'7 J'9 IPG I'5 MTN I%G 6'- 9T'
19A I'R' HKH'K INM I'M'LM M99P9'JGP'7NHP' O S

6' JLL GP'%N VN'I I'MIO'I QHN'NHP'GJI'G HM97 MT' JQHN
@ HP'GHMO G'N 'AP'9M OP'AT'H G OPGKPIO'IQ'A JQHN
XH' 'NH M'7P PIN'PTP'9 UG'NH 'JQH'NHP 2 3'QMOPG+
#IQ'H G O GLP GPO' MTG'K I I WPNH 'NH'NHP'GHMOPG+R

' PP TIAP9 IP'299JGN MN IG' 7#KN'22+'L'' +
--SPIOPGG'HM IQ'I 'KP'MN'I'N 'AP'JGPO'MG'IM9 O JG'N', -- 3 2 5$ NHP'F G
F27' P'JIOP'GNMIO' 4, -';N 'AP'JGPO'MG'IM9 O JG'N', -- 3 2 5$ NHP'F G
I'MIG'NHP'4, -'7 I MIT'M' MI'GHPO'G OHN#' M9 IP'NH I9%G'NHMN-3 'G JGPO7'
-3 #'AJN'NH G G KP'NM I9T'M' P T'GN M IPO'K IEPKJ P+

JN'NHPI'APQ IG'M'E J IPT' I' I'THPMO
' U'I'I IO' HPI'A OT%G U%G'PWL %O
O 'NHPI' I'NH JQHNG'@7 I'7M' HP P'2'MA OP
2INPIO'M'CPM9 JG'L'9Q I MQP'N 'NHPP+
"'ML9T'2'NH IU' I' NHPP SMIO'NHPI' I'T'GMNP'
@/ UP'N 'NHP'9M U'MN'A PMU' 7OMT'M G IQ'
O 1'GJ99P'PM NH 'G IQG'HTI IG'MN'HPM PIG'QMNP'
O 'NHT'G PPN'9 P' PIPIAP %O'GJKH' PM9NH'A IQG+
HMN'NHPI'2'GK I'N 'KHMIQP' I'T'GNMNP' NH'U IQG+

VVV+

XHPI'N 'NHP'GPGG IG' 7G PPN'G 9PIN'NH JQHN'
2'GJII I'JL'PIPIA MIKP' 7NH IQG'LMGN
2'G QH'NHP'9MKU' 7 IMIT'M'NH IQ'2'G JQHN+
#iO' NH' 9O' PG'IP ' M 9'I T'OPM'N IPG% MGNP
HPI'KMI'2'O I'MI'PTP'JIJG%O'N '79 +
O 'L PK JG'7 PIOG'H O' I'OPMNH%G'OMNP9PGGF'I QHN
#+iO' PPL'M7 PGH'9 P%G'9 IQ G IKP'KMIK99%O' P+
#iO' I MI'NHP'PWLPIGP' 7 IMIT'M' MI GH%O'G QHN+F
HPI'KMI'2'Q P P'MN'Q P MIKPG'7 PQ IP+
#iO'HPM 9T'7 I' P'N ' P'NP99' %P'
HP'GMO'MKK JIN' 77 P API MIPO' I MI+
XH KH'2'IP 'LMT'MG' 7I N'LM O'AP7 P+

MLLPM'MN' INP JMG+R' "P'MOOG'6' 2 'GH'J9O'I N'HM P'APPI'GJ77P PO'N'O '
AG 9PNP'7 ' P'HM PI ' O'I ' I'JGP'NHMN'KMI'MNUP' NG'L9MKP' 'AP'K IG OP PO'
MGL PK GP9T'GTI IT1 JG' NH' N' I' GPIGP '9PP'MIO'N IU9P'M P'IP P9T'GHMOPG' 7
N+R' :'77 O']J NPG'GP M9'LMGGMQPG'7 I'?'IG I'MIO' PMJ'JI IN'MIO'O9PMKHP'
I'K I7 'IMN 'I' 7HG LI I+' JN'NHP P'M P'7 J'9 IPG I'5 MTN I%G 6'- 9T'
19A I'R' HKH'K INM I'M'LM M99P9'JGP'7NHP' O S

6' JLL GP'%N VN'I I'MIO'I QHN'NHP'GJI'G HM97 MT' JQHN
@ HP'GHMO G'N 'AP'9M OP'AT'H G OPGKPIO'IQ'A JQHN
XH' 'NH M'7P PIN'PTP'9 UG'NH 'JQH'NHP 2 3'QMOPG+
#IQ'H G O GLP GPO' MTG'K I I WPNH 'NH'NHP'GHMOPG+R

' PP TIAP9 IP'299JGN MN IG' 7#KN'22+'L'' +
--SPIOPGG'HM IQ'I 'KP'MN'I'N 'AP'JGPO'MG'IM9 O JG'N', -- 3 2 5$ NHP'F G
F27' P'JIOP'GNMIO' 4, -';N 'AP'JGPO'MG'IM9 O JG'N', -- 3 2 5$ NHP'F G
I'MIG'NHP'4, -'7 I MIT'M' MI'GHPO'G OHN#' M9 IP'NH I9%G'NHMN-3 'G JGPO7'
-3 #'AJN'NH G G KP'NM I9T'M' P T'GN M IPO'K IEPKJ P+

'Q P'NHTGP97'NHP'NHMiUG' 7'MJQHN' i'lP
X NHT'LP JGM9 GNMiO'MQM iGN'NHTG Q'HN8
O ' H %G'G'OJIA'NHMN'KMii N' NP'N ,'NHPP'
X HPi'NH J'NHTGP97O GN'Q P'i piN i'9 QHN'\
P'NH J'NHP'NPiNH lJGP'NPi'N lPG l P' i' NH
HMi'NH GP' 9O'i ip' HKH' HTlP G i KMNP'8
#iO'HP'NHMN'KM99G i'NHPP'9PN'H l'A iQ'7 NH'
3Np iM9'iJlAp GN ' JN9 P'9 iQ'OMN+
27'lT'G9 QHN' lJGP'O 'L9PMGP'NHPGP'KJ JG'OMTG+
HP'LM i'AP' l ip'AJN'NH ip'GHM99'AP'NHP'L M GP+

VVV2V+

'H ,NHT' NH' NH' lMiip G'lMT'2'G iQ+
XHPi'NH J'M N'M99'NHP'APNNP'LM N' 7'lP\
XHMN'KMi'l ip' i'L M GP'N ' l ip' i'GP97A iQ'\
#iO' HMN' G%'AJN' l ip' i' HPi'2'L M GP'NHPP'\
3 pi'7 ,NH G'9PN'JG O OPO'9 P+
#iO' J'OPM'9 P'9 GP'iMlP' 7G iQ9P' ip+
HMN'ATNH G GPLM MN i'2'lMT'Q P
HMN'OJP'N 'NHPP' H KH'NH J'OPGp $G'M9 ip+
'MAGPiKP' HMN'M'N lPiN' J9OGN'NH J'L P'
XP P'N'i N'NHT'G J'9p GJ P'QM P'G ppN'9PM P'
'piNP NM i'NHP'N lP' NH'NH JQHNG' 7'9 P
@XH KH'N lP'MiO'NH JQHNG'G 'G ppN9T'O NH'OPKP P '
#iO'NHMN'NH J'NPMKHPGN'H 'N ' lMUP' ip'N M i+
T'L M G iQ'H l'Hp p' H'O NH'HPiKP' plM i[

V/+

MUP'M99' lT'9 PG' lT'9 p'TPM'NMUP'NHPl'M99'
X HMN'HMGN'NH J'NHPi' l p'NHMi'lH J'HMOGN'APl' P'\
'9 p' lT'9 p'NHMN'NH J'lMT%GN'N JP'9 P'KM998
#99' l ip' MGNH ip'APl' P'NH J'HMOGN'NH G l p+
HPi' 7' 'lT'9 P'NH J'lT'9 P' PKP PGN
2'KMii N'A9Ml P'NHPP'7 'D l T'9 P'NH J'JGPGN8

V/22+

HMN'NH J'HMGN'HP ' N' G i N'M99' lT'Q P7+
#iO'TPN' N' lMT'AP' GM O'2'9 %O'HP 'OPM 9T'8
HMN'GHP'HMNH'NHPP' G' 7 l T' M 9 iQ'KH P7'
#'9 GG' i'9 P'NHMN'N JKHPG' lP' l P' lPM 9T+

$'>i'HP P G QI7PG (8-
; -', SNHPP i' lP+
Y #'LMGGMOP' i' "pi T+ PMLQMiG NHG SB"P G LJ P'M 'MiO'7 P8 MiO' NHP
OJ99 P9PlPNG' 7PM NH'MiO' NMP'ip p;MLLPM' i'HI +R HP'NH JQHN' GK iNiJPO
i'NHP'7 GN9 ip' 7'NHPO NT7'7NH iipN' i' HKH' iipN P M96'7iO'6 T9'7P
AP iQ'lMOP'7'7 J+R HG MG'NHP NHP T' 7'97P i' HMUGLP P%G N lP8 MiO '
AT' i' P97NH QHN' GLPMUG 9PM ipO9T' HPi'HP GMTG'65 PG i N' J'97P K i

ip'pTP'MiO'HPM N'M P'MN'M' l NM9' M +
" 'N 'O OP'NHP'K i]JPGN' 7'NHT'G QHN8 ',
ip'pTP' lT'HPM N'NHT'FL KNJ P%G G QHN' J9O'AM '
T'HPM N' l ip'PTP'NHP'7 PPO l' 7'NHMN' QHN+

G GN'7NHP7 J'P9PlPiNG\R' HMUGLP P'H p p'G lP HMM'9MJQHG'MN'NHP'NHP'T
HPi'HP'lMUPG ';#ioP ' PL9T'6%OM NH'G ' NHPT'GMT8 AJN'2'NHiU'N' MNHP'
K iGGNG 7PMN'iQMiO'O iU'iQ+R
LH'KM9 P $ ', KKJ G7 J'N lPG i'MNG #MiO'N G PlMUA9P'NMNN'NHP'GMlP'NTL Q M
) HP' Q'iN8'HMG' # MiO'N G PlMUA9P'NMNN'NHP'GMlP'NTL Q M
i'K lLPNPiN 'MJNH GPO'LP G i'GJLP'iNPiOPO'NHP'LJA9'KMN i+ 3 G 7'NHG
G N'M P'T7 P]JPiN i'NHP' Q'iM98 AJN' P'HM P i N'NH JQHN' N'ipKPGGM T'N'
i NKP'NHPl' HPi'NHP P'KMi'AP i'O JAN' 7'NHP lPMi iQ+

27'NHP'OJ99'GJAGNMiKP' 7 lT'79PGH' P P'NH JQHN+
2iEJ JG'O GNMiKP'GH J9O'i N'GN L' lT' MT8
O 'NHPi'OPGL NP' 7'GLMKP'2' J9O'AP'A JQHN'
O l'9 l NG 7M' pl NP' HP P'NH J'O GN'GNMT+
'lMNNP'NHPi'M9NH JQH' lT'7 N'O O'GNMiO'
L i'NHP'7M NHPGN'PM NH' pl %O'7 l'NHPP+

XHPi' l GN'2' iU'NHPi'O ' l ip'pTPG'APGN'GPP+
O 'M99'NHP'OMT'NHPT' P 'NH iQG'Ji pGLPKNPO8D
JN' HPi'2'G9PL' i'O PMlG'NHPT'9 U' i'NHPP+
#iO'OM U9T'A QHN'M P'A QHN' i'OM U'O PKNPO'8
HPi'NH J' H GP'GHMO 'GHMO G O NH' lMUP'A QHN+
" ' J9O'NHT'GHMO %G7 l'7 l'HMLLT'GH '
'NHP'K9PM'OMT' NH'NHT'lJKH'K9PM P'9 QHN+
XHPi'N 'JiGPP iQ'PTPG'NHT'GHMOP'GH ipG'G '[
" ' J9O'@Z'GMT' l ip'PTPG'AP'A9PGGPO'lMOP'
T'9 U iQ' i'NHPP'i'NHP'9 iQ'OMT+
XHPi' i'OPMO'i QHN'NHT'7M ' lLP 7PK'GHMOP'
H JQH'HPM T'G9PPL' i'G QHN9PGG'PTPG'O NH'GNMT'\
#99'OMTG'M P'i QHNG'N 'GPP'N 99'2'GPP'NHPP+
#iO'i QHNG'A QHN'OMTG' HPi'O PMlG'O 'GH 'NHPP'lP+D

T'HPM N'O NF'L9PMO'NHMN'NH J' i'H l'O GN'9 p
@#'K9 GP\'ip p'L pK%O' NF'K TGUM9'PTPG
JN'NHP'OP7PiOMiN'O NF'NHMN'L9PM'OPiT+
#'N'9P7N'NHP'L pT' 7p p T' J9QM'NH P7+
HPP'HM P?'i N'9 KU%O'JL' i'MiT'KHPGN
M P' HP P'NH J'M N'i N'NH JQH'?'7PP9'NH J'M N+'
X NH i'NHP'QPiN9P'K9 GJ P' 7'lT'A PMGN
O l' HPlKP'MN'L9PMGJ P'NH J' lMT%GN'K lP'MiO'L M N8
#iO'p piN'NHPlKP'NH J' 9N'AP'GN 9pi'?'7PM
O 'N JNH'L PG'NH p GH'7 'M'L CP'G 'OPM+

V/2V+

#QM iGN'NHMN'N lP' 7p p'NHMN'N lP'K lP+
XHPi'?'GHM99'GPP'NHPP'7 i' i'lT'OP7PKNG'
XHPiMGF'NHT'9 P'HMNH'KMGN'H G'JNl GN'GJl+
M99%O'N 'NHMN'MJO N'AT'MO G%O'PGLPKNG
#QM iGN'NHMN'N lP' HPi'NH J'GHM9N'GN MiQP9T'LMGG+
#iO'GKM KP9T'Q PPN'lP' NF'NHMN'GJi'NH iP'pTP+
XHPi'9 p'K i p NPO'7 l'NHP'NH iQ' N' MG+
HM99'PMG iG7 iO' 7GPNN9PO'Q M NT'8
#QM iGN'NHMN'N lP'O '2'piGK iKPF'lP'HP P'
X NH i'NHP'Ui 9POQP'7 l ip' i'OPGP N
#iO'NH G lT'HMiO'MQM iGN'lTGP97'JL PM
'QJM O'NHP'9M 7J9' PMG iG' i'NHT'LM N
'9PM P'L 'lP'NH J'HMGN'NHP'GN piQNH' 79M G+'
iKP' HT'N '9 P'2'KMi'M99PQP'i 'KMJGP+

V/ 22+

PN WN' l ip'pTP'MiO'HPM N'M'9PMQJP'G'N U+
#iO'PMKH'O NF'Q O'NJ iG'i 'JiN 'NHP' NHP''
XHPi'NHMN' l ip'PTP' G 7MI GH%O'7 'M'9 U
1'HPM N'i'9 P' NF'G QHG'H lGP97'O NF'GI NHP '
X NF'lT'9 P%G'L KNJ P'NHPi'lT'pTP'O NF'7PMGN
#iO'N 'NHP'LM iNPO'AMi]JPN'A OG'lT'HPM N8
#i NHP'N lP' ip'PTP' G lT'HPM N%G'QJPGN
#iO'iH G'NH JQHNG'79 P'O NF'GHM P'ML M N
'P NHP'AT'NHT'L KNJ P' 'lT'9 P+
HTGP97M MT'M N'L PGPiN'GN 99' NF'l P8
O 'NH J'i N'7M NHP'NHMi'lT'NH JQHNG'KMiGN'l P'
#iO'2'Mi'GN 99' NF'NHPl'MiO'NHPT' NF'NHPP'8
1 '7NHPT'G9PPL'NHT'L KNJ P' i'lT'G QHN
MUPG'lT'HPM N'N 'HPM N%G'MiO'PTP%G OP9 QHN+

V/' 222+

" 'KM P7J9' MG2' HPi'2'N U'l'T' MT+
3MKH'N 79P'JiOP'N JPGN'AM G'N 'NH JGN
HMN'N 'lT'JGP' N'l QHN'JiJGPO'GNMT
O l'HMiOG' 77M9GPH O'i'GJ P' M OG' 7N JGN[
JN'NH J'N' H l' lT'EP P9G'N 79PG'M P+
GN' NHT'K l7 N'i 'lT'Q PMNPG'Q P7+

HP'APMGN'NHMN'APM G'lP'N PO' NF'lT' p+
-9 OG'OJ99T' i'N'APM'NHMN' pQHN' i'lP
#G'7AT'G lP' iGN iKN'NHP' pNKH'O O'UI '
1 'KMLNM iF'EP P9G' i'NHP'KM KMiPN+F
' G'NHP'N lP'NHMN'UPPLG'T J'MG'lT'KHPGN+
1 'MG'NHP' M O AP' HKH'NHP' AP'O NF'H OP
'lMUP'G lP'GLPK MJ' iGNMiN'GLPK M9 A9PGN
T'ip 'J17 9O iQ'H G' lL G i%O'L OP+
9PGGPO'M P'T J' H GP' NH ipGG'Q PG'GK LP+
piQ'HMO'N 'N J1LH'AP iQ'9MKU%O'N 'H LP+

/222+

XHMN'GT J'GJAGNMiKP' HP p 7M p'T J'lMOP+
HMN'l 99 iG'7GN MiQP'GHMO G i'T J'NPiO'F
iKP'p p T' ip'HMNH'p p T' ip' ip%G'GHMOP
#iO'T J'AJN' ip'KMi'p p T'GHMO '9PiO+
5PGK AP'#O i G'MiO'NHP'K JiNP 7P N'
2G'L 9T' l NMNPO'M7NP'T JJ
1i"'p9pi%G'KHPPU'M99'M N' 7APMJNT'GPN+
#iO'T J'i':'pK Mi'N PG'M P'LM iNPO'ip
LPMU'7NHP'GL iQ'MiO'7 G i'7NHP'TPM J
HP'ip'O NF'GHMO ' 7T J'APMJNT'GH $
HP'NHP'MG'T J'A JiNT'O NF'MLLPM+
#iO'T J'i'p p T'A9PGGPO'GHMLP' P'UI +
2i'M99'PWNP iM9'Q MKP'T J'HM P'G lP'LM N+
JN'T J'9 UP'i ip'i ip'T J'7 'K iGNMiN'HPM N+

/22+

HJG'KMi'lT'9 P'PWKJGP'NHP'G9 ' 77PiKP'
1T'lT'OJ99'APM p ' HPi'7 l'NHPP'2'GLPPO
O l' HP P'NH J'M N' HT'GH J9O'2'HMGNP'lP'NHPiKP'\
99?'PNJ i' 7L GN iQ'G i'ipPO+
1' HMN'PWKJGP' 99'lT'L 'APMGN'NHPi'7iO
XHPi'G 7N'PWN pl NT'KMi'GPPl'AJN'G9 ''
HPi'GH J9O'?'GLJ 'NH JQH'l JiNPO'i'NHP' iO'8
2i' iQPO'GLPPO'i 'l N i'GHM99'?'UI '
HPi'KMi'i 'H GP' NH lT'OPG P'UPPL'LMKP'8
', HP P7 P'OPG P' 7LP 7PKN'9 P'AP iQ' lMOP
‡ HM99'ip QH'@i 'OJ99'79PGH' i'H G'7 P T' MKP8
JN'9 P'7 '9 P'NHJG'GHM99'PWKJGP'lT'EMOP8
iKP'7 l'NHPP'Q iQ'HP' piN' 97J9'G9 ‡
M OG'NHPP'2%99' Ji%MiO'Q P'H l'9PM P'N 'Q +

/22+

'MI'2'MG'NHP' KH' H GP'A9PGGPO'UPT'
MI'A iQ'H l'N 'H G'G PPN'JL 9 KUPO'N PMGJ P'
HP' HKH'HP' 99 i N'P P T'H J'GJ PT+
O 'A9JiN iQ'NHP'7 ipL iN' 7GP9O l'L9PMGJ P‡
HP P7 P'M P'7PMGNG'G 'G 9PI l'MiO'G ' MPF%
iKP'GP9O l'K l iQ' i'NHP'9 iQ'TPM 'GPN+

PNH iUG i '7MKP G 'Q MK JG D G MG I ip
'GHMLP G 'N JP'i 'N JNH' 7GJKH'MKK JiN+
#i07 'I'TGP97'I ip' i' NH'O 'OP7 ip+
#G2'M99' NHP' i'M99' NHG GJ I JiN+
X HPi'2'HM P'GPPi'GJKH' iNp KHMiQP' 7GNMNP+
1 'GNMNP' NGP97'K i7 JiOPO'N 'OPKMT8
&J i'HMNH'NMJQN'NH'NHJG'N ' JI iMNP S
HMN' IP' 99'K IP'MiO'NMUP'I'T9 P'M MT+
H G'NH JQN' G MG'M' OPMNH' H KH'KMii N'KH GP'
JN' PPL'N 'HM P'NHMN' H KH' N'7PM G'N '9 GP+

/V +

iKP'A MGG'i 'GN ip'i 'PM NH'i 'A JiO9PGG GPM+
JN'GMO'I NM9 NT' %P G MTG'NHP 'L P+
" ' NH'NH G' MQP'GHM99'APMJNT'H 9O'M'L9PM+
X H GP'MKN i'G i 'GN iQP 'NHMi'M'79 P'
1'H 'GHM99'GJI I P %G H ipT'A PMNH'H 9O' JN'
#QM iGN'NHP' pKUJ7J9 G PQP' 7AMNP iQ'OMTG+
X Hpi' KUG' IL PQiMA9P'M P'i N'G 'GN JN+
'QMNPG' 7GNPP9'G 'GN iQ 'AJN'N I P'OPKMTG'\
1'7PM 7J9' I PO NMN i'[HP P'M9MKU[
HM99' I P%G APGN'EP P9'7 I' I P%G'KHPGN'9 P'H O'\@
1 ' HMN'GN iQ'HMiO'KMi'H 9O'H G'G 7N'7 N'AMKU'\
1 ' H'H G'GL 9' 7APMJNT'KMi'7 A O'\+
'i ip'J19PGG'NH G' I MK9P'HM P'I QHN+
HMN' i'A9MKU' iU' I T'9 P'I MT'GN 99'GH iP'A QHN+

/V222+

#QM iGN' I T'9 P'GHM99'AP'MG 2'MI'i +
X NH' I P%G' iEJ JG'HMiO'K JGH%O'MiO' %P i8
X HPi'H J G'HM P'O M i%O'H G'A9 O'M iO'7 99%O'H G'A '
X NH'9 ipG'MiO' $ iU9PG8 HPi'H G'T JNH7J9' I i'
"MNH'N M P99%O' i'N 'MQP%G'GNPPLT'i QHN8'F
#iO'M99'NH GP'APMJN PG' HP P 7'i 'HP%G U iQ
#P' Mi GH iQ' ' Mi GH%O' JN' 7G QHN+
NPM9 iQ'M MT'NHP'N PMGJ P' 7H G'GL iQ'8
O' 'GJKH'M'N I P'O '2'i '7 N 77'
#QM iGN'K i7 JiO iQ'MQP%G'K JP9'U i 7P+
HMN'HP'GHM99'ip P'K JN'7 I'I PI T'
T G PPN'9 P%G APMJNT'NH JQH'I T'9 P%G 9 7P+
" G'APMJNT'GHM99' i'NHPGP'A9MKU$9 ipG'AP'GPPi+
#iO'NHPT'GHM99'9 P'MiO'HP' i'NHP I 'GN 99'Q PPi+

/V2 +

XHPi'2'HM P'GPPi'AT' IP%G 7P99'HMiO'OP7MK%O'
HP' KH L JO'K GN' 7 JN i'AJ PO'MQP8
XHPi'G IPN IP9 7NT'N P G2'GPP'O i MG%O+
#iO'A MGG'PNP iM9'G9M P'N ' I NM9' MQP8
XHPi'2'HM P'GPPi'NHP'HJiQ T' KPMi'QM i'

/V 229+

%O' NH'M99'NHPGP'7 ' PGN7J9'OPMNH'2'K T S
#G'N 'APH 9O'OPGP N'M'APQQM'A I+
#iO'ippOT'i NH iQ'N II%O' i'E 99 NT+
#iO'LJ PGN'7M NH'JiHMLL 9T'7 G i+
#iO'Q 9OPO'H i J'GHM IP7J99T' I GL9MK%O+
#iO' IM OPi' NJP' JOP9T'GN J1LPNPO
#iO' QHN'LP 7PKN i' iQ7J99T'O GQ MK%O+
#iO'GN piQNH'AT'9 IL iQ'G MT'O GMA9PO+
#iO'M N' IMOP'N iQJP N PO'AT'MJNH NT+
#iO'7 99T'@O KN 9 UP'K iN 99 iQ'GU 99
#iO'G IL9P'N JNH' I GKM99%O'G IL9 K NT %
#iO'KMLN P'Q O'MNNPiO iQ'KMLNM i' 99
%O' NH'M99'NHPGP'7 I'NHPGP' J9O'2'AP'Q ip'
M P'NHMN'N 'O P'2'9PM P'IT'9 P'M9 ip+

/V 22+

#H[HP P7 P' NH' i7PKN i'GH J9O'HP'9 P
#iO' NH'H G'L PGPiKP'Q MKP' IL PNT+
HMN'G i'AT'H I'MO MiNMQP'GH J9O'MKH P P+
#iO'9MKP'F NGP97' NH'H G G K PNT'\
XHT'GH J9O'7M9GP'LM iN iQ' I NMN'H G KHPPU+
#iO'GNPM9'OPMO'GPP iQ' 7H G'9 iQ'HJP'\
XHT'GH J9O'L 'APMJNT' iO PKN9T'GPPU
& GPG' 7GHMO 'G iKP'H G GP' G'N JP'\
XHT'GH J9O'HP'9 P'i ' MNJ P'AMiU JLN' G+
PQQM %O' 7A9 O'N 'A9JGH'NH JQH'9 P9T' P iG'\
O 'GHP'HMNH'i 'PWKHP]JP'i 'AJN'H G+
#iO'L JO' 7 IMiT'9 PG'JL i'H G'QM iG+
1'H I'GHP'GN PG'N 'GH J7 HMN' PM9NH'GHP'HMO'
2i'OMTG'9 iQ'G iKP'AP7 P'NHPGP'9MGN'G 'AMO+

/V 2+

%O' NH'M99'NHPGP'7 ' PGN7J9'OPMNH'2'K T S
#G'N 'APH 9O'OPGP N'M'APQQM'A I+
#iO'ippOT'i NH iQ'N II%O' i'E 99 NT+
#iO'LJ PGN'7M NH'JiHMLL 9T'7 G i+
#iO'Q 9OPO'H i J'GHM IP7J99T' I GL9MK%O+
#iO' IM OPi' NJP' JOP9T'GN J1LPNPO
#iO' QHN'LP 7PKN i' iQ7J99T'O GQ MK%O+
#iO'GN piQNH'AT'9 IL iQ'G MT'O GMA9PO+
#iO'M N' IMOP'N iQJP N PO'AT'MJNH NT+
#iO'7 99T'@O KN 9 UP'K iN 99 iQ'GU 99
#iO'G IL9P'N JNH' I GKM99%O'G IL9 K NT %
#iO'KMLN P'Q O'MNNPiO iQ'KMLNM i' 99
%O' NH'M99'NHPGP'7 I'NHPGP' J9O'2'AP'Q ip'
M P'NHMN'N 'O P'2'9PM P'IT'9 P'M9 ip+

/V 22+

#H[HP P7 P' NH' i7PKN i'GH J9O'HP'9 P
#iO' NH'H G'L PGPiKP'Q MKP' IL PNT+
HMN'G i'AT'H I'MO MiNMQP'GH J9O'MKH P P+
#iO'9MKP'F NGP97' NH'H G G K PNT'\
XHT'GH J9O'7M9GP'LM iN iQ' I NMN'H G KHPPU+
#iO'GNPM9'OPMO'GPP iQ' 7H G'9 iQ'HJP'\
XHT'GH J9O'L 'APMJNT' iO PKN9T'GPPU
& GPG' 7GHMO 'G iKP'H G GP' G'N JP'\
XHT'GH J9O'HP'9 P'i ' MNJ P'AMiU JLN' G+
PQQM %O' 7A9 O'N 'A9JGH'NH JQH'9 P9T' P iG'\
O 'GHP'HMNH'i 'PWKHP]JP'i 'AJN'H G+
#iO'L JO' 7 IMiT'9 PG'JL i'H G'QM iG+
1'H I'GHP'GN PG'N 'GH J7 HMN' PM9NH'GHP'HMO'
2i'OMTG'9 iQ'G iKP'AP7 P'NHPGP'9MGN'G 'AMO+

/V 229+

XHPi'2'HM P'GPPi'AT' IP%G 7P99'HMiO'OP7MK%O'
HP' KH L JO'K GN' 7 JN i'AJ PO'MQP8
XHPi'G IPN IP9 7NT'N P G2'GPP'O i MG%O+
#iO'A MGG'PNP iM9'G9M P'N ' I NM9' MQP8
XHPi'2'HM P'GPPi'NHP'HJiQ T' KPMi'QM i'

/V2 +

#O MiNMQP' i'NHP'U iQO I' 7NHP'GH P+
#iO'NHP'7 I'G 9' i' 7NHP' MN% T' I M i+
2ik PMG iQ'GN P' NH'9 GG'MiO'9 GG NH'GN P8
XHPi'2'HM P'GPPi'GJKH' iNp KHMiQP' 7GNMNP+
1 'GNMNP' NGP97'K i7 JiOPO'N 'OPKMT8
&J i'HMNH'NMJQN'NH'NHJG'N ' JI iMNP S
HMN' IP' 99'K IP'MiO'NMUP'I'T9 P'M MT+
H G'NH JQN' G MG'M' OPMNH' H KH'KMii N'KH GP'
JN' PPL'N 'HM P'NHMN' H KH' N'7PM G'N '9 GP+

/V +

iKP'A MGG'i 'GN ip'i 'PM NH'i 'A JiO9PGG GPM+
JN'GMO'I NM9 NT' %P G MTG'NHP 'L P+
" ' NH'NH G' MQP'GHM99'APMJNT'H 9O'M'L9PM+
XH GP'MKN i'G i 'GN iQP 'NHMi'M'79 P'
1'H 'GHM99'GJI I P %G H ipT'A PMNH'H 9O' JN'
#QM iGN'NHP' pKUJ7J9 G PQP' 7AMNP iQ'OMTG+
XHPi' KUG' IL PQiMA9P'M P'i N'G 'GN JN+
'QMNPG' 7GNPP9'G 'GN iQ 'AJN'N I P'OPKMTG'\
1'7PM 7J9' I PO NMN i'[HP P'M9MKU[
HM99' I P%G APGN'EP P9'7 I' I P%G'KHPGN'9 P'H O'\@
1 ' HMN'GN iQ'HMiO'KMi'H 9O'H G'G 7N'7 N'AMKU'\
1 ' H'H G'GL 9' 7APMJNT'KMi'7 A O'\+
'i ip'J19PGG'NH G' I MK9P'HM P'I QHN+
HMN' i'A9MKU' iU' I T'9 P'I MT'GN 99'GH iP'A QHN+

/V2 +

'5 (%SAPMJN 7J9+
'3 ' i'NHP' 9O'K LT8 MiO'N HMG' APPi'7 99 PO'AT' M9 ip+ "P'GJQ'
QPGNG'NHMN'NHP'N JP' O'IMT AP' ';' AJN'HP' PKP PG" 'MG'NHP'LM N K L9P'7
NHP' P A'N '."
'4 -2' $ ' 2N'HMG'APPi'L L GPO'N ' PMO'%" -2' $ ';' AJN' i'NHP' P piNH'
iipN' P'HM P'NHP'GMIP'i N i' 7 IMi'K9 I A iQ' JL'NHP'H 99 7MQP8 MiO'HP P'NHP'
OPM'G M96 'K iipKNPO' NH'NHP'MiN NHPG'G 7 'MiO' $
&2i' 9JG'MiO' PGG OM' 9TGGPG'GMTG S

6' IP'HMNH' IT'9 O'M'8 '' 'MN'H G'AMKH
2i' H KH'HP'LJNG'M9 I G'7 ' A9 i+R

IP%G ($ %'MiO' IP%G 8 '' 'M P'NHP'GM IP'8 NHPT'M P'NHP'OPL G N PG' 7 HMN'
', MG' iKP'Q PMN'MiO'APMJN 7J9'LMGGPO'M MT'LP GHPO'MiO'7 Q NNPi+

HPT'9 U iN 'NHP'APMJNT' 7NHT'I iO+
#iO'NHMN' i'QJPGG'NHPT'IPMGJ P'AT'NHT'OPPOG8
HPi'@KHJ 9G'NHP 'NH JQHNG'M9NH JQH'NHP 'PTPG
'NHT'7M '79 P'MOO'NHP MiU'GIP99 7 PPOG
JN' HT'NHT' O J'1MNKHPNH'i N'NHT'GH +
HP'G 9 P' G NH G SNHMN'NH J'O GN'K II i'Q +

$:;
1'9PGN'NHP' 9O'GH J9O'NMGU'T J'N 'PK NP'
XHM'IP N'9 %O'i'IP'NHMN'T J'GH J9O'9 P'
#7NP'IT'OPMNH SOPM'9 P'7 QPN'IP']J NP+
O 'T J'i'IP'KMi'i NH iQ' NHT'L P8
i9PGGT J' J9O'OP GP'G IP' NJ JG 9 P+
'O'I P7 '7P'NHMI'I IP' i'OPGP N+
#iO'HMiQ' I P'L M GP'JL i'OPKPMGPO'?
HMi'i QQM O'N JNH' J9O' 99 iQ9T' I L M N
1'9PGN'T J'N JP'9 P'IMT'GPPI'7M9GP' i'NH G+
'NHT'7M '79 P'MOO'NHP' MiU'GIP99' 7 PPOG
JN' HT'NHT' O J'1MNKHPNH'i N'NHT'GH +
HP'G 9 P' G NH G SNHMN'NH J'O GN'K II i'Q +

$:;
HMN'NH J'M N'A9MI%O'GHM99'i N'AP'NHT'OP7PKN
O 'G9MiOP %G'IM U' MG'P P'TPN'NHP'7M '8
HP' iMIPiN' 7APMJNT' G'GJGLPKN D
#'K 'NHMN'79PG i'HPM pi%G'G PPNPGN'M +
'NH J'AP'Q O'G9MiOP'O NH'AJN'MLL P'
HT' NH'NHP'Q PMNP 'API'Q' %O' 7N IP8
O 'KMiUP' KP'NHP'G PPNPGN'AJOG'O NH'9 P+
#iO'NH J'L PGpiN%GN'M'LJ P'JiGNM iPO'L IP+
H J'HMGN'LMGG%O'AT'NHP'MIAJGH' 7T JiO'OMTG+
3 NHP'i N'MGGN 9%O' ' KN 'API'Q'KHM Q%O 8
4PN'NH G'NHT'L M GP'KMii N'AP'G 'NHT'L M GP
'N P'JL'pi T'p p I P'pi9M Q%O
27'G IP'GJGLPK' 7 99 IMGU%O'i N'NHT'GH +
HPi'NH J'M9 ipU iQO IG' 7HPM NG'GH J9OGN' P+F

$:;
'9 iQP'I J i'7 'IP' HPi'2'MI'OPMO'
HMi'T J'GHM99'HPM'NHP'GJ 9T'GJ99pi'AP99'
: P' M i iQ'N 'NHP' 9O'NHMN'2'MI'79PO'
O I'NH G' 9P' 9O' NH' 9PGN' IG N 'O P99
MT' 7T J' PMO'NH G'9 ip' pIpIAp'i N'
HP'HMiO'NHMN' N'N8 7 '2'9 P'T J'G +
HM N'2' i'T J'G PPN'NH JQHNG' J9O'AP'7 Q N+
27'NH iU iQ' i'IP'NHPi'GH J9O'IMUP'T J' P+
1'7@2'GMT'T J'9 U'JL i'NH G' P GP+

2i'IP'NH J'GPPGN'NHP'Q9 iQ' 7GJJKH'7 P+
HMN' i'NHP'MGHPG' 7HG'T JNH'O NH'9 P+
#GNHP'OPMNH APO' HP P i' N'IJGN'PWL P+
iGJ1%O' NH'NHMN' H KH' N' MG'i J GH%O'AT+
H G'NH J'LP KP %GN' H KH' IMUPG'NHT'9 P'I P'GN iQ'
'9 P'NHMN' P99' H KH'NH J'IJGN'9PM P'P P'9 iQ'

$:;)
XHT'G IT' P GP'G'AM pi' 7ip 'L OP'\
'7M'7 I' M MN i' ']J KU'KMiQP'\
XHT' NH'NHP'N IP'O'2'i N'Q9MiKP'MG OP'
'ip 7 JiO'IPNH OG'MiO'N 'K IL JiOG'GN MiQP'\
XHT' NP2'GN 99'M99' ip'P P'NHP'GMIP+
#iO'UPPL'i piN i'i'M'i NPO' ppOD
HMN'P P T' O O NH'M9I GN'NP99'IT'iMIP+
H iQ'NHP 'A NH'MiO' HP P'NHPT'O O'L KPPO'\
1'UI 'G PPN'9 P'2'M9 MTG' NP' 7T J
#iO'T J'MiO'9 P'M P'GN 99'IT'M QJJpiN8
'M99'IT'APGN'G O PGG iQ' 9O' OG'ip
LPiO iQ'MQM i' HMN'G'M9 PMOT'GLPiN8
O 'MG'NHP'GJi' G OM 9T'ip 'MiO' 9O+
'G IT'9 P'GN 99'NP99 iQ' HMN'G'N 9O+

$:;)
HT'Q9MGG' 99'GH 'NHPP'H 'NHT'APMJN PG' PM+
HT'O M9'H 'NHT'L PK JG'I iJNPG' MGNP'8
HP' MKMiN'9PM PG'NHT'I iO%G' IL iN' 99'APM+
#iO' 7NH G'A U'NH G'9PM i iQ'I MT%GN'NH J'NMGNP+
HP' iU9PG' H KH'NHT'Q9MGG' 99'N J9T'GH +
1'7'I JNHPO'Q M PG' 99'Q P'NHPP'IPI T8
H J'AT'NHT'O M9%G'GHMOT'GNPM9NH'IMT%GN'UI '
IP%G'NH P GH'L Q PGG'N 'PNP i NT+
/ U' HMN'NHT'IPI T'KMii N'K iNM i+
I I N'N 'NHPGP' MGNP'A9MiUG'MiO'NH J'GHM9N'7 iO'
H GP'KH 9O PI'iJ G%O'OP9 P %O'7 I'NHT'A M i+
'NMUP'M'ip 'MK]JM iNMiKP' 7'NHT'I iO+

$:;)
'M P'T J'N 'IT'NH JQHNG'MG'7 O'N '9 7P+
1'MG'G PPN PMG i%O'GH P G M P'N 'NHP'Q JiO8
#iO'7 'NHP'LPMKP' 7T J'2'H 9O'GJKH'GN 7P'
#G%W WN'M I GP'MiO'H G' PM9NH'G7 JiO'
'L JO'MG'MI'piE TP 'MiO'MI i'
5 JAN iQ'NHP'79KH iQ'MQP' 99'GNPM9'H G'N PMGJ P8
'K JiN iQ'APGN'N 'AP' NH'T J'M9 ip+
HPi'APNNP %O'NHMN'NHP' 9O'IMT'GPP'IT'L9PMGJ P'
IPN IP'M99'7J99' NH'7PMGN iQ' i'T J'G QHN+
#iO'AT'MiO'AT'K9PMi'GNM PO'7 'M'9 U8

F 8 S i+
Y' ' '8 SM'O PGG'UI i'MiO'7MI 9 M 'NH JQH'AP iQ'M9 MTG'NHP'GMIP+

HM'N IP' 7TPM'NH J'IMT%GN' i'IP'APH 9O'
XHPi'TP99 '9PM PG' 'i ip' '7P 'O 'HMiQ'
L i'NH GP'A JQHG' H KH'GHMUP'MQM iGN'NHP'K 9O+
M P'J i%O'KH G' HP P'9MNP'NHP'G PPN'A OG'GMiQ+
2i'IP'NH J'GPPGN'NHP'N 9 QHN' 7'GJKH'OMT'
#G'M7NP'GJiGPN'7MOPNH' i'NHP' PGN+
XH KH'AT'MiO'AT'A9MKU'i QHN'O NH'NMUP'M MT+
5PMNH%G'GPK iO'GP97'NHMN'GPM9G'JL'M99' i' PGN+

'9 iQP'I J i'7 'IP' HPi'2'MI'OPMO'
HMi'T J'GHM99'HPM'NHP'GJ 9T'GJ99pi'AP99'
: P' M i iQ'N 'NHP' 9O'NHMN'2'MI'79PO'
O I'NH G' 9P' 9O' NH' 9PGN' IG N 'O P99
MT' 7T J' PMO'NH G'9 ip' pIpIAp'i N'
HP'HMiO'NHMN' N'N8 7 '2'9 P'T J'G +
HM N'2' i'T J'G PPN'NH JQHNG' J9O'AP'7 Q N+
27'NH iU iQ' i'IP'NHPi'GH J9O'IMUP'T J' P+
1'7@2'GMT'T J'9 U'JL i'NH G' P GP+

$' A' ' HP' Q IMG'HMG% 2' M9 iP' PMOG% ' 'i'NHP'GPiGP' 7'% ' '
XP'HM P i'LM M99P9'PWM IL9P' 7'NHP'JGP' 7'% ' 'MG'Mi JI+
'4%-(SGJGLK i#' ' i' iQ'"PiT'2 +'-M N'22+ S

HPGP 77KPG' G ' 7N MG NH J 9N9 U
HM99L 7 N NHPP'MIO' IJKH'pi KH'NHT'A U+

/VVV 222+

' 7N HM P'2' i U%O'NHPP'7 'IT'IJGP+
i iQ'M'APNNP'GL N'O NH'JGP'T J'IMIP+
#iO' i'NHP'L M GP'NHP P 7'GLPiOG'M99'H G'I QHN+
'IMUP'IP'N iQJP N PO'GLPMU iQ'7T J'7MIP'[
JN G iKP'T J' NH'@ OP'MG'NHP' KPMi'G
HP'HJ1A9P'MG'NHP'L JOPGN'GM 9'O NH'APM
T'GMJKT'AM U'i7P '7M'N'H G+
1i'T J'A MO'IM i'O NH' 97J99T'MLLPM +
4 J'GHM99 PGN'HP9L' 99'H 9O'I P'JL'M79 MN+
XH 9GN'HP'JL i'T J'G JiO9PGG OPPL'O NH' OP8
1 'AP iQ' PkU%O'2'MI'M' NH9PGG'A MN+
"P' 7NM99'AJ 9O iQ'MiO' 7Q O9T'L OP
HPi' 7HP'NH P'MiO'2'AP'KMGN'M MT+
HP' GN' MG'NH G'8SI T'9 P' MG' IT'OPKMT+

/VVV2+

1'2'GHM99'9 P'T J'PL NMLH'N 'IMUP
.1'T J'GJ P' HPi'2' i'PM NH'MI' NNPi8
O I'HPikP'T J'IPI T'OPMNH'KMIi N'MMUP
#9NH JQH' i'IP'PMKH'LM N' 99'AP'7 Q NNPi+
4 J'IMIP'7 1'HPikP' II NM9 9 7P'GHM99'HM P+
H JQH'2' ikPQ ip'N 'M99'NHP' 9O'I JGN'O P'8
HP'PM NH'KMI'T P9O'IP'AJN'M'K II i'Q M P+
XHPi'T J'PiN IAPO'i'IpI%G PTPG'GHM99'9 P+
4 J'I iJJpiN'GHM99'AP'IT'QPiN9P' P GP+
XH KH'PTPG'i N'TP%'K PMNPO'GHM99' %P PMO'8
#iO'N iQJPG'N 'AP'T J'AP iQ'GHM99' PHPM GP+
XHPi'M99'NHP'A PMNHP G' 7NH G' 9O'M P'OPMO'
4 J'GN 99'GHM99'9 P'@GJKH' NJP'HMNH'IT'LPi
XHP P'A PMNH' I GN'A PMNHPG SP pi' i'NHP' I JNHG' 7
IPi+

/VVV+

iKP' HMN'HP' PG'NHPP'NH J'NHTGP97O GN'LMT+

/VVV 2+

XH ' G N'NHMN'GMTG I GN4 H KH'KMi'GMT' I P'
HMI'NH G' KH'L M GP SNHMN'T J'M9 IP'M P'T J'\
2i' H GP'K i7IP' II J PO' G'NHP'GN P'
XH KH'GH J9O'PWM IL9P' HP P'T J'P]JM9'Q P '\
/PMI'LPiJ T' NH i'NHMN'LPi'O NH'O P99+
HMN'N 'H G'GJAEPKN'9PiOG'i N'G IP'G I M99'Q9 T'8
JN'HP'NHMN' NPG' 7T J' 7HP'KMi'NP99'
JM'T J'M P'T J'G 'O Qi 7PG H G'GN T+
/PN'H I'AJN'K LT' HMN' i'T J' G N+
N' I MU iQ' GP' HMN'iMNJ P' IMOP' 'K9PM +
#iO'GJKH'M'K JiNP LM N'GHM99'7MIP'H G N
' MU iQ'H G'GNT9P'MOI PO'P P T HP P+
4 J'N 'T J'APMJNP JG'A9PGG iQG'MOO'M'KJ GP+
P iQ'7 iO' i'L M GP' H KH' IMUPG'T J'L M GPG GP+

/VVV +

T'N iQJP N PO' IJGP' i'IMiip G'H 9OG'HP'GN 99+
XH 9P'K II piNG' 7T J'L M GP' KH9T'K IL 9%O+
&PGP P'D'NHP 'KHM MKNP' NH'Q 9OPi']J 99+
#iO'L PK JG'LH MGP'AT'M99'NHP' IJGPG 7 9%O+
2'NH iU'Q O'NH JQHNG' H 9P' NHP G NP'Q O OG+
#iO'9 UP'J19PNNP PO'K9P U'GN 99'K T'6'# Ipi'R
'P P T'HTI i'NHMN'MA9P'GL N'M77 OG+
2i'L 9 GH%O'7 I' 7 P99 P7 iPO'LPi+
"PM iQ'T J'L M G%O'2'GMT'6'% G'G '%N G'N JP R
#iO'N 'NHP' I GN 7'L M GP'MOO'G IPNH iQ'I P8
JN'NHMN' G i'IT'NH JQHN' H GP'9 P'N 'T J+
H JQH' OG'K IP'H iOI GN'H 9OG'H G MiU'AP7 P+
HPi' NHP G'7 'NHP'A PMNH' 7 OG PGLPKN+
P'7 'IT'OJIA'NH JQHNG'GLPMU iQ' i'P77PKN+

/VVV2 +

XMG'N'NHP'L JO'7J99'GM9'7H G'Q PM' P GP+
Jio'7 'NHP'L CP' 7M99 N L PK JG'T J

HMN' O O' I T' LP'NH JQHNG' i' I T A M i' iHPM GP'
MU iQ'NHP 'N IA'NHP' IA' HP p i'NHPT'Q p '\
X MG' N'H G' GL N'AT'GL NG'NMJQHN' N ' NP'
L i'NHT'LM N'2'KMi'GPN'O i'M'GN T'
17'7MJ9NG'K iKPM9%O' HP p i'2'M I'MNMN iNPO8
HMN'NH J'i'9 G iQ'P I P'GHM9N' i'I JKH'Q9 T'
#iO'2'AT'NH G' 99'AP'M'QM ip'N ' 8
O 'API0 iQ'M99'I T'9 iQ'NH JQHNG' i'NHPP+
HP' iEJ PG'NHMN'N 'I TGP97'2'O +
5 iQ'HPP' MiNMQP'O JA9P MiNMQP' IP+
JKH' G I T'9 p'N 'NHPP'2'G 'AP9 iQ+
HMN'7 'NHT' QHN' I TGP97' 99'APM'M99' iQ+

/VVV2V+

MT'NHMN'NH J'O OGN'7 GMUP' IP'7 'G IP'7MJ9N+
#iO'2' 99'K I IPIN'JL i'NHMN' 77PiKP'
LPMU' 7'I T'9MIPIPGG'MiO'2'GN M QHN' 99'HM9N8
#QM iGN'NHT' PMG iG I MU iQ' i 'OP7PiKP+
H J'KMiGN' N'9 p'O GQ MKP' IP'HM97'G ' 99+
'GPN'M'7 I'JL i'OPG PO'KHMiQP+
#G 2\99' I TGP97'O GQ MKP'Ui iQ'NHT' 99
2' 99'MK]JM iNMiKP'GN MiQ9P F' MiO'9 U'GN MiQP'8
P'MAGPiN'7 I'NHT' M9UG8 MiO i'I T'N iQJP'
HT'G PPN AP9 PO'iM I P' i ' I P'GHM99'O P998
/PGN'2'DN 'I JKH'L 7MiP'GH J9O'O ' N' iQ+
#iO'HML9T' 7' J' 9O'MK]JM iNMiKP'NP99+
O 'NHPP'MQM iGN' I TGP97'2%9Y 'OPAMNP+
O '2' I JGN'IP%P'9 P'H I' H I'NH J'O GN'HMNP+

S@

HPi'HMNP' I P' HPi'NH J' 9N8 7P p 'i ';
' H 9P'NHP' 9O' G APiN' I T'OPPOG'N 'K GG+
? i' NH'NHP'GL NP' 77 NJiP'IMUP' I P'A +
#iO'O'i N'O L' i'7 'Mi'M7NP 9 GG

S@

HPi'HMNP' I P' i' PMU IP GG' AP iQ' APGN' MK]JM iNPO+
L i'NHT'LM N'2'KMi'GPN'O i'M'GN T'
X MG' N'H G' GL N'AT'GL NG'NMJQHN' N ' NP'
17'7MJ9NG'K iKPM9%O' HP p i'2'M I'MNMN iNPO8
HMN'NH J'i'9 G iQ' I P'GHM9N' i'I JKH'Q9 T'
#iO'2'AT'NH G' 99'AP'M'QM ip'N ' 8
O 'API0 iQ'M99' I T'9 iQ'NH JQHNG' i'NHPP+
HP' iEJ PG'NHMN'N 'I TGP97'2'O +
5 iQ'HPP' MiNMQP' O JA9P MiNMQP' IP+
JKH' G I T'9 p'N 'NHPP'2' G 'AP9 iQ+
HMN'7 'NHT' QHN' I TGP97' 99'APM'M99' iQ+

/VVV2V+

MT'NHMN'NH J'O OGN'7 GMUP' IP'7 'G IP'7MJ9N+
#iO'2' 99'K I IPIN'JL i'NHMN' 77PiKP'
LPMU' 7'I T'9MIPIPGG'MiO'2'GN M QHN' 99'HM9N8
#QM iGN'NHT' PMG iG I MU iQ' i 'OP7PiKP+
H J'KMiGN' N'9 p'O GQ MKP' IP'HM97'G ' 99+
'GPN'M'7 I'JL i'OPG PO'KHMiQP+
#G 2\99' I TGP97'O GQ MKP' Ui iQ'NHT' 99
2' 99'MK]JM iNMiKP'GN MiQ9P F' MiO'9 U'GN MiQP'8
P'MAGPiN'7 I'NHT' M9UG8 MiO i'I T'N iQJP'
HT'G PPN AP9 PO'iM I P' i ' I P'GHM99'O P998
/PGN'2'DN 'I JKH'L 7MiP'GH J9O'O ' N' iQ+
#iO'HML9T' 7' J' 9O'MK]JM iNMiKP'NP99+
O 'NHPP'MQM iGN' I TGP97'2%9Y 'OPAMNP+
O '2' I JGN'IP%P'9 P'H I' H I'NH J'O GN'HMNP+

S@

HPi'HMNP' I P' HPi'NH J' 9N8 7P p 'i ';
' H 9P'NHP' 9O' G APiN' I T'OPPOG'N 'K GG+
? i' NH'NHP'GL NP' 77 NJiP'IMUP' I P'A +
#iO'O'i N'O L' i'7 'Mi'M7NP 9 GG

'NPP piG'K iEPKNJ PG'NHMN'NH G' G'Mi'M99JG i'N '5 ;'5PP%G'L PNPIOPO' iNP K J GP
NH'M'7MI 9 M'GL N+
QM P' NHP' 9MGN' L 9 GH;' pi'? iG i' i' H G' P GPG' i' HMUGLP P
D 7H G
GLPMUG 6'$XP99 N I PO'MIO' i ' '9IPG+R

/VVV 222+

XHPi'NH J'GHM9N'AP'O GL G%O'N 'GPN' I P'9 QHN+
#iO'L9MKP' I T' I P N' i'NHP'PTP' 7'GK i+
L i'NHT'G OP'MQM iGN' I TGP97'2%9Y 7 QHN+
#iO'L P'NHPP' NJ JG'NH JQH'NH J'M N'7 G i' '
HPi'9MKU%O'2' I MNNP'8 NHMN'PI7PPA9PO' I IP+

/VVV 22+

OM P P99[NH J'M N'N 'OPM'7 'I T'L GGPGG iQ+
#iO'9 UP'Pi JQH'NH J'UI %GN'NHT'PGN I MNP'8
HP'KHM NP' 7'NHT' NH'Q PG'NHPP' P9PMG iQ'8
T'A iOG i'NHPP'M P'M99'OPNP I iMNP+
O 'H 'O'2'H 9O'NHPP'AJN'AT'NHT'Q MiN iQ'\
#iO'7 'NHMN' KHPG' HP P' G I T'OPGP iQ'O
HP'KMJGP' 7'NH G'7M 'Q 7N' i'IP' G' MiN iQ+
#iO'G 'I T'LMNPiN'AMKU'MQM i' G G P iQ+
HTGP97'99 J'QM %GN'NHT' i' NH'NHPi'i N'UI iQ'
1'IP'N' H I'NH J'QM %GN' N'P9GP' I GMMU iQ'8
'NHT'Q PM'Q 7N'JL i' I GL G i'Q iQ+
IPG'H I P'MQM i' i'APNNP'EJOQ I piN' I MU iQ+
HJG'HM P'2'HMO'NHPP'MG'M O PM I'O NH'79MNP +
2i'G9PPL'N'U iQ'AJN' MU iQ'i 'GJKH' I MNNP +

/VVV 222+

XHPi'NH J'GHM9N'AP'O GL G%O'N 'GPN' I P'9 QHN+
#iO'L9MKP' I T' I P N' i'NHP'PTP' 7'GK i+
L i'NHT'G OP'MQM iGN' I TGP97'2%9Y 7 QHN+
#iO'L P'NHPP' NJ JG'NH JQH'NH J'M N'7 G i' '
HPi'IPPO'2'i N'N '7PM'NHP' GN' 7' iQG+
XHPi' NHP'9PMGN' 7NHP I' I T'9 7P'HMNH'piO+

#H'[O'i N' HPi'I T'HPM N'HMNH'GKML%O'NH G'G +'
I P'i'NHP'PM MO' 7'N'K i]JP %O' P'8
: P'i N'M iOT'i QHN'N' M i'T' I +
'9 iQP' JN'M'LJ L G%O' P NH +
27'NH J' 9N'9PM P' I P'O'i N'9PM P' I P' 9MGN
XHPi' NHP'LPNT'Q P7G'HM P'O IP'NHP 'GL NP+
JN' i'NHP' iGPN'K I P8 G 'GHM99'2'NMGNP'
#N'7 GN'NHP' P T' GN' 77 NJIP%G I QHN8 ,
#iO' NHP'GN M iG' 7' P' H KH'i 'GPPI' P+
I LM %O' NH'9 GG' 7NHPP' 99'i N'GPPI'G +

S@

IP'Q9 T' i'NHP 'A NH'G I P' i'NHP 'GU 99+
I P' i'NHP ' PM9NH'G I P' i'NHP 'A OT%G'7 KP8
I P' i'NHP 'QM IPiNG'NH JQH'ip 7MiQ9PO' 998
I P' i'NHP 'HM UG'MiO'H J1OG'G I P' i'NHP 'H GP'8
#iO'P P T'HJI J'HMNH'H G'MOEJiK'L9PMGJ P+
XHP P i' N'7 iOG'MF E T'MA P'NHP' PGN8
JN'NHPGP'LM N KJ9M G'M P'i N' I T' IPMGJ P+
#99'NHPGP'2'APNNP ' i' ip'QPip M9' APGN+
HT'9 P' G'APNNP 'NHMI'H QH'A NH'N ' I P+
&'KHP 'NHMI' PM9NH'L JOP'NHM'I'QM IPiNG%K GN+
17'I P'OP9 QHN'NHMI'HM UG'MiO'H GPG'AP'8
#iO'HM iQ'NHPP' 7M99'IPi%G'L OP'2'A MGN+
X PNKHPO' i'NH G'M9 ip'NHM'NH J'IMT%GN'NMUP'
#99'NH G'M MT'MiO'IP'I GN' PNKHPO' IMUP+

c □

JN'O'NHT' GN'N 'GNPM9'NHTGP97'M MT+
O 'NP I' 7'9 7P'NH J'M N'MGGJ PO' I IP8
#iO'9'7P'i '9 iQP'NHMI'NHT'9 P' 99'GNMT+
O ' N'OPLPiOG'JL i'NHMN'9 P' 7'NH IP+
HPi'IPPO'2'i N'N '7PM'NHP' GN' 7' iQG+
XHPi' NHP'9PMGN' 7NHP I' I T'9 7P'HMNH'piO+

#H'[O'i N' HPi'I T'HPM N'HMNH'GKML%O'NH G'G +'
I P'i'NHP'PM MO' 7'M'K i]JP %O' P'8
: P'i N'M iOT'i QHN'M MiT' I +
'9 iQP' JN'M'LJ L G%O' P NH +
27'NH J' 9N'9PM P' I P'O'i N'9PM P' I P' 9MGN
XHPi' NHP'LPNT'Q P7G'HM P'O IP'NHP 'GL NP+
JN' i'NHP' iGPN'K I P8 G 'GHM99'2'NMGNP'
#N'7 GN'NHP' P T' GN' 77 NJIP%G I QHN8 ,
#iO' NHP'GN M iG' 7' P' H KH'i 'GPPI' P+
I LM %O' NH'9 GG' 7NHPP' 99'i N'GPPI'G +

S@

IP'Q9 T' i'NHP 'A NH'G I P' i'NHP 'GU 99+
I P' i'NHP ' PM9NH'G I P' i'NHP 'A OT%G'7 KP8
I P' i'NHP 'QM IPiNG'NH JQH'ip 7MiQ9PO' 998
I P' i'NHP 'HM UG'MiO'H J1OG'G I P' i'NHP 'H GP'8
#iO'P P T'HJI J'HMNH'H G'MOEJiK'L9PMGJ P+
XHP P i' N'7 iOG'MF E T'MA P'NHP' PGN8
JN'NHPGP'LM N KJ9M G'M P'i N' I T' IPMGJ P+
#99'NHPGP'2'APNNP ' i' ip'QPip M9' APGN+
HT'9 P' G'APNNP 'NHMI'H QH'A NH'N ' I P+
&'KHP 'NHMI' PM9NH'L JOP'NHM'I'QM IPiNG%K GN+
17'I P'OP9 QHN'NHMI'HM UG'MiO'H GPG'AP'8
#iO'HM iQ'NHPP' 7M99'IPi%G'L OP'2'A MGN+
X PNKHPO' i'NH G'M9 ip'NHM'NH J'IMT%GN'NMUP'
#99'NH G'M MT'MiO'IP'I GN' PNKHPO' IMUP+

c □

JN'O'NHT' GN'N 'GNPM9'NHTGP97'M MT+
O 'NP I' 7'9 7P'NH J'M N'MGGJ PO' I IP8
#iO'9'7P'i '9 iQP'NHMI'NHT'9 P' 99'GNMT+
O ' N'OPLPiOG'JL i'NHMN'9 P' 7'NH IP+
HPi'IPPO'2'i N'N '7PM'NHP' GN' 7' iQG+
XHPi' NHP'9PMGN' 7NHP I' I T'9 7P'HMNH'piO+

@

#9MKU[HMN'L pNT'IT JGP'A iQG'7 NH
HMN'HM iQ'GJKH'M'GK LP'N 'GH 'HP'L OP+
HP'M QJJPIN'M99'AM p'G 7'I p' NH+
HMI' HPi' N'HMNH' IT'MOOPO'L M GP'APG OP+
'7 ip'- 'GJKH'MiO'p p'G +
iO'G IT'9 p'N OMT'iB i i2'UiO+
N 99'K iGNMiN'i'M'2i "iR-'4 #
HP P7 p'IT p GP'i'i - 5K i7 i%O+
1ip'NH iQ'pWL pGG iQ' 1 -'iR'"..
OM 'UiO'"' R $ -' '5M QJ1PIN+
OM 'UiO'MiO'N JP'HM p' 7MPi'9 %O'M9 ip+
XH KH'NH PP'N 99'i 'ip p'UPLN'GPMN'i' ip+

K +

XHPi'i'NHP'KH iK9P' 7 MGNPO'N I p'
2'GPP'OPGK LN iG 7NHP'7M pGN' QHNG+
#iO'APMJNT'IMU iQ'APMJN 7J9' 9O' HTIP
2iL M GP' 7MO pG'OPMO'MiO'9 P9T'Ui QHNG+
HPi'i'NHP'A9MC i' 7G PPN'APMJNT%G'APGN+
17HMiO'-77 N' 79L'7pTP'7A
2'GPP'NHP 'MiN]JP'LPi' J9O'HM p'PWL PGG%O'
3 pi'GJKH'M'APMJNT'MG'T J'IMGNp'i +
'M99'NHP 'L M GPG'M p'AJN'L LHPK PG'
17'NH G' J'N Ip'M99'T J'L P7 QJ iQ8
#iO'7 'NHPT'9 U%O'AJN' NH'O i iQ'PTPG+
HPT'HMO'i N'GU 99'pi JQH'T J' NH'N 'G iQ

2 +

'Ip'7M '7 piO'T J'ip p'KMi'AP' 9O+
O 'MG T J' pP' HPi'7 GN'T J'pTP'?'PTPO+
JKH'GPPIG'T J'APMJNT'GN 99+' H PP' iNP G%K 9O'
"M p'7 I'NHP'7 PGNG'GH UNH PP'GJIIP G%L OP8
H PP'APMJNP JG'GL iQG'N'TP99 'MJNJIi'NJ i%O'
;'2i'L KPGG'7NHP'GPMG iG'HM p'?'GPPi8
H PP'#L 9LP7JIPG'i'NH PP'H N'?JIPG'AJ i%O+
iKP'7 GN'2'GM 'T J'7 PGH' H KH'TPN'M p'Q PPi+
#H[TPN'O NH'APMJNT'9 UP'M'O M9 HMiO+
NPM9'7 I'H G'7 Q J p'MiO'i 'LMKP'LP KP %O 8
'T J'G PPN'HJP' H KH$ IPNH iUG'GN 99'O NH'GNMiO+
"MNH'I N i'Mi0'I ip'pTP'IMT'AP'OPKP %O+
O '7PM' 7 H KH'HPM'NH G'NH J'MQP'JiA PO+
3 p'T J' pp'A i' MG'APMJNT%G'GJII p'OPMO+

+

'ip p'GMT'NHMN'2' MG'7M9GP' 7HPM N+
H JQH'MAGPiKP'GPPI%O'IT'79MIP'N ']JM9 7T[
#G PMGT'I QHN'2'7 I'ITGP97OPLM N+
#G7 I'IT'G J9' H KH'i'NHT'A PMGN'O NH'9 p
HMN'G IT'H IP' 79 p$' 72'HM P' MiQ%O
/ UP'H I'NHMN'N M P9G'2' PNJ i'MQM i8
?JGK'N 'NHP'N Ip'i N' NH'NHP'N IP'PWKHMiQ%O S
'NHMN'ITGP97A iQ' MNP'7 'IT GNM i+
p p'AP9 p p'NH JQH'i'IT'iMNJ P' pQi%O'
#99'7 M 9N PG'NHMN'APG PQP'M99'U iOG' 7A9 O
HMN'N'K J9O'G 'L PL GNP JG9T'AP'GNM i%O
'9PM P'7 'i NH iQ'M99'NHT'GJI' 7Q O8
O 'i NH iQ'NH G' OP'JI p GP'2'KM99
M P'NH J'IT GP8 i' N'NH J'M N'IT'M99+

V+

#9MG'%G N JP'2'HM P'3I 'HP P'MiO'NHP p+
#iO'IMOP'ITGP97M'I N9PTD'i' 'I 2$
: %OD'I ip' i'NH JQHNG'-i"' ,'2 ';'I GN'OPM +'
MOP'9OD 77PikPG'7'.. i -' 2
GN'N JP' N'G'NHMN'2'HM P' ii'G"i' &'
#GUMiKP'MiO'- 3 5# &$(5' '(i1
HPGP'A9PiKHPG'F'QM P'IT'HPM N' i '5i& $
#iO', GP PGGMTG'L %O'NHP'IT'APGN'79 P+
'M99'G O ip'HM PF' HMN'GHM99'HM P'i 'piO
IP'MLLPN NP2'ip p'I P' 99Q iO'
1i'ip p'L 7'N'N T'M' 9OP'7 piO
#':O i'9 p'N' H I'2'MI'K i7i%O+

222+

X HMN%G i'NHP'A M i'NHMN' iU' IMT'KHM MKNP +
XH KH'HMNH'i N'7QJ %O'N'NHP' IT'N JP'GL N'\
X HMN%G ip 'N'GLPMU' HMN'ip D'N ' PQ GNP +
HMN'IMT'PWL PGG'IT9 P' 'NHT'OPM'IP N'\
NH iQ'G PPN'A T8 AJN'TPN'9 UP'L MTP G'O ip
2'IJGN'PMKH'OMT'GMT' %P'NHP' PT'GMIP8
JiN iQ'i ' 9O'NH iQ' 9O'NH J'I ip'2'NH ip+
3 pi'MG' HPi'7 GN'2'HM99 %O'NHT'7M 'iMIP+
'NHMN'PNP iM9'9 P' i'9 P%G'7 PGH'KMGP'
XP QHG'i N'NHP'OJGN'MiO'iEJ T' '7MQP+
'Q PG'N 'ipKPGGM T' iU9PG'L9MKP+
JN'IMUPG'MiN]J NT'7 'MTP'H G'LMQP8
O iO iQ'NHP'7 GN'K iKP N' 79 P'NHP P'A PO+
XHP P'N IP'MiO' JN M O'7 I' J9O'GH ' N'OPMO+

3 pi'G 'AP iQ'7J99 7T J'ip%P K9 T iQ'G ppNIpGG+
'A NNP'GMJKPG O O2'7 M I P IT'7PPO iQ+
#iO'G kU' 7 P97M P'7 JiO'M U iO' 7 IppNIpGG
'AP'O GPMG%O'P P'NHMN'NHP P' MG'N JP'G PP iQ+
HJ5'L 9 kT' i'9 P'N'MiN k LMNP
HP' 99G'NHMN' p p i N'Q P 'N '7MJ9NG'MGGJ PO+
#iO'A JQHN'N 'IPO k iP'M'HPM9NH7J9'GNMNP
X H kH' MiU' 7Q OipGG' J9O'AT' 99'AP'kJ PO+
JN'NHpikP'2'9PM i'MiO'7 iO'NHP'9pGG i'N JP+
5 JQG'L G i'H I'NHMN'G '7P99 G kU' 7T J+

9 9

X HMN'L N iG'HM P'2'O JiU' 7 pi'NPM G
5 GN 99%O'7 I'9 I APkG'7 J9'MG'HP99' NH i+
#LL9T iQ'7PM G'N 'H LPG'MiO'H LPG'N '7PM G+
N 99'9 G iQ' HPi'2'GM 'ITGP97N ' i[
X HMN' pNkHPO'p G'HMNH'I'HPM N'k I I NNPO+
X H 9GN'N'HMNH'NH JQHN' NGP97'G 'A9PGGPO'ip p [
" 'HM P'I ip'pTPG' JN' 7NHP 'GLHP pG'APpi'7 NNPO D
2i'NHP'O GN MkN i' 7NH G'I MOO iQ'7P p [
1'APiP7N' 7 99[i '2'7 iO'N JP'
HMN'APNNP' G'AT'p 9'GN 99' IMOP'APNNP 8
#iO' J i%'9 p' HPi'N G'AJ 9N'Mip +
: G7M p'NHMi'MN'7 GN'I p'GN iQ'7M'Q PMNP +
'2' pNJ i' pAJU%O'N ' IT'k iNpiN+
#iO'QM i'AT' 99'NH kP' I p'NHMI'2'HM p'GLPiN+

99

HMN'T J' p p' ikP'JiU iO'AP7 piOG' IPi +
#iO'7 'NHMN'G ' HkH'2'NHPi'O O'7PP9+
ppOG' IJGN'2'JiOP'IT'N MiGQ PGG i'A +
i9PGG' IT'ip pG' p p'A MGG' 'HMI Ip %O'GNPP9+
O ' '7T J' p p'AT' IT'JiU iOipGG'GHMUPi+
#G'2'AT'T J G'T J'HM p'LMGG%O'M'HP99' 7N I P8
#iO'2'M'NT MiN'HM P'i '9p GJ p'NMUPi'

"piKP'NH J'GJA i%0' i7 Ip[M'N JP'G J9
XHpi'I G#' lLPMKH%0'GNMiOG'9PMG#'i'NHT'K iN 9+

vv 2+

1'NH J'lT'9 P9T'A T' H'i'NHTL P'
5 G#'H 9O' lP%G'7KU9P'Q9MGG'HG'GKU9P'HJ8
XH'HMG#'AT' Mi iQ'Q i'MiO'NHP pi'GH %G[
HT'9 pG' NHP iQ'MG'NHT'G PPN'GP97'Q %G[
27' MNJp'G ppQi'l GN PGG' p' MKU+
#G'NH J'Q pG#'i M OG'GN 99' 99'L9JKU'NHPP'AMKU+
HP'UPPLG'NHPP'N 'NH G'LJ L GP'NMH'HP'GU 99'
MT'N lp'O GQ MKP'Mio' pNKHPO'l iJNPG'U 99+
4PN'7PM'HP'1'NH J'l i i' 7HP'L9PMGJ p8
HP'lMT'OPM1'AJN'i N'GN 99'UPPL'HP'N PMGJ p'
"p'MJO N'NH JQH'OP9MT%O'MiG p%O'lJGN'AP+
#iO'HP']J pNJG'G N' piOP'NHPP+

vv 22+

2i'NHP'9O'MQP'A9MKU'MG'i N'K JiNPO'7M +
1'7'N' pp'N'A p'i N'APMJNT%G'iMlp8
JN'i 'G A9MKU'APMJNT%G'GJKKPGG P'HP +
#iO'APMJT'G9MiOP%O' NH'M'AMGNM O'GHMlP'
O 'GikP'PMKH'HMiO'HMNH'LJN' i'iMNJ pNG'L p'
OM iQ'NHP'7 J9' NH'M N%G'7M9GP'A %O'7MKP+
pp'APMJNT'HMNH'i 'iMlp'i 'H 9T'H J
JN'G'L 7Mi%O'7'i N'9 pG'i'O GQ MKP+
HP p7 P'lT'l GN PCG%'pTPG'M P'M pi'A9MKU+
"p'pTPG'G 'GJ NPO8 MiO'NHPT'l J ip G'GPPl'
9MiOP iQ'K pMN i' NH'M'7M9GP'pGNPPl
4PN'G 'NHPT'l J i'APK l iQ' 7NHP ' p+
HMN'P p T'N iQJP'GMTG'APMJNT'GH J9O'9 U'G +

H J'M N'MG'NT Mii JG'G 'MG'NH J'M N+
#G'NH GP' H GP'APMJN pG'L JO9T'lMUP'NHPl'K JP98
O ' p99'NH J'Ui %GN'N 'lT'OPM'O N iQ'HPM N'
H J'M N'NHP'7M pG#'MiO'l GN'L pK JG'EP p9+
4PN'i'Q O'7M NH'G lP'GMT'NHMN'NHPP'APH 9O
HT'7MKP'HMNH'i N'NHP'L p'N 'lMUP'9 P'Q Mi8
'GMT'NHPT'P '2'OM P'i N'AP'G 'A 9O+
#9NH JQH'2'G PM' N'N 'lTGP97'M9 ip+
#iO'N 'AP'GJ P'NHMN' G i N'7M9G'P'2'G PM
#'NH JGMiO'Q MiG'AJN'NH iU iQ' i'NHT'7MKP+
1ip' i'Mi NHP %G'ipKU'O' NipGG'APM'
HT'A9MKU' G'7M pGN' i'lT'EJOQ'lpi%G'L9MKP+
2i'i NH iQ'M N'NH J'A9MKU'GM P' i'NHT'OPPOG+
#iO'NHPiKP'NH G'G9MiOP 'MG'2'NH iU'L KPPOG+

T l GN pGG%'pTPG'M P'i NH iQ'9 UP'NHP'GJ i8
M9 G7M'l P'pO'NHMI'HP'9 LG% pO'
27'Gi 'AP' HNP' HT'NHPi'HP'A PMGNG'M P'OJi'8
27'HM G'AP' pG'A9MKU' pGQ ' i'HP'HPMO+
2'HM P'GPPi' GPG'OM lMGU%O'pO'MiO' HNP+
JN i'GJKH' GPG'GPP2' i'HP'KHPPUG8
#iO' i'G lP'LP7JlPG'G NHP P' lP'OP9'QHN'
HMI'i'NHP'A PMNH'NHMN'7 l'lT'l GN PGG'ppUG+
2'9 P'N'HPM'HP'GLPMU STPN' p99'2'UI '
HMN'lJG K'HMNH'M7M'l P'L9PMG'iQ'G JiO8
2'Q MiN'2'ip p'GM 'N'Q OOPGG'Q S
T l GN PGG' HPi'GHP' M9UG'N pMOG' i'NHP'Q Ji0'8
#iO'TPN'AT'HPM pi'2'NH iU'lT'9 P'MG' M P'
#G'MiT'GHP'AP9 pO' NH'7M9GP'K lLM P+

JN" HP P7 P'GMTG'GHP'I N'GHP' G JIEJG"\
#IO' HP P7 P' GMT'I N'2'NHMN'2'MI' 9O'\
1'9 P%G'APG"$HMA N' G I'GPPI IQ'N JGN+
#IO'MQP'I'9 P'9 PG'I N'N 'HM P'TPM G' I "*
HP P7 P'2'9 P' NH'HP 'MIO'GHP' NH' IP+
#IO' I' J'7MJ9NG'AT'9 PG' P'79MNNP %O'AP+F

999 9

1'KM99'I N' IP'N 'EJGN 77'NHP' IQ'
HMN'NHT'JIU IOIPGG'9MTG'JL I'IT'HPM N8
X JIO'IP'I N' NH'NH IP'PTP'AJN' NH'NHT'N IQJP8
GP'L P' NH'L P'MIO'G9MT'IP'I N'ATM N+
P99'IP'NH J'9 %GN'P9GP HP P'8 AJN' I'IT'G QHN+
5PM'HPM N'7 APM'N 'Q9MIKP'NH IP'PTP'MG OP+
X HMN'IPPO% N'NH J' JIO' NH'KJII IQ' HPI'NHT'I QHN'
2G'I P'NHMI'IT' %P L PGG%O'OP7PIKP'KMI'%A OP'\
/PN'IP'PWKJGP'NHPP'MH[IT'9 P' P99UI G
"P'L PNNT'9 UG'HM P'APPI'I IP'PIPI PG8
#IO'NHP P7 P'7 I'IT'7MOP'GHP'NJ IG' IT'7 PG+
HMN'NHPT'P9GP HP P'I QHN'OM N'NHP ' IEJ PG'
4PN'O'I N'G 8 AJN'G IKP'2'MI'IPM'G9M I+
99' IP' JN QHN' NH'9 UG'MIO' O'ITLM I+

G HP P'M P'IMIT M MN IG'I'NHP'K LT' 7'NH G IIPN'MG Q IM99T'LJA9 GHPO'
I' HP'-MGG IMN' - 9Q I' HP'O'77P PIKPG M P' 7'NHMN'KHM MKIP' H'KH' JO'
9PMO'JG'N 'AP9 P P'NHMN'NHP'MJNH 'M7NP'NHP'9ML GP' 7'M 7P 'TPM G' NP' N' JN' I
GPK IQ'N IP'7 I'IPI T'' HP' M MN IG'M P'KP NM I9T I N'NH GP' 7'M' N MI_
GK AP'S

6 XHPI'IT'9 P'G PM G'NHMN'GHP' G IMOP' 7'N JNH
2'O 'AP9 P P'HP 'NH JQH'2'UI 'GHP'9 PG8
HMN'GHP' I QHN'NH IU' IP'G IP'JINJN %O'T JNH'
%" 'I'NHP' 9O%'E \%' %
HJG M I9T'NH IU IQ'NHMN'GHP'NH IUG IP'T JIQ+
#9NH JQH' '$ 8' 22 %"'LMGN'NHP'APGN
%' ' 'KPO N'HP '7M9GP GLPMU IQ'N IQJP+
(; ', %" ';' '8 $'. 0%' '': %
JN HP7 P'GMTG 2'' ' $ 'GHP'G2 '1
#IO' HP P7 P'GMTI N'2'NHMN'2'MI' 9O' '
1'9 P%G APGN'HMA N'G '%' $ '
#IO'MQP'I'9 P'9 PG I N'N 'HM P'TPM G'N 9O'
HP P7 P' G ' NH' *MIO' ' NHF IP+
4 ('$ ' J'7MJ9NG ';' ' $ %'% $ 'AP+R

$ 4 SGPKJ NT' ' A9 QMN i+
D PPI NP' I'/ P%G /MA J %G / GN' #KN'22' K2+' 9' 2L' +

VVV 222+

H JQH' I'NHT'GN PG% MKK JIN2' IP' IJGN' AP+
O 'NH J'M N'K PN JG'MIO'HP' G U IO8
"P'9PM1 %O'AJN'GJ PNT 9 UP'N ' NP'7 'IP+
IOP'NHMN'A IO'NHMN'H I'MG7MGN'O NF'A IO2' +
O 'I NH IQ'H 9O'I P'G ' N'L9PMGP'NHPP'H 9O'
HMN'I NH IQ'IP'N'G IPNH IQ'G PPN'N 'NHPP8
MUP'AJN'IT'IM IP'NHT'9 P'MIO'9 P'NHMN'GN 99+
#IO'NHPI'NH J'9 %GN'IP S7 'IT'IM IP'G XC +

VVV 22+

H J'A9 IO'7 9'/ P' HMN'O GN'NH J'N 'I IP'PTPG+
HMN'NHPT'APH 9O'MIO'GPP'I N' HMN'NHPT'GPP'\
HPT'UI ' HMN'APMJNT' G'GPP' HP P' N'9 PG+
4PN' HMN'NHP'APGN'G'NMUP'NHP' GN'N 'AP+
27'PTPG'K JLN'AT';' P LM N MG'9 UG
P'MIKH %O' I'NHP'AMT' HP P'M99' IPI' OP
X HT' 7'PTPG%'7M9GPH O'HMGN'NH J'7 QPO'H UG+
X HP PN 'NHP'.'JOOIPIN' 7 T'HPM N' G'N PO'\
X HT'GH J9O'IT'HPM N'NH IU'NHMN'M'GP P M9'L9 N D
X H KH'IT'HPM N'UI G'NHP' OP' 9O%'K II I'L9MKP'\
1 'I IP'PTPG'GPP IQ'NH G'GMT'NH G'G I N
'LJN'7M 'N JNH'JL I'G'7 J9'M'7MKP'\
21'NH IQG' QHN'N JP' IT'HPM N'MIO'PTPG'HM P'P %O'
#IO'N 'NH G'7M9GP'L9MQJP'M P'NHPT'I 'N MIG7P OO+

KWWW +

XH P P'HMNH'HP' GH'NH J'HMGN'NHT' 99+
#IO' 99N'A N'MIO' 99 I' P L9JG8
'NHT'G PPN' 99 IMU IQ'MOO N I'NHJG+
P'NMI'PI JQH'MI'7'2'NHMN' PW'NHPP'GN 99+
HM99' 99 I' NHP G'GPPI' QHN'Q MK JG+
#IO' I'IT' 99 I'7M 'MKKPLMMIKP'GH IP'\
HP'GPM'M99' MNP 'TPN' PKP PG M I'GN 99+
#IO' I'MAJIOMIKP'MOOPNH'N 'H G GN P8
'NH J'APIQ' KH' I' 99'MOO'N 'NHT' 99'
1IP' 99 7 I IP'N 'I MUP'NHT'9M QP' 99 I P+
/PN I'JIU IO'I '7M 'APGPPKHP G U 998
H IU'M99'AJN' IP'MIO'I P' I'NHMN' IP'7O$ +

KWWW +

27'NHT'G J9'KHPKU'NHPP'NHMN'2'K IP'G 'IPM +
PM'N 'NHT'A9 IO'G J9'NHMN'2' MG'NHT' X
#IO' 99'NHT'G J9'UI G' G MOI NNPO'NHP P8
HJG7M'7 '9 P'IT'9 P GJ N'G PPN'7J97 9+
X ' 99'7J97 9'NHP'N PMGJ P' 7'NHT'9 P+
#T'7 99 N'7J99 NH' 99G'MIO'IT' 99 IP+
21'NH IQG' 7Q PMN' PKP LN' NH'PMGP' P'L P8
#I IQ'M'IJIAP' IP' G PKU I%O'I IP+
HPI' I'NHP' "JIAP'9PN'I P'LMGG'JIN 9O+
H JQH' I'NHT'GN PG% MKK JIN2' IP' IJGN' AP+
O 'I NH IQ'H 9O'I P'G ' N'L9PMGP'NHPP'H 9O'

X HMN' I P N' O ' 2' !' I TGP97' PGLPKN
HMN' G' G ' L JO' NHT' GP KP' N ' OPGL GP+
X HP !' M99' I T' APGN' O NH' GH L' NHT' OP7PKN+'
I I M ! OPO' AT' NHP' I N !' 7' NH ! P' PTPG' \
JN ' 9 P ' HMNP' !' 7 ' ! ' 2' U ! ' NHT' I ! O8 ';
+ H GP' NHMN' KM !' GPP' NH J' 9 %GN ' M ! O' 2' M I ' A9 ! O+

/+

1 ' 7 I' HMN' L P ' HMGN' NH J' NH G' L P 7J9' I QHN '
X NH' !GJ77 K P ! KT' I T' HPM N' N ' G MT' \
' I MUP' I P' Q P' NHP' 9 P' N ' I T' N JP' G QHN+
! O' G PM ' NHMN' A QHN ! PGG' O NH' ! N' Q MKP' NHP' OMT' '
X HP ! KP' HMGN' NH J' NH G' APK I ! Q' 7' NH ! QG' 99+
HMN' !' NHP' P T' P7JGP' 7' NHT' OPPOG
HP P' G' GJKH' GN P ! QNH' M ! O' M ! N GP' 7' GU 99+
HMN ' !' I T' I ! O ' NHT' GN' M99' APGN' PWKPPOG' \
X H ' NMJQHN' NHPP' H ' N ' I MUP' I P' 9 P' NHPP' I P+'
HP' I P' 2' HPM ' M ! O' GPP' EJGN' KMJGP' 7' HMNP' \
1 ' NH JQH' 2' 9 P' HMN' NHP G' O ' MAH +
X NH' NHP G' NH J' GH J9OGN' ! N' MAH ' I T' GNMNP8
27' NHT' J ! NH ! PGG' M G%O' 9 P' !' I P+
P' NHT' 2' N ' AP' AP9 %O' 7' NHPP+

/ +

/ P' G' N ' T J ! Q' N ' U ! ' HMN' K !GK P ! KP' G8
4 PN' H ' U ! G' ! N ' K !GK P ! KP' G' A !' 7' 9 P' \
HP ! ' QP ! N9P' KHPMNP ' J QP' ! N' I T' M I GG '
/ PGN' QJ 9NT' 7' I T' 7MJ9NG' NHT' G PPN' GP97' L P+'
O ' NH J' APN MT ! Q' I P ' 2' O ' APN MT'
T' ! A9P ' LM N' N ' I T' Q GG' A OT%G' N PMG !' 8
T' GLJ9' O NH' NP99' I T' A OT' NHMN' HP' I MT'
J I LH' !' 9 P8 79PGH' GNMTG' ! ' 7M NHP ' PMG !' 8
JN' G ! Q' MN' NHT' ! M I P ' O NH' L !N' JN' NHPP'
G' H G' N J I LHM ! N' L CP+' - JO' 7' NH G' L OP '
" P' G' K !NP ! NPO' NHT' L ' O JOQP' N ' AP
' GNM ! O' !' NHT' M77M G ' 7M99' AT' NHT' G OP+
' M ! N' 7' K !GK P ! KP' H 9O' N' NHMN' 2' KM99'
" P S9 P ' 7 ' H GP' OPM ' 9 P' 2' GP' M ! O' 7M99+

/ 22+

2 ! ' 9 ! Q' NHPP' NH J' U ! %GN' 2' M I ' 7 G !'
JN' NH J' M N' N KP' 7 G ! ' N ' I P' 9 P' G PM ! Q8

2 ! ' MK N' NHT' APO ' A UP ' M ! O' ! P ' 7M NH' N I +
2 ! ' ! Q' ! P ' HMNP' M7NP ' ! P ' 9 P' APM ! Q+
JN' HT' 7' N ' MNHG% A PMKH' O ' 2' MKKJGP' NHPP+'
X HP !' 2' A PMU' N P ! NT' \ 2' M I ' LP EJ %O' I GN8
O ' M99' I T' G' M P' MNHG' AJN' N ' I GJGP' NHPP+
! O' M99$ I T' H ! PGN' 7M NH' !' NHPP' G' 9 GN
O ' 2' HM P' G !' OPPL' MNHG' 7' NHT' OPPL' U ! O ! PGG+'
1 MNHG' 7' NHT' 9 P ' NHT' N JNH ' NHT' K ! GNM ! KT8
! O ' N ' P ! 9 QHNP ! ' NHPP ' QM P' PTPG' N ' A9 ! O ! PGG+
1 ' I MOP' NHP I ' G PM ' MQM ! GN' NHP' NH ! Q' NHPT' GPP' 8
O ' 2' HM P' G !' NHPP' 7M ' I P' LP EJ %O' 2
' G PM ' MQM ! GN' NHP' N JNH ' G ' 7 J9' M' 9 P' 2

/ 222+

JL O' 9MT' AT' H G' A M ! O ' M ! O' 7P99' MG9PPL'
' I M O' 7' 5 M ! %G' NH G' MO M ! NMQP' 7 J ! O+
! O' H G' 9 P U ! O9 ! Q' 7 P' O O'] J KU9T' GNPPL'
2 ! ' M' K 9O' M99PT 7 J ! NM !' 7' NHMN' Q J ! O8
X H KH' A %O' 7 I ' NH G' H 9T' 7 P' 7' 9 P'
' OMNP9PGG' 9 P9T' HPMN ' GN 99' N ' P ! OJ P
! O' Q P ' M' GPPNH ! Q' AMNH ' H KH' TPN' I P ! ' L P'
QM ! GN' GN M ! QP' I M9MO PG' M' G P P Q ! ' KJ P+
JN' MN' I T' I GN PGG% PTP' / P%G' A M ! O' ! P 7 %O+
HP' A T' 7 ' N M9' ! PPOG' J9O' N JKH' I T' A PMGN8
2 ' G KU' NHM9 ' NHP' HP9L' 7' AMNH' OPG %O+
! O' NH NHP ' H PO ' M' GMO' O GNP I LP %O' QJPGN+
JN' 7 J ! O' ! ' KJ P ' NHP' AMNH' 7 ' I T' HP9L' 9 PG'
X HP P' JL O' Q N' ! P ' 7 P S I T' I GN PGG% PTPG+

/ 2 +

HP' 9 NN9P' 9 P Q O ' 9T ! Q' ! KP' MG9PPL+
/ M O' AT' H G' G OP' H G' HPM N ! 79M I ! Q' A M ! O+
X H 9GN' I M ! T' ! T I LHG' NHMN' %O' KHMGNP' 9 7P' N ' UPPL
M I P' N LL ! Q' AT8 AJN' !' HP ' I M OP ! ' HM ! O
HP' 7M PGN' NM T' N U' JL' NHMN' 7 P
X H KH' I M ! T' 9PQ ! G' 7' N JP' HPM NG' HMO' M I %O 8
! O' G ' NHP' QP ! P M9' 7' H N' OPG P
X MG' G9PPL ! Q' AT' M' Q ! ' HM ! O' O GM I %O+
H G' A M ! O' GHP'] JP ! KHPO' !' M' K g' P99' AT+
X H KH' 7 I ' / P%G' 7 P' N U' HPMN' LP LPNJM9+'
: ! Q' M' AMNH' M ! O' HPM9NH7J9' P I POT'
O ' I P ! ' O GPMG$O8 AJN' 2 ' I T' I GN PGG% NH M99+
M I P' NHP P' 7 ' KJ P ' M ! O' NH G' AT' NHMN' 2' L P' '
/ P%G' 7 P' HPMNG' MNP ' MNP ' K 9G' ! N' 9 P+

4 ' 77' M' H 99' H GP' K ! KM P' I A' P OPO' D
' L9M ! N7J9' GN T' 7 I ' M' G GNP ! Q' M9P
T' GL NG' N ' MNNP ! O' NH G' O JA9P' KP' MKK OPO+'
! O' O !' 2' 9M OF' N ' 9 GN' NHP' GMO NJ ! %O' NM9P'
3 P' 9 ! Q' PGL PO' M' 7 KU9P' I M O' 7J99' LM9P+
PM ! Q' 7' LMLP G ' A PMU ! Q' ! QG' M N M ! +'
N I ! Q' HP ' 9O' NH' G %G' ! O' M ! O' M ! +

2 %% S7MJ9N+
D =8 SPKH PO+
**%

JL ! ' HP ' HPMO' M' L9MNNPO' H P' 7' GN M +
X H KH' 7 N 7 PO' HP ' GMQP' 7 I ' NHP' GJ ! +
X HP P !' NHP' NH JQHN' I QHN' NH ! U' G I PN I P' N' GM '
HP' KM KMGP' 7' M' APMJNT' GLP ! N' M ! O' O ! P+
I P' HMO' ! N' GKTNHPO' M99' NHMN' T JNH' APQJ ! +
' T JNH' M99'] J N8 AJN ' GL NP' 7' " PM P ! %G' 7P99' MQP+
I P' APMJNT' LPPL%O' NH JQH' 9MNN KP' 7' GPM %O' MQP+

' ' ' NHP' Q ! M9+' JN' N' G' JGJM99T' I P' K PKN9T' L ! NPO' ' 2 ' HP'
O I MN K' Q M I I M ' 7' HMUGLP P%G' MQP' JQHN' ! N' N ' AP' P I PO+

W.E. FROST R.A. PINXT

T. LIGHTFOOT SCULPT

DISARMING OF CUPID.

(SONNET CLIV.)

LONDON. VIRTUE &Cº

17N O O GH' HPM P'H P 'iMLU i'DN 'HP 'pTIP+
/MJ1iO% iQ'FNHP G 9UPi'7 QJ PG i'NHP'A ip'
XH KH' i'N'HMO'K iKP NPO'KHM MKNP G $
HMN'GPMG i%O' P'HMO'LP99PNPO$' i'NPM G
#iO' 7NPi'U GG%O'MiO' 7NPi'QM PN 'NPM'8
3iG MNH%O'MiO'GPM9%O'N 'KJ JG GPK pKT+

HPGP' 7NPi'AMNH%O'GHP' i'HP '79JW P'pTPG+
#iO' 7NPi'U GG%O'MiO' 7NPi'QM PN 'NPM'8
PO'6'1'7M9GP'A9 O[NH J' PQ GNP ' 7 9PG+
XHMN'JIMLL PO' NIPGG O GN' NH J'APM'[
2iU' J9O'HM P'GPPI%O' I P'A9MKU'MIO'OMI IPO'HP P'[Y
H G GMO' i'N L' 7 MQP'NHP'9 IPG'GHP' piNG+
Q'O GK iNPiN'G 'A PMU iQ'NHP 'K iNPiNG+

#' P P PIO' IMi'NHMN'Q MC%O'H G'KMNN9P' i QH+
IPN IP'M A9JGNP P 'NHMN'NHP' JJ79P'UIP '
1JK J N' 7K NT'MiO'HMO'9PN'Q 'AT'
HP G 7NPGN'H J G' AGP PO'MG NHPT'79P $F
M OG'NH G'MJ79 KNPO'7MiKT.'7MGN9T'O P 8

SHMIOUP KH P7+ 31 9 M GMTG' 7'5PGOPI iN%G 7MNM9'HMiOUP KH P7'S

62'MI'GQMO'2'HM P'7 JiO'NH G'IMLU i+R

F' ('($ (%'S7MiX'7J97 QJ PG' UPO' i'NHP'HMiOUP KH P7+
D '' S7 lPO' iN 'LP99PNG' 'GI N99' AM99G+
F' HMUGLP P' 7NPi'PIL9 TG'NHP' IPNMLH ' 7'ML PKP' 7 OiNIKP'8 AJN' HMN' i'
H G'L9MTG' G'QPip M99T'M G9 QHN' M99JG i'HP P'APK IPG'M G IP HMN']JN iN K iKP N+
F $0' '' X'P PNM i'' 'MG'M O GGT99MA9P'MKK O iQ'N 'NHP' Q iN9+' +
5TKP'HMG $ ' "0 *
%'#$ 0 SIMOP' 7GN M 'K 99PKNPO'7 1'GHPM PG+
F' SM'AMGUP+' HP' G'JGPO'i'NHP' 9O'N MiG9MN i'7NHP' A9P+
F3 ' 'NHP' Q iN9' NHP' O'L AMA9T'IPM'JiQ'A ' '' ' 'GPN'
i'G IP' NHP 'GJAGNMiKP+ NPP piG'HMG' " 'A <2 '7 IPO' iN ' APMOG'S'
H KH' +'5TKP'MO LNG+

<2(%(' H G O'G i ' i M MA9TL iNPO' ' 2i' KKJ G i'GJAGP
]JPiN'GNMiCMG+ X HT'GH J9O' P'OPGN T'NH G 9 NN9P'M KHM K APMJNT'AT'M MQP'7 '
I OPi G iQ'\ HP' K I I piMAN G PWL9M'i'NH G MG 6 JiN GNPO' G 9U+R 2i'NHP
KH JG'N 'NHP'7 J NH'MKN' 7'-P K9PG' M iM' G L KNJ POS

6 X HPi'GHP' PM %O'NHP G9P OPO' G 9U'
X NH'7 iQP G 9 iQ'GI M99' H NP'MG I 9U+

-P KT' i'M' i NP' i'NH G LMGGMQP'GMTG'6' iN GNPO' G 9U'L PLM PO'N 'AP JGPO' i'
NHP' PM P %G'G9PT+R' HP'7 GN'LM N' 7NH G'OPGK LN i' GKP NM 19T'i N K PKN' HP'
G 9U' G i N'JiN GNPO'7 ' N I JGN'AP GLJi'AP7 P' N' G pi8 MiO'M' GN iQ'N GNPO'
G 9U' G' PWMKN9T' HMN' MG' p]J PO' HPi' 9PNP G p P'N 'AP GPM9PO' 6'7PMN'R'@iPMN9T

'

XHM" JiOG' HM" A JiOG' HM" K J GP' HM" GN L' HP"
IMUPG[
#iO'K iN P GT'HPikP'M'JJPGN i'MUPG+
XHPNHP'NHP'H GP'AT'H 1'APKM IP'H G'OPPO+
1'HP'H G IMiQP'AT'NHP' P99 O iQ'GNPPO+

6' 'IMiT'HM P'NHMN'ip p'N JKH%O'H G'HMiO+
ppN9T'GJLL G%O'NHPI'I GN PGG' 7H G'HPM N+
T' P7JG GP97'NHMN'O O'i'7 PPO I'GNMiO+
#iO' MG IT' i'7PP G ILGP'@i N' i'LM N
XHMN' NH'H G M N' i'T JNH'MiO'T JNH' i'M N+
H P 'IT'M77PKN iG'i'H G'KHM IPO'L P+
&PGP %O'NHP'GNM9U'MiO'QM P'H I'M99' IT'79 P+

64PN'O O'2'i N'MG G IP' IT'P]JM9G' O O+
5PIMiO' 7H I'i 'AP iQ'OPG POT P9OPO'8
O iO iQ'ITGP97'i'H i J'G'7 A O+
X NH'GM7PGN'O GNMiKP'2'I iP'H i J'GH P9OPO'
3WLP piKP'7 'IP'IMiT'AJ9 M UG'AJ 9OPO'
1'7L 7G'ip A9PPO iQ' H K#' piM i%O'NHP'7 g
1'7NH G'7M9GP'EP P9'MiO'H G'MI JG'GL 9+

6' JN'MH'[H'p p'GHJIi%O'AT'L pKPOPiN'
HP'OPGN i%O' 99'GHP' I JGN'HP GP97'MGGMT'\
1'7 K%O'PWMI L9PG'%QM iGN'HP' i'K iNPiN
#99'PL9 KMN i'L IL'MiO'PMG i'GN iQ+
#99'U iO' 7M QJJ IPNG'MiO']JPGN i'OPPL+
O 'HG'MO MiNMQP'GN 99'O O' MUP'MiO'G9PPL
'LJN'NHP'AT LMGG%O'LP 9G' i'HP' MT'\
'IMUP'NHP' PPLP'9MJQH'NHP'9MJQHP' PPL+
"P'HMO'NHP'O M9PKN'MiO'O 97P piN'GU 99+
MNKH iQ'M99'LMGG iG' i'H G K M7N' 7' 998

6' HMN'HP'O O' i'NHP'QPiP M9'A G I' P Qi'
1'7T JiQ' 7 9O8 MiO'GPWPG'A NH'piKHMiNPO+
'O P99' NH'H I' i'NH JQHNG' 'N' piM i'
2i'LP G i M9'OJNT'7 99 iQ' HP P'HP'HMJiNPO'
iGpiNG'AP NK%O'P P'HP'OPG P'HM P'Q MiNPO8
#iO'O M9 QJPO'7 'H I' HMN'HP' J9O'GMT+
#GU%O'NHP ' i' 99G'MiO' IMOP'NHP ' 99G' APT+

6' MiT'NHP P' P P'NHMN'O O'H G'L KNJ P'QPN+
'GP P'NHP 'PTPG'MiO' i' N'LJN'NHP 'I iO'8
/ UP'7 9G'NHMN' i'NHP' IMQ iMN i'GPN
HP'Q O9T' AEPKNG' H K#'MA MO'NHPT'7 iO

6' 'Q PG N'GMN G7MKN i'N ' J'A9 O+
HMN' P I JGN'KJ A' N'JL i' NHP G%L 7+
'AP7 A O'NHP'G PPG'NHMN'GPPI'G'Q O+
O '7PM' 7HM I G'NHMN'L PMKH' i' J'APH 7+
'MLLPN NP'7 I'EJOQ IPN'GNMiO'M9 7[
HP' iP'M'LM9MP'HMNH'NHMN'iPPOG' 99'NMGNP+
H JQH' PMG i' PPL'MiO'K T'2N'G NHT'9MGN+

6O '7J NHP'2'K J9O'GMT+ H G I Mi%G JiN JP+
#iO'UiP 'NHP'LMNNP iG' 7H G'7 J9 APQJ 9 iQ8
"PM O' HP'P H G'L9MiNG' i' NHP G% KHM OG'Q P +
M 'H 'OPKP NG' P P'Q 9OPO' i'H G'6 I 9 iQ#
ip ' G P P'P P',A UP G'N 'OP7 9 iQ'8
H JQN'@KHM MKNP G MiO' OG' I P 9T'AJN'M N
#iO'AMGNM OG' 7H G'7 J9 MOJ9NP MNP'HPM N+

6'Y HP'O MI iO' HT'%N MG'APMJN 7J9 MiO'HM O+
XHP PN'H G' i G%O'FL LP N PG O O'NPiO'8
HP'OPPL Q PPi'P I P M9O' i' H GP'7 PGH' PQM O'
XPMU'G QHNG'NHP 'G KU9T' MO MiK'O 'MI PiO'8
HP'HPM Pi HJPO'GMLLH P'MiO'NHP' LM9'A9PiO

6' 'Q PG N'GMN G7MKN i'N ' J'A9 O+
HMN' P I JGN'KJ A' N'JL i' NHP G%L 7+
'AP7 A O'NHP'G PPG'NHMN'GPPI'G'Q O+
O '7PM' 7HM I G'NHMN'L PMKH' i' J'APH 7+
'MLLPN NP'7 I'EJOQ IPN'GNMiO'M9 7[
HP' iP'M'LM9MP'HMNH'NHMN'iPPOG' 99'NMGNP+
H JQH' PMG i' PPL'MiO'K T'2N' G NHT'9MGN+

6O '7J NHP'2'K J9O'GMT+ H G I Mi%G JiN JP+
#iO'UiP 'NHP'LMNNP iG' 7H G'7 J9 APQJ 9 iQ8
"PM O' HP'P H G'L9MiNG' i' NHP G% KHM OG'Q P +
M 'H 'OPKP NG' P P'Q 9OPO' i'H G'6 I 9 iQ#
ip ' G P P'P P',A UP G'N 'OP7 9 iQ'8
H JQN'@KHM MKNP G MiO' OG' I P 9T'AJN'M N
#iO'AMGNM OG' 7H G'7 J9 MOJ9NP MNP'HPM N+

6'Y HP'O MI iO' HT'%N MG'APMJN 7J9 MiO'HM O+
XHP PN'H G' i G%O'FL LP N PG O O'NPiO'8
HP'OPPL Q PPi'P I P M9O' i' H GP'7 PGH' PQM O'
XPMU'G QHNG'NHP 'G KU9T' MO MiK'O 'MI PiO'8
HP'HPM Pi HJPO'GMLLH P'MiO'NHP' LM9'A9PiO

H M9 ipSMiO'HP' G7 99 PO'i'M99'I OPI'PO\ iGSDLJN6MK I\M7NP' $ $*
MiO'GMTG'6 2N' G HP P8'2'AP9 P P'M GJAGNMiN P+R' J P9T' $ $' G M P A+' XP'
HM P'M' PQJ9M' GPJJPiKP' 7 P AG SHPM O SGM SUip SNH JQHN+' " ' KMi
NH JQHN'AP'M N'\ HP'M N G i'NHP'PWL PGG i' 7NHP'NH JQHNG AT'6'KHM MKNP G MiO'
OG+R "P' H 'GM O' 6 X OG' P P'Q pi'JG N 'K iKPM9' J 'NH JQHNG R' G M
APNM'K I I PWLN 'JL i'NHP'LMGGMQP'NHMi' M9 ip+
D ('G PWL9M ipO'MG GTi iTI JG NH' (
F SQ P7+
% ' % G HP P'JGPO' i'NHP'GpiGP' 7% $ '- (%
' -' (SiNP pi+
F %0 S i G A9P+

X HPi'Q JNT'UPPLP G'7NHPP'KMii N'GNMiO+R
*'
6 H J%N'Q 'GN iQ'NH P7+
' % S JN M O'GH +
' 'G NHP' Q iM9 PMO iQ'8 AJN' M9 iP'KHMiPO'N N'(*MiO'HP'EJGN 7 PG
NHP'KHMiQP'AT'M'LMGGMQ?' i' MKAPNH'#KN'2+' K+'222+' HP P'HP'GJLL GPG'NHP'GM IP
I GNMUP' KKJ PO+' 2i'NHMN'LMGGMQP' P'O O i N' PKP P'NHP'L L GPO'K PKN i8
i 'O' P'NH i9K N'iPKPGGM T'N ' PKP P N'HP P+ ' G K iGNMi N9T'JGPO'AT'NHP' 9O'
NP G'PGLPK M99T'AT' LPiGP ' i'NHP' GPiGP 7 "' ;'MiO'NHMN'GPiGP"' ' ,
%* 'MG' iNP99 Q A9P'MG (' ; %' F ';'G'JGPO' i'NHP' GPiGP 7' %
' HP P' G' M' G I 9M' GM KMGN K NH JQHN' i' I i' HP P' NHP' I GMiNH LP'
MOO PGG iQ'H I GP97N 'NHP'Q 9O'HP'HMO'7 JiO'GMTG S

1 MUPGL
#iO'9MA J iQ'i'I 'L9PMGJ PG'N 'APGN 'NHPI+
HMi'NHP'N JP'Q JNT'9MiO9 O' H K#'O NH' P'NHPI
6' 'IMiT'HM P'NHMN'ip p'N JKH%O'H G'HMiO+
ppN9T'GJLL G%O'NHPI'I GN PGG' 7H G'HPM N+
T' P7JG GP97'NHMN'O O'i'7 PPO I'GNMiO+
#iO' MG IT' i'7PP G ILGP'@i N' i'LM N
XHMN' NH'H G M N' i'T JNH'MiO'T JNH' i'M N+
H P 'IT'M77PKN iG'i'H G'KHM IPO'L P+
&PGP %O'NHP'GNM9U'MiO'QM P'H I'M99' IT'79 P+

64PN'O O'2'i N'MG G IP' IT'P]JM9G' O O+
5PIMiO' 7H I'i 'AP iQ'OPG POT P9OPO'8
O iO iQ'ITGP97'i'H i J'G'7 A O+
X NH'GM7PGN'O GNMiKP'2'I iP'H i J'GH P9OPO'
3WLP piKP'7 'IP'IMiT'AJ9 M UG'AJ 9OPO'
1'7L 7G'ip A9PPO iQ' H K#' piM i%O'NHP'7 g
1'7NH G'7M9GP'EP P9'MiO'H G'MI JG'GL 9+

6' JN'MH'[H'p p'GHJIi%O'AT'L pKPOPiN'
HP'OPGN i%O' 99'GHP' I JGN'HP GP97'MGGMT'\
1'7 K%O'PWMI L9PG'%QM iGN'HP' i'K iNPiN
#99'PL9 KMN i'L IL'MiO'PMG i'GN iQ+
#99'U iO' 7M QJJ IPNG'MiO']JPGN i'OPPL+
O 'HG'MO MiNMQP'GN 99'O O' MUP'MiO'G9PPL
'LJN'NHP'AT LMGG%O'LP 9G' i'HP' MT'\
'IMUP'NHP' PPLP'9MJQH'NHP'9MJQHP' PPL+
"P'HMO'NHP'O M9PKN'MiO'O 97P piN'GU 99+
MNKH iQ'M99'LMGG iG' i'H G K M7N' 7' 998

6' HMN'HP'O O' i'NHP'QPiP M9'A G I' P Qi'
1'7T JiQ' 7 9O8 MiO'GPWPG'A NH'piKHMiNPO+
'O P99' NH'H I' i'NH JQHNG' 'N' piM i'
2i'LP G i M9'OJNT'7 99 iQ' HP P'HP'HMJiNPO'
iGpiNG'AP NK%O'P P'HP'OPG P'HM P'Q MiNPO8
#iO'O M9 QJPO'7 'H I' HMN'HP' J9O'GMT+
#GU%O'NHP ' i' 99G'MiO' IMOP'NHP ' 99G' APT+

6' MiT'NHP P' P P'NHMN'O O'H G'L KNJ P'QPN+
'GP P'NHP 'PTPG'MiO' i' N'LJN'NHP 'I iO'8
/ UP'7 9G'NHMN' i'NHP' IMQ iMN i'GPN
HP'Q O9T' AEPKNG' H K#'MA MO'NHPT'7 iO
N' iP' H GP'79M I'P I'T HPM N'G 'I JK#'MG M I%O+

6' 'Q PG N'GMN G7MKN i'N ' J'A9 O+
HMN' P I JGN'KJ A' N'JL i' NHP G%L 7+
'AP7 A O'NHP'G PPG'NHMN'GPPI'G'Q O+
O '7PM' 7HM I G'NHMN'L PMKH' i' J'APH 7+
'MLLPN NP'7 I'EJOQ IPN'GNMiO'M9 7[
HP' iP'M'LM9MP'HMNH'NHMN'iPPOG' 99'NMGNP+
H JQH' PMG i' PPL'MiO'K T'2N' G NHT'9MGN+

6O '7J NHP'2'K J9O'GMT+ H G I Mi%G JiN JP+
#iO'UiP 'NHP'LMNNP iG' 7H G'7 J9 APQJ 9 iQ8
"PM O' HP'P H G'L9MiNG' i' NHP G% KHM OG'Q P +
M 'H 'OPKP NG' P P'Q 9OPO' i'H G'6 I 9 iQ#
ip ' G P P'P P',A UP G'N 'OP7 9 iQ'8
H JQN'@KHM MKNP G MiO' OG' I P 9T'AJN'M N
#iO'AMGNM OG' 7H G'7 J9 MOJ9NP MNP'HPM N+

6'Y HP'O MI iO' HT'%N MG'APMJN 7J9 MiO'HM O+
XHP PN'H G' i G%O'FL LP N PG O O'NPiO'8
HP'OPPL Q PPi'P I P M9O' i' H GP'7 PGH' PQM O'
XPMU'G QHNG'NHP 'G KU9T' MO MiK'O 'MI PiO'8
HP'HPM Pi HJPO'GMLLH P'MiO'NHP' LM9'A9PiO

H M9 ipSMiO'HP' G7 99 PO'i'M99'I OPI'PO\ iGSDLJN6MK I\M7NP' $ $*
MiO'GMTG'6 2N' G HP P8'2'AP9 P P'M GJAGNMiN P+R' J P9T' $ $' G M P A+' XP'
HM P'M' PQJ9M' GPJJPiKP' 7 P AG SHPM O SGM SUip SNH JQHN+' " ' KMi
NH JQHN'AP'M N'\ HP'M N G i'NHP'PWL PGG i' 7NHP'NH JQHNG AT'6'KHM MKNP G MiO'
OG+R "P' H 'GM O' 6 X OG' P P'Q pi'JG N 'K iKPM9' J 'NH JQHNG R' G M
APNM'K I I PWLN 'JL i'NHP'LMGGMQP'NHMi' M9 ip+
D ('G PWL9M ipO'MG GTi iTI JG NH' (
F SQ P7+
% ' % G HP P'JGPO' i'NHP'GpiGP' 7% $ '- (%
' -' (SiNP pi+
F %0 S i G A9P+

'i N"NHP"HPM pi9T" HPN K' 7NH ip"pTP
$:M iGN" H i'NHP" 9O'K J9O'i N"H 9O'M QJ1piN+"
-p GJMOP"iT"HPM N"N 'NH G"7M9GP"LP EJ TT\
G7 'NHPP"A UP"OPGP P'i N"LJi GHipiN+
#" lMi'2'7 G P8 AJN"2' 99"L p+
H J'APiQ"M"Q OOPGG'2'7 G P'i N"NHPP8
T" ' MG"PM NH9T'NH J'M"HPM pi9T'9 P8
HT'Q MKP"AP iQ"QM i$O'KJ PG"M99'O GQ MKP' i'lP+
3WHM9P"NH G"ML J' 8 i'NHPP"N"G
HPi'NH J'7M 'GJi'NHMN" i'NH G"PM NH'O NH"GH ip+"
27"AT"iP"A UP' HMN"7 9 G i N"G ' GP"
27"A UPi'NHPi' N"G i'7MJ9N" T i ip+
'9 GP"Mi' MNH'N ' i'M"LM MO GP

PPN")DHP PM'G NN iQ"AT"M"A U
X NH"T JiQ" #O i G'9 P9T'7 pGH'MiO'Q ppi+
5 O'K J N"NHP"9MO" NH"IMiT"M'9 P9T'9 U+
JKH'9 UG"MG i ip'K J9O'9 U AJN"APMJNT%G]Jppi+"
HP"N 9O'H I'GN PG'N 'OP9 QHN"H G PM 8
HP"GH %O'H I'7M J G'N 'M99J P'H G'pTP'8

OM 'G IT'9 P'AJN"i N'G '7M 'MG'7 KU9P8
9O"MG"M"O P'AJN"ip NHP'N JP'i 'N JGNT'8
QHNP'NHMI'Q9MGG'MiO'TPN'MG'Q9MGG'G'A NN9P8
7NP'NHMI' MW'MiO'TPN'MG' i' JGNT"
#'9'9T"LM9P' NH"OM1MGU'O P'N 'Q MKP'HP +
ip'7M P ' i ip'7M9GP'N 'OP7MKP'HP +

KM KP'HMO"NHP'GJi'O PO'JL'NHP'OP T I i+
#iO"GKM KP'NHP'HP O'Q ip"N 'NHP'HPOQP'7 'GHMOP+'
XHPi' TNHP PM'M99'i'9 P'7 9 i
#'9 iQ iQ"NM MiKP'7 '#O i G'1MOP+
iOP'Mi' G p'Q iQ"AT"M"A U
#'A U HP P'#OPi'JGPO"N 'K 9'H G'GL9PPi+
" N' MG"NHP'OMT8 GHP'H NNP'NHMN'O O'9 U'
O 'H G'MLL MKH'NHMN' 7NPi'NHP P'HMO'APPi+
#i i'HP'K lPG'MiO'NH G'H G'lMiN9P'AT+
#iO'GN O'GNM U'iMUPO' i'NHP'A U%G'Q PPi'A l8
HP'GJi'9 U%O'Li'NHP' 9O' NH'Q9 JG'PTP+
4PN'i N'G ' GN9T'MG'NH G'] PPi' i'H l'
"p'GLT iQ'HP 'A JiK%O' i' HP PMG'HP'GN O8
1'? p']J NH'GHP' HT' MG'i N'2'M'79 O'\

6'%:MiGN' H l'NHP' 9O'('$'M iO'A PMNH'M ML J' G8
6' 8%" ':" ', $"MiO'A PMNH'M ML J' G8
HPi'NH J'7M 'GJi'8$ ($' i' 2'PM NH' %'GH ip
J$ '0%'NH G ML J' 8 i'NHPP'N'G+R

HP'NPWN' 7NHP'L9MT'G p OPiN9T'GJLP '\N'NHMN' i' HP-MGG iMNP'-9Q l+

1IP'Q O' GQ O' 7A NH'MG'L PNG'7P QI8
1IP'UI QHN'9 PG A NH'MIO'A NH' I'NHPP' PLM I+

I+

OM ' MG'NHP' I i' HPI'NHP'7M 'JPPI' 79 PD
Z < < < <
-M9P'7 'G 'NHMI'HP'I 9U HNP'O P
O '#OPI%G GMUP'M'T JIQGNP'L JO'MIO' 9O8
"P'GNMIO'GHP'NMUPG'JL I'M'GNPPL JL'H 99
#I I'#O I G'K IPG NH'H I'MIO'H JIOG8
HP'G 99T']JPPI' NH I P'NHMI'9 P%G'Q O' 99+
O AMOP'NHP'A T'HP'GH J9O'I N'LMGG'NH GP$Q JIOG8
1IKP']J NH'GHP'O O'2'GPP'M'7M 'G PPN'T JNH'
"P P' I'NHPGP'A MUPG'OPPL JIOPO' NH'M'A M
5PPL' I'NHP'NH QH'M'GLPKNMK9P' 7' JNH'[
PP' I' IT'NH QH']J NH'GHP'HP P' MG'NHP'G P
#O'AJ9JGH IQ'79PO'MIO'9P7'HP'M99'M9 IP+

222+

PPN' GP'7M '79 P'JIN IP9T'L9JKU%O'G I' MOPO F'
-9JKU%O' I'NHP'AJO'MIO' MOPO' I'NHP'GL IQ[
QHN' PIN'LPM 9'M9MKU[N 'N IP9T'GHMOPO'[
OM 'K PMJ P'U 99%O' N 'G I'AT'OPMH%G'GHM L'GN IQ[
/ UP'M'Q PPI'L9JI'NHMN'HMIQG JL I'M'N PP+
#IO'7M99G'NH JQH' IO'AP7 P'NHP'7M99 GH J9O'AP+

2' PPL'7 'NHPP'MIO'TPN' I 'KMJGP'2'HM P'8
O ' HT'\NH J'9P7N%GN' IP' I NH IQ' I'NHT' 99+
#IO'TPN'NH J'9P7N%GN' IP' I P'NHMI'2'O O'K M P'8
O ' HT'\ 2'K M PO' I NH IQ' 7NHPP'GN 998
1'TPG'OPM'7 PIO'2'LM O I'K M P' 7NHPP'E
HT'O GK INPI'NH J'O OGN'AP]JPMNH'N ' IP+

2V+

PIJG' NH'#O I GF'G NN IQ'AT'HP +
IOP'M' I T N9P'GHMOP'APQMI'N' ' 'H I
HP'N 9O'NHP'T JIQ9 IQ'H 'Q O' M G O O'N T'HP +'
#IO'MG'HP'7P99'N 'HP 'GHP'7P99'N 'H I+
3 PI'NHJG']J NH'GHP'NHP' M 9 UP'Q O'PIA MK%O' IP'8
#IO'NHPI'GHP'K9 LL%O' #O I G I'HP'M I G
3 PI'NHJG']J NH'GHP'NHP' M 9 UP'Q O'JI9MK%O' I P8
#G' 7NHP'A T'GH J9O'JGP'9 UP'9 IQ'KHM I G+
3 PI'NHJG']J NH'GHP'HP'GP CPO' I'IT'9 LG
#IO' NH'HP'9 LG I'H G O O'MK%'NHP'GP CJ P8
#IO' J9O'I N'%MUP'HP'I PMI IQ'I 'HP'L9PMGJ P+
#IO'MG'GHP'7PNKHPO'A PMNH'M MT'HP'GU LG+
#H[NHMM'2'HMO'I T'9MOT'MN'NH G'AMT+
'U GG'MIO'K9 L'I P'N 99'2' JI'M MT[

V+

MAAPO'MQP'MIO'T JNH'
MII N'9 P'N QPNHP 8
4 JNH'G7J99' 7'L9PMGMIKP+
#QP' G7J99' 7KM P'8
4 JNH'9 UP'GJ1IP'I i+
#QP'9 UP' INP' PMNHP 8
4 JNH'9 UP'GJ1IP'A M P
D#QP'9 UP' INP'AM P+
4 JNH' G7J99' 7'GL N+
#QP%G A PMNH' G GH N+
4 JNH' G I A9P'MQP' G9MI P8

'HP'GPK IO'9 IP' G9 GN+
S7MOPO+ HG7 I' 7'NHP' O' 7NPI' KKJ G i' HMUGLP P'MIO'HMG
APPI'N '7P]JPIN9T'KMNIQPO' I' PL ING+
' H G IIP'M G 7 JIO' I' 6O OPGGM R'AT' +: 77I'@)= +' HP P'M P' Q PM'
M MN IG I'NHMN'K LT+' # I IQGN' NHP G P'HM P'NHP'PL N'HPNAP7 P'#O I G+
27' P'IMUP'M LMJGP'MZNP' PIJG'NHP'PL NHPN' G I N'IPKPGGM T'N 'NHP'IPN P+' HP'
7 JNF'9 IP G'Q PI' I P'IPN KM99T' I'6O OPGGM'RS

6'#IO'MG'HP'7P99N'HP '%'GHP'7P99N'H I+R

D 2I'NHP'N PINT I INH' 9JIP'7NHP'5 ' O%' D 'MK LT'7NH GL PI

4JNH'MN'I T'LM N IQ'G PPN9T'O O'GHP'GI 9P+
2I'GK I' '7 PIOGH L'I 99'2'K IGN JP' HPNHP
% 'IMT'AP'GHP'E T%O'N 'EPGN'MN' I T'PW 9P
% 'IMT'AP'MQM I'N 'IMU'P' IP' MIOP'NH NHP'
8 " $ M' O7 'GHMO G'9 UP' ITGP97+
#G'NMU'NHP'LM I'AJN'KMII N'L9JKU'NHP'LP97+

V222+

/ O'H 'I IP'PTPG'NH 'QMCPG'N 'NHP'PMGN[
T'HPM N'O NH'KHM QP'NHP' MNKH8 NHP' I IIQ' GP'
5 NH'K NP'PMKH' I IQ'GPIGP'7 I' O9P' PGN+
N'OM IQ'N JGN'NHP' 77KP' 7'I IP'PTPG+
XH 9P'-H 9 IP9M'G NG'MIO'G IQG'2'G N'MIO'IM U
#IO' GH'HP'9MTG' P P'NJJIPO'9 UP'NHP'9M U8

O 'GHP'O NH' P9K IP'OMT9 QHN' NH'HP'O NNT+
#IO'O PG'M MT'OM U'O G IM9 ONPM I IQ'I QHN
HP'I QH'N'G'LMKU%O'2'L GN'JIN'I T'L PNNT8
"PM N'HMNH'H G'H LP'MIO'PTPG'NHP' GHPO'G QHN8
'KHMIQ%O'N 'G 9MKP'G 9MKP'I W%O' NH'G 8
O ' HT'\GHP'G QH%O'MIO'AMOP'IP'K IP'N I +

XP P'2' NH'HP 'NHP'I QHN' J9O'L GN'N 'G i8
JN'I 'M P'I JNPG'MOOPO'N 'NHP'H J G8
'GL NP'IP'I 'PMKH'I IJNP'GPPIG'M'I i'
4PN'I N'7 'IP'GH IP'GJI'N 'GJKK J'79 P G[
-MKU'I QHN'LPPL'OMT8'Q O'OMT' 7'I QHN'I 'A 8+
H N'I QHN'N I QHN'MIO'9PIQNH'NHTGP97'N I +

G'Q PI'MG'7 I'MI'MIKPIN'IMIJGK LN' I' HKH'NHP P'M P'NHP'7 99 IQ'M M_
N IG S

6'#IO'MG'Q OG'9 GN'M P'GP9O' 'IP P'7 JIO+
#G'7MOPO'Q9 GG'I ' JAA IQ' 99'JC(
#G'79 P G'OPMO'9 P' NHP %O' I'NHP'Q JIO
#G'A UPI'Q9MGG'I 'KPIPIN'KMI' PO PGG D
'APMJNT'A9PI GH%O' IKP'7 'P P %G 9 GN+
2I'GL NP' 7LHTG K'LM IN IQ'LM I'MIO'K GN+

V22+

: O'I QHN'Q O' PGN+' #H[IP NHP'AP'IT'GHM P8
HP'AMOP'Q O' I QHN'NHMN'UPLN'IT' PGN'M MT8
#IO'OM77%O' IP'N 'M'KMA I'HMIQ%O' NH'KM P+
'OPGKMIN' I'NHP'O JANG' 7 IT'OPKMT+
OM P P99']J NH'GHP'MIO'K IP'MQM I'N I 8
OM P' P99'2'K J9O'I N'7 '2'GJLL%O' NH'G +

V2+

PMJNT' G'AJN'M' M I'MIO'O JAN7J9'Q O
#'GH I IQ'Q9 GG'NHMN' MOPNH'GJOOPI9T8
#'79 P'NHMN'O PG' HPI'7 GN'N'%Q IG'N 'AJO8
#'A NN9P'Q9MGG'NHMN%G'A UPI'L PGPIN9T
#'O JAN7J9'Q O'M'Q9MGG'M'79 P
/ GN' MOPO'A UPI'OPMO' NH I'MI'H J +

#IO'MG'Q OG'9 GN'M P'GP9O' 'IP P'7 JIO+
#G' MOPO'Q9 GG'I ' JAA IQ' 99'P7 PGH+
#G'79 P G'OPMO'9 P' NHP %O' I'NHP'Q JIO+
#G'A UPI'Q9MGG'I 'KPIPIN'KMI' PO PGG D
'APMJNT'A9PI GH%O' IKP'7 'P P %G 9 GN+
2I'GL NP' 7LHTG K'LM IN IQ'LM I'MIO'K GN+

4JNH' G N'MIO'A 9O+
#QP' G PMU'MIO'K 9O8
4 JNH' G 9O'MIO'MQP' G'NM I P+
#QP'2'O 'MAH 'NHPP+
4 JNH'2'O 'MO P'NHPP8
1'IT'9 P'IT'9 P' G'T JIQ[
#QP'2'O 'OP7T'NHPP8
1'G PPN'GHPLHP O'H P'NHPP+
O 'IPNH IUG'NH J'GNMT%GN'N '9 IQ+

' ' ' ' ' i

V2 +

2N" MG M" 9 O iQ%G OMJQHNP 'NHP'7M PGN" iP" 7NH ppH+
HMN"9 UPO" 7HP'lMGNP'MG" p99"MG" p99"l QHN"AP+
99"9 U iQ' i'Mi'3iQ9 GHlMi'NHP'7M PGN"NHMN"pTP"k J9O"
GPP'
"p'7MiKT'7P99"M"NJ i iQ+
/ iQ' MG"NHP"k lAM"O JAN7J9'"NHMN"9 P" NH"9 P"OO"
7QHN
'9PM P"NHP'lMGNP'9 p9pGG' 'U 99"NHP'QM99IN"UiQHN'
'LJN"i'L MKN KP"pNHP 'M9MG"N" MG"M'GL NP"
iN'NHP'G 99T'OMlGP9+
JN"lP'lJGN"AP"p7JGPO'l P'l KU9P" MG"NHP'LMi
HMN"i NH'iQ'k J9O"AP"JGPO'N'NJ i'NHPl'A NH"N'QMi+
O ' 7NHP"N 'NHP"N JGNT"Ui QHN" MG" JiOPO" NH"OG_
OM i'
#9MG'GHP'k J9O'i N"HP9L'N[
HJGM N' NH"M lG'K iNPiO'iQ' MG" KN ' 7NHP'OMT'
XH KH"AT'M'Q 7N' 79PM i iQ'O O'APM'NHP'lMO'M MT8
HPi'9J99MAT'NHP'9PM ipO'lMi'HMNH'Q N"NHP'9MOT'QMT'8
O 'i 'lT'G iQ'G piOPO+

V +

1i'M'OMT'@M9MKU'NHP'OMT[
/ p' H GP'l iNH" MG'p p' MT
L PO'M'A9 GG l'LMGG iQ'7M +
-9MT iQ' i'NHP" Mi N i'M
H JQH'NHP' p9 pN'9PM PG'NHP" iO+
#99'JiGPPi'%QMi'LMGGMQP'7 iO8
HMN'NHP'9 p 'G kU'N 'OPMNH+
X GH%O'H l GP97'NHP'HPM pi%G'A PMNH+
' H G APMJN 7J9'9 NN9P'L pi'M9G ' kKJ G i'/ p%G'/MA J'%G'/ GN+ 2i'NHMN'k LT'
i'NHP'GPk iO'9 ip' P'BO'6'% 2" MT+R' 2" HKH'G pLPMNPO'i'NHP'
7 9 ' 7 ' G K9PM 9T'M'I GNMUP+ 2i'NHP'p9P piNH'9 iP' P'HM pS
6' JN' ' ()*lT'HMiO' %'G iR
6'5 'i N'KM99 N'G i' i'lP+
2i'NHP'L9MT'NHP P'GM'K JL9PN'i N'7 Jio' i' HP"-MGG iMP"-9Q l S
HM N'2'M l'7 G i'7 'NHPP+R
HPG'P'9 ipG'L pKPOP'6' H J'7 ' H l+R
FX p'HM P'N ' NHP'MiK piN'K L PG' 7NH G'L pl S iP' i'6 3iQ9MiO%G"'p9 K iR'
@ 8 NHP' NHP ' i'M' K 99PKN i' 7 MO QM9G'AT' H l MG' X PP9UPG'@2
6'3iQ9MiO%G"'p"'K i'R'NHPGP'9 ipG'M P'NHJG'G pi' S
6'/ P'G OPiE iQ'@pIT iQ' KMJGP' 7NH G+R
"PM NG' piQ iQ'@pIT iQ' KMJGP' 7NH G+R
% ' 'S i'i 'OPQ pp‡ 4 ' "MiO' ' "8 'K ll i'PWL pGG iG+
' (%' HP'KJ'NM 9'O Q' G'NHP'i l iMN P'KMGP'N 'NH G P A+

V 2+

T'79 KUG'7PPO'i N+
T'p pG A ppO'i N
T' M l G GLPPO'i N
#99'G'M l GG
/ P' G OT i Q+
OM NH%G OP7T'iQ+
"PM N%G OPIT iQ
MJGP' 7NH G+D
#99'lT'l p T'E QG'M P']J NP'7 Q N+
#99'lT'9MOT%G'9 P'G 9 GN': O' N
‡XHP P'HP'7M NH' MG'7 l9T'7 WO'i'9 P+
HP P'M'iMT' G'L9MK%O' NH JN' pl P+
1lP'G 99T'K GG
X JQHN'M99'lT'9 GG8

' H G APMJN 7J9'9 NN9P'L pi'M9G ' kKJ G i'/ p%G'/MA J'%G'/ GN+ 2i'NHMN'K LT'
i'NHP'GPK iO'9 ip' P'BO'6'% 2" MT+R' 2" HKH'G pLPMNPO'i'NHP'
7 9 ' 7 ' G K9PM 9T'M'I GNMUP+ 2i'NHP'p9P piNH'9 iP' P'HM pS
6' JN' ' ()*lT'HMiO' %'G iR
6'5 'i N'KM99 N'G i' i'lP+
2i'NHP'L9MT'NHP P'GM'K JL9PN'i N'7 Jio' i' HP"-MGG iMP"-9Q l S
HM N'2'M l'7 G i'7 'NHPP+R
HPG'P'9 ipG'L pKPOP'6' H J'7 ' H l+R
FX p'HM P'N ' NHP'MiK piN'K L PG' 7NH G'L pl S iP' i'6 3iQ9MiO%G"'p9 K iR'
@ 8 NHP' NHP ' i'M' K 99PKN i' 7 MO QM9G'AT' H l MG' X PP9UPG'@2
6'3iQ9MiO%G"'p"'K i'R'NHPGP'9 ipG'M P'NHJG'G pi' S
6'/ P'G OPiE iQ'@pIT iQ' KMJGP' 7NH G+R
"PM NG' piQ iQ'@pIT iQ' KMJGP' 7NH G+R
% ' 'S i'i 'OPQ pp‡ 4 ' "MiO' ' "8 'K ll i'PWL pGG iG+
' (%' HP'KJ'NM 9'O Q' G'NHP'i l iMN P'KMGP'N 'NH G P A+

' HP' PMO iQ' i'XPP9UPG%G' MO QM9G G'Mi' lL plpiN' 7NH GLMGGMQP S
6'/ JO'AP99G' iQ'i N'
HPP 7J99T+R

F %%' H G G NHP' PMO iQ' 7'X PP9UPG‡ HP"-MGG iMP"-9Q l'HMG' *
G ' H G G NHP' PMO iQ' i'6'3iQ9MiO%G"'p9 K i+R' HP"-MGG iMP"-9_
Q l'HMG 8
F4) ' ' NHP' Qi M9‡ ‡ 5TKP' H'GP9O l'iOJ9QPG' i'K iEPKNJ M9
p1piOMN i'M9NP G'NHP' O'N '% * 6 7 'NHP'GMUP' 7'NHP' HTlP+R' H G' P'
NH iU' G GKM KP9T'M99 MA9P8 7 'NHP P'M P'lMiT'PMMlL9PG' 79 GP' HTlPG' i'NHPGP'
9 NN9P'L plG‡ 2i'NHP'GP piNH'GNMiCM'7'NH GL pl' P'HM P' $'N'HTlP' NH'
F£ (2' G HP P' JGPO' MG ('Mio' $'NG' 8 ' NPP piG'l GKH p JG9T'
P'GH J9O' lNQ ip'KMiQPO' $'N'- ") ;'Mio' M9 ip'MO LNG
NH G'PMO iQ' H'KH'lMUPG' JL O'M'AJ99Q O+
4 '' HP' PMO iQ' 7 HP'-MGG iMP'-9Q l' G% ' ' #'lMiJGK LN' i'NHP'
L GGPGG i' 7 ‡/TG iG'Q PG'JG%'' J'lP'NHMP'NHP P'G i ip+
1NHP'HP9L'7 'H l'2'GPP'NHMN'NHP P'G i ip+
J i'Q' l NM9'7 'NHT'9 p+D

1'7 i iQ'O NJip'KJ GPO'7 KU9P'OMlP'[
O 'i '2'GPP+
2iK iGMMiKT
P' i' lPi'NHMi' i'lPi' plM i+

2i'A9MKU'l J i'2E
#99'7PM G GK i'2
/ P'HMNH'7 9 i'lP+
/ iQ' i'NH M99
"PM N' G A9PPO iQ+
#99'HP9L'ippO iQ
@1'K JP9'GLPPO iQ[
"MJQHNPO' NH'QM99+
T'GHPLHP O%G L LP'KMi'G JiO' i 'OPM9 F
T PNHP %G AP99' iQG'O 9P7J9'U iP998
T'KJ NM 9'O Q'NHMN' iN'N 'HM P'L9EMT%O+
-9MTG' i N'MN'M99'AJN'GPPlG'M7 M O8
X NH'G QHG'G 'OPPL
- KJ PGD'N ' PPL+
2i'H 9 iQ GP'N 'GPP'lT'O 9P7J9'L9 QHN+
" 'G QHG' PG JiO'
H JQH'HPM N9PGG'Q JiO+
/ UP'M'NH JGMiO' Mi]J GH%O' lPi' i'A9 OT'7 QHN[

9P' 'S i'i 'OPQ pp‡ 4 ' "MiO' ' "8 'K ll i'PWL pGG iG+
' (%' HP'KJ'NM 9'O Q' G'NHP'i l iMN P'KMGP'N 'NH G P A+

' HP' PMO iQ' i'XPP9UPG%G' MO QM9G G'Mi' lL plpiN' 7NH GLMGGMQP S
6'/ JO'AP99G' iQ'i N'
HPP 7J99T+R

F %%' H G G NHP' PMO iQ' 7'X PP9UPG‡ HP"-MGG iMP"-9Q l'HMG' *
G ' H G G NHP' PMO iQ' i'6'3iQ9MiO%G"'p9 K i+R' HP"-MGG iMP"-9_
Q l'HMG 8
F4) ' ' NHP' Qi M9‡ ‡ 5TKP' H'GP9O l'iOJ9QPG' i'K iEPKNJ M9
p1piOMN i'M9NP G'NHP' O'N '% * 6 7 'NHP'GMUP' 7'NHP' HTlP+R' H G' P'
NH iU' G GKM KP9T'M99 MA9P8 7 'NHP P'M P'lMiT'PMMlL9PG' 79 GP' HTlPG' i'NHPGP'
9 NN9P'L plG‡ 2i'NHP'GP piNH'GNMiCM'7'NH GL pl' P'HM P' $'N'HTlP' NH'
F£ (2' G HP P' JGPO' MG ('Mio' $'NG' 8 ' NPP piG'l GKH p JG9T'
P'GH J9O' lNQ ip'KMiQPO' $'N'- ") ;'Mio' M9 ip'MO LNG
NH G'PMO iQ' H'KH'lMUPG' JL O'M'AJ99Q O+
4 '' HP' PMO iQ' 7 HP'-MGG iMP'-9Q l' G% ' ' #'lMiJGK LN' i'NHP'
L GGPGG i' 7 ‡/TG iG'Q PG'JG%'' J'lP'NHMP'NHP P'G i ip+
1NHP'HP9L'7 'H l'2'GPP'NHMN'NHP P'G i ip+
J i'Q' l NM9'7 'NHT'9 p+D

1'7 i iQ'O NJip'KJ GPO'7 KU9P'OMlP'[
O 'i '2'GPP+
2iK iGMMiKT
P' i' lPi'NHMi' i'lPi' plM i+

2i'A9MKU'l J i'2E
#99'7PM G GK i'2
/ P'HMNH'7 9 i'lP+
/ iQ' i'NH M99
"PM N' G A9PPO iQ+
#99'HP9L'ippO iQ
@1'K JP9'GLPPO iQ[
"MJQHNPO' NH'QM99+
T'GHPLHP O%G L LP'KMi'G JiO' i 'OPM9 F
T PNHP %G AP99' iQG'O 9P7J9'U iP998
T'KJ NM 9'O Q'NHMN' iN'N 'HM P'L9EMT%O+
-9MTG' i N'MN'M99'AJN'GPPlG'M7 M O8
X NH'G QHG'G 'OPPL
- KJ PGD'N ' PPL+
2i'H 9 iQ GP'N 'GPP'lT'O 9P7J9'L9 QHN+
" 'G QHG' PG JiO'
H JQH'HPM N9PGG'Q JiO+
/ UP'M'NH JGMiO' Mi]J GH%O' lPi' i'A9 OT'7 QHN[

9PM' P99G'GL iQ'i N
PPN'A OG'G iQ'i N+
: PPi'L9MiNG'A iQ'i N'
O NH8'NHPT'OP'F
"P OG'GNMiO' PPL iQ+
O9 kUG'M99'G9PPL iQ$+
TlLHG'AMkU'LPPL iQ'
OPM 7J99T+
#99' J'L9PMGJ P'Ui i'N'iGL 'G M iG+
#99' J'lP T'lPPN iQG' i'NHP'L9M iG+
#99' J'P pi iQ'GL N'+7 l'JG'G'79PO+
#99' J'9 P'G G9 GN'7 /' P'G OPMO+
OM P P99'G PPN'9MGF
HT'9 UP'ipW'P' MG
O 'M'G PPN'K iNPiN'NHP'KMJGP'7M99'lT'l Mi'
- ' O i'
JGN'9 P'M9 ip+
1NHP'HP9L'7 'H l'2'GPP'NHMN'NHP P'G i ip+

XHMN'NH JQH'HP'7 i!Q'A G'AP'APiN'
"P'K9 JOT'9 UG 99'KM9lD'P P'i QHN8
#iO'NHPi'N '9MNP'GHP' 99'pLPiN+
HM N'NHJG'O GGPl A9PO'HP'OP9 QHN'8
#iO'NHPG'P'P'N'AP'OMT
HMN' H KH' NH'GK i'GHP'LJN'M MT+

XHMN'NH JQH'GHP'GN P'N'N T'HP'GN piQNH+
#iO'AMi'MiO'A M 9'MiO'GMT'NHPP'iMT+
"P'7PPA9P'7 KP 99'T P9O'MN'9piQNH+
XHPi'K M7N'HMNH'NMJQHN'HP'NHJG'N'GMT8
6'"Q+O' lPi'APPi'G'GN iQ'MG lPi+
2i'7M NH'T J'HMO'i N'HMO' N'NHPi+R

#iO'N'HP' 99'7 M l P'M99'NHT' MTG8
LM P'i N'N'GLPiO SMiO'KH P79T'NHP P'
XHP P'NHT'OPGP N'lMT'lP N'L M GP+
T' iQ iO'i'NHT'9MOT%G PM'
HP'GN iQPGN'KMGN9P'N P'MiO'N i+'
HP'Q 9OPi'AJ99PN'APMNG'N'O i+

P P'M9 MTG NH'MGGJ PO'N JGN
#iO'i'NHT'GJ N'AP'HJlA9P'N JP'8
i9PGG'NHT'9MOT'L P'JEJGN+
-PGG'ip p'NH J'N'KH GP'MIp '
XHP7'N lP'GH M99'GP P'AP'NH J'i N'G9MKU
'L 77P 'NH JQH'GHP'LJN'NHPP'AMKU+

HP' 9PG'MiO'QJ 9PG'NHMN' lPi' U+
5 GGPlA9PO' NH'Mi' JN M O'GH +
HP'N KUG'MiO'N TG'NHMN' i'NHPl'9J U+
HP'K KU'NHMN'N PMOG'NHPl'GHM99'i N'UI +'
"M P'T J'i N'HPM O' N'GM O'7J99' 7N
#' lMi%G'iMT'O NH'GNMiO'7 'i JQHN'\+

'XP'iGP N'NH G L Pl'i'NHP' OP' i' HKH N'MLLPM G' i' HP'-MGG iMNP'-9_
Q l+
' HG L Pl' G M96' ik lL9PNP9T'L iNPO' i'6'3iQ9MiO%G "P9K i8R' HP P'N
APM G'NHP'G QIMJ P' ; HP P'M P'G lP' M MN iG' i' NHP'N piNT P'QHN'9 ipG
NHP P'Q Pl'piMG' Q'P' KMGP'AP7 P'JG' 7' (' i' HP'-MGG iMNP'-9Q l ' HKH i'
6'3iQ9MiO%G "P9K i'R' G - ' *
F6-i ''' HG G'Q pi' %' i'6'3iQ9MiO%G "P9K i+R
F3 %' 2i'6'3iQ9MiO%G "P9K i R" %%
% HP'L Pl' i'6'3iQ9MiO%G "P9K i'R'HP P'piOG8 AJN'NHP'N '9ipG NH' HKH
N'K ik9JOPG M P' MiN iQ' i' HP'-MGG iMNP'-9Q l+

piGP9PGG'N PPG'NHPT'KMii N'HPM'NHP8
&JNH9PGG APM G F'NHPT' 99 i N'KHPP'NHPP+
iQ'-MiO i'HP'G OPMO'8
#99'NHT'7 piOG M P'9MLL%O' i'9PMO8
#99'NHT'7P99 A OG O'G iQ+
M p9PGG' 7NHT'G iQ+
^3 pi'G 'L 'A O'9 UP'NHPP
IP'M9 P' 99'L NT' IP+DE
XH 9GN'MG'7 KU9P'7 NJIP'GI 9%O
H J'MiO'2' P P'A NH'APQJ 9%O+
3 P T' IP'NHMN'79MNNP G'NHPP'
2G i '7 piO' i'l GP T+
X OG'M P'pMGT'9 UP'NHP' iO#
OM NH7J9'7 piOG'M P'HM O'N '7 iO+
3 P T' lMi' 99'AP'NHT'7 piO+
XH 9GN'NH J'HMGN' HP P NH'NF'GLPiO8
JN' 7'GN P' 7'K iG'AP'GKMiN+
'lMi' 99'GJLL9T'NHT' MiN+',
27'NHMN' IP'AP'L O QM9+
JiN 7J9'NHPT' 99'H l'KM99
#iO' NH'GJKH 9 UP'79MNNP iQ
6'-NT'AJN'HP' P P'M'U iQ+R
27'HP'AP'MOO KN'N ' KP+
>J KU9T'H l'NHPT' 99'piN KP'8
27'N ' lPi'HP'AP'APiN+
HPT'HM P'H l'MN'K l lMiOPlPiN8
JN'77 NJiP' iKP O'7 i+
HPi'7M P P99'H G Q PMN' Pi i'
HPT'NHMN'7M i%O' i'H l'AP7 P+
GP'H G'K lLMiT'i 'l P+

"p'NHMN' G NHT'7 piO' iOPPO+
"p' 99'HP9L'NHPP' i'NHT'ipPO'8
27'NH J'G 'HP' 99' ppL8
27'NH J' MU0'HP'KMii N'G9PPL''
HJG' 7p p T'Q p7'i'HPM N'
"p' NH'NHPP'O NH'APM'M'LM N+'
HPGP'M P'KP NM i'G QiG'N 'Ui '
OM NH7J9'7 piO'7 1'79MNNP iQ'7 p+

MUP' H'NMUP'NH GP'9 LG'M MT+'
HMN'G 'G ppN9T' p p'7 G i+'
#iO'NH GP'pTPG'NHP'A PMU' 7OMT+'
/ QHNG'NHMN'O 'I G9PMO'NHP' I I''
JN' 1T'U GGPG'A iQ'MQM i+
PM9G' 79 p'AJN'GPM9%O' i' M i+

" OP' H'H OP'NH GP'H 99G' 7Gi +'
XH KH'NHT'7 CPi'A G I'APM G'
1i' H GP'N LG'NHP'L iUG'NHMN'Q '
P' 7NH GP'NHMN'#L 9' PM G+'
JN'7 GN'GPN' 1T'L 'HPM N'7 pp+'
JiO' i'NH GP' KT'KHM iG'AT'NHpp+D

' HP'K 99PKN i'piN N9PO' HP'-MG6 iMNP-9Q I'4 *piOG NH'NHP' iipN' '
JioT PM'NH'7 JG'N'NHP'; 'MOOG'N 'MV W+' M9 iP' PMGJ P'7 'K 99PKN i'NH G PWJ]G NP G iQ' 7 HKH' P'7iO'NHP'7 GN' p GP' i' PMGJ P+' '
PMGJ P+' @ PP'299JGN MN iG' 9+' +L+' +

"p p'NHP'MiNHPI'O NH'K IIPiKP'+
/ P'MiO'K iGMiKT' G OPMO8
-H piW'MiO'NHP'NJ N9P'79PO'
2i'M'IJNJM9'79MIP'7 I'HPiKP+

'NHPT'9 %O'MG9 P'i'N Mi'
"MO'NHP'pGGPiKP'AJN' i' ip8
'OGN iKNG'O G i'i ip'
JIAP'NHP P'i'9 P' MG'G9M i+

"PM NG' pI NP'TPN'i N'MGJiOP 8
5 GNMiKP'MiO'i 'GLMKP' MG'GPPi'
% WN'NHP'NJ N9P'MiO'H G]JPPi8
JN' i'NHPI' N' p p'M' iOP +

'APN ppi'NHPI'9 P'O O'GH ip+'
HMN'NHP'NJ N9P'GM 'H G' QHN'
O9MI iQ' i'NHP'LH piW%G QHN'
3 NHP' MG'NHP' NHP %G I ip+

- LP NT' MG'NHJG'MLLM99%O+
HMN'NHP'GP97' MH'i N'NHP'GM I P8
iQ9P'iMNJ P%G O JA9P'iM I P'
P NHP'N 'i ' ip' MG'KM99%O+

&PMG i' i' NGP97'K i7 JiOPO+
M 'O G i'Q 'N QPNHP'8
'NHPI GP9 PG'TPN'P NHP ip NHP '
IL9P' P P'G' P99'K IL JiOPO8

HMN' N'K PO'H 'N JP'N'N M i'
ppIPNH'NH G'K ik OMiN' LP'[
/ P'HMNH' PMG i' PMG i'i ip+
27' HMN'LM NG'KMi'G ' PIM i+

"P P'NHP'MiNHPI'O NH'K IIPiKP'+
/ P'MiO'K iGMiKT' G OPMO8
-H piW'MiO'NHP'NJ N9P'79PO'
2i'M'IJNJM9'79MIP'7 I'HPiKP+

'NHPT'9 %O'MG9 P'i'N Mi'
"MO'NHP'pGGPiKP'AJN' i' ip8
'OGN iKNG'O G i'i ip'
JIAP'NHP P'i'9 P' MG'G9M i+

"PM NG' pI NP'TPN'i N'MGJiOP 8
5 GNMiKP'MiO'i 'GLMKP' MG'GPPi'
% WN'NHP'NJ N9P'MiO'H G]JPPi8
JN' i'NHPI' N' p p'M' iOP +

'APN ppi'NHPI'9 P'O O'GH ip+'
HMN'NHP'NJ N9P'GM 'H G' QHN'
O9MI iQ' i'NHP'LH piW%G QHN'
3 NHP' MG'NHP' NHP %G I ip+

- LP NT' MG'NHJG'MLLM99%O+
HMN'NHP'GP97' MH'i N'NHP'GM I P8
iQ9P'iMNJ P%G O JA9P'iM I P'
P NHP'N 'i ' ip' MG'KM99%O+

&PMG i' i' NGP97'K i7 JiOPO+
M 'O G i'Q 'N QPNHP'8
'NHPI GP9 PG'TPN'P NHP ip NHP '
IL9P' P P'G' P99'K IL JiOPO8

HMN' N'K PO'H 'N JP'N'N M i'
ppIPNH'NH G'K ik OMiN' LP'[
/ P'HMNH' PMG i' PMG i'i ip+
27' HMN'LM NG'KMi'G ' PIM i+

D HP P'G M'KI JG'K ikOPiKP' i'M'LMGGMQP' i' HP' PILPGN S
6' '2' 99AP9 P P'
HMN'NHP P'M P'JiK iG8 NHMN' i'# MA N'
HP P'G IP'N PP'NHP'LHPPi W%NH ip+R

' SDUi G+
' $ S7JiP PM9G iQ+

I 5' CFG' >D C' FGD' A>' @E' HPGHCAH' KDAPG' NG>AD@GN' ' F?M' LG' ADDE' C' F?N' A' HALMG' ?' AN>?CFGD c' #FG G' ?DG' CFG' JADN' JFOF' H' DGM?CAH' CA' CFG')GHB' ?HN' NAH ' F?(KGDG' ?NNDG GN' H' 513' CA' CFG' !?DM' A>' ABCF?@KCAH' DG' JG' CA' ?OOGKC' CFG@' MCGD?MME' W ?' CFG')GHB' ?HN' NAH ' CFG' >D C' KDANBOCAH' A>' F?(KGDG8' @? H?CAH' W D' N N' FG' KBC' ABC' A>' F' PGJ' CFA G' ND?@?CO' KGD>AD@?HOG' JFOF' FG' F?N' CFGH' BHQBG CAH?LME' KDANBOGN' H' NG>GDGHOG' CA' CFG' ODCO?M' AKHAH' P FOF' DG ?DNGN' KM?E' ?' JAD(' HAC' LGMAH H' CA' = HPGHCAHWI' G' CFH(' CF?C' FG' B GN' CFG' JADN' H' ?' MCGD?M GH G' G' DG ?DN' CFG')GHB' ?HN' NAH ' ?' CFG' KDANBOCAH' A>' ?' PGDE' EABH' @?H' @KDAPGN' KGDF?K' OAH NGD?LME' H' CFG' HCGDP?M' LGCJGGH' C' >D C' OA@KA CAH' ?HN' C' KBLMO?CAH' LBC' N CH B FGN' LE' KGOBM?DCG' JFOF' LGMAH' CA' CFG' JMN' MB BD?HOG' A>' EABCF>BM' KAJGDR BOF' KAJGD' FAJGPGD' ?' >GJ' LG NG' F?(KGDG' F?PG' GPGD' KA G GN

' NGGK' CFH(GD' ?HN' GMAQBGHC' JDCGD' 0BMB' F?DMG' ?DG' CFB' NG ODLG' = CFG' KDC' A>' GM> ?OD>OG c' ?' ?KKMGN' CA' KAGCDE R

6' HP' I QHN' 7' NHP' I MQ !MN !' G' I M! 7PGNPO' AT' NG' 9MJ!KH !Q' 7 NH' 7 I' NHP' LPNNT' K PPU' HP P' NHP' MKK OP!NG' 7' A NH' I PO' N' !N 'NHP' OP' KPM!' 7' AP !Q' SAT' NG' Q !Q' MA MO' !N 'NHP' 9O' M J!O' LMGG !Q' !N '79 HMNP P' N' I PPNG' NH' M! I MN !Q' N' M!O' APK I !Q' !P' NH' N+' H G' K I L9PNP' J! !' M!O' OP!N 7 KMN !' 7' NHP' L PN' NH' H G' L P I SNH G' GJLL PGG !' 7' H G' !' !O OJM9' !GJ9MNPO' K !_ GK JG!PGG' NH' NG' !M !PGG' 7' NH JQHN' M!O' LPNN !PGG' 7' 7PP9 !Q S G' HMN' P' MO I P' !' NHP' Q PMN' I MGNP G' 7' NHMN' H KH' 7 'NH G' PMG !' P' EJGN9T' KM99' K9MGG KM9' L PN T' MG' PL PGP!N !Q' NHMN' H KH' G' GT I A 9 KM9' M!O' J! P GM9' !' N' NHMN' H KH' G' I P P9T' KKMG !M9' M!O' LPKJ9 M +' H G' Q PG' NHP I' NHMN' I MEPGN K' KM9 I !PGG' H KH'

GN 99' A PMNHPG' JL !' JG' 7 I' NHP' GNMNJPG' 7' NHP 'Q OG+' H G' ! PGNG' NHP ' UG' NH' NHMN' 9JK O' N M!GLM P!N' MN I GLHP P' HP P !' P P T' 7 I' GNM!OG' JN' !' LP 7PKN' OP7 ! NP!PGG' M!O' O GN !KN!PGG' !9T' APMJN 7 PO' AT' NHP' O GNM!KP' H KH' OPM9 CPG' N+' H G' HMG' OP9 P PO' NH GP' UG' 7 I' NHP' KMGJM9N PG' 7' N I P' M!O' GLMKP' M!O' HMG' 9 7NPO' NHP I' JL' 9 UP' GNM G' !N 'NHP' LJ P' 7 I M I P!N' 7' NH JQHN' G 'NHMN' NHPT' O ' ! N' GH !P' !' !P' GL N' M9 !P' ! '7MOP' 9 UP' PM NH9T' 79 P G' AJN' E J !PT' !' 7 I' K9 I P' N 'K9 I P' GHPOO !Q' NHP' 9 QHN' 7' APMJNT' !' QP!P MN !' M7NP' QP!P MN !+' HP' GM I P']JM9 NT' M I J!N !Q' N 'M' N NM9' PWN !KN !' 7' H G' !' GP97 GH' AP !Q' G 'NHMN' H G' GL N' APKM I P' M' I QHNT' QM!' NH JQH' H KH' MNJ P' QM P' JNNP M!KP' N 'NHP' 7J99' O MLMG !' 7' HP '! NPG' G' HMN' P' !OP' MN' !' J' !' Q PMN' O M I MN GN' M!O' G' NHP' Q J!O_ U' 7' M99' H G' NHP 'L P G8 7 ' N' G' !9T' HP!' LJ QPO' 7' GP97 GH!PGG' NHMN' NHP' !NP99PKN' APK I PG' 7 NNPO' 7 ' PKP !Q' NHP' !GL MN !G' 7' QP! JG+R

F?C' &D' ?DG' A' SB CME' OAH NGD' ?' CFG' DG?C' @APH' KDHOKMG' A>' = OM? O?M' KAGCDEI R JF?C' FG' >BDCFGD' HACG' ?' CFG' KDG G@HGHC' OF?D?OCGD C' A>' =' ACD' AJH' DG?C' ND?@?C CI R ' ?LBHN?HCME' >ABHN' H' CF?C' DG?C' ND?@?C C8' G?DMG C' JAD(' AMGDN G' J?' CFG' >D C' CA' KAHC' ABC' CF' KGDP?NH' QB?MCE' H' CFG')GHB' ?HN' NAH ' ?HN' FG' F?' NAHG' CF' A' ?N@D?LME' CF?C' C' JABMN' LG' KDA>?H?CAH' JGDG' JG' CA' ?CCG@KC' CA' GMBONCG' CFG' KAHC' H' ?HE' ACFGD' CF?H' F' AJH' JADN' R

6' 2N' G' NH JQH JN' MG' 7' M' GJLP 'GL N' I P' !NJ N P' I P' !N I MNP9T' K !_ GK JG' P P!' NHM!' NHP' KHM MKNP G' NHP I GP9 PG' ! N' !9T' 7' P P T' JN M O' 9 U' M!O' MKN' AJN' 7' NHP' 79JW' M!O' P79JW' 7' NHP' I !O' !' M99' NG' GJAN9PGN' NH JQHNG' M!O' 7PP9 !QG' P P' L9MK !Q' NHP' H 9P' AP7 P' I' P 8' H I GP97' I PM! H 9P' J!LM N K LMN !Q' !' NHP' LMGG !G' M!O' MKNJMNPO' !9T' AT' NHMN' L9PMGJ MA9P' PWK NP I P!N' H KH' HMO' PGJ9NPO' 7 I' NHP' P!P QPN K' 7P J' 7' H G' !' GL N' !' G' O9T' PWH A N !Q' HMN' N' HMO' G' MKKJ MNP9T' M!O' L 7 J!O9T' K !NP I L9MNPO+' 2' NH !U' 2' GH J9O' HM P' K !EPKNJ PO' 7 I' NHPGP' L P I G' NHMN' P P!' NHP!' NHP' Q PMN' !GN !KN' H KH' I LP99PO' NHP' L PN' N ' NHP' O M I M' MG' GPK PN9T' U !Q' !' H I ' L I LN !Q' H I' AT' M' GP PG' M!O' !P P A UP!' KHM !' 7' I MQP T' M9 MTG' O' M!O' APKMJGP' J!A UP!' 7NP!' I !JNP SDAT' NHP' H QHPGN' P77 N' 7' NHP' L KNJ PG]JP' !' OG' 7' H KH' OG' M P' KMLMA9P' H QHP' LP HMLG' NHM!' MG' P P' PM9 CPO' AT' M!T' NHP' L PN' P P!' 5M!NP' ! N' PWKPLNPO SN' L OP' M' GJAGN NJNP' 7 ' NHMN' GJM9' 9M!QJMQP' NHMN' K !GNM!N' !NP P!N !' M!O' J!! !Q' K I I P!N' AT' N !P' 9 U' M!O' QPGNJ P' H KH' !' H G' O M I MN K' UG' HP' MG' P!N N9PO' N ' PWLPKN' 7 I' NHP' L9MTP G+' " G' P!JG' M!O' #O ! G' GPP I' MN' !KP' NHP' KHM MKNP G' NHP I GP9 PG' M!O' NHP' H 9P'% PL PGP!NMN !' 7' NH GP' KHM MKNP G' AT' NHP' I GN' K !GJ I I MNP' MKN G+' 4 J' GPP I' N ' AP' ' ' ! NH !Q' AJN' N ' GPP' M!O' HPM' P P TNH !Q+' "P!KP' N' G' NHMN' 7 I' NHP' LP LPNJMG' MKN NT' 7' MNNP !N !' P]J PO' !' NHP' LM N' 7' NHP' PMOP S7 I' NHP' ML O' 79 ' NHP']J KU' KHM!QP' M!O' NHP' L9MT7J9 !MNJ P' 7' NHP' NH JQHNG' M!O' I MQPG SM!O' MA P' M99' 7 I' NHP' M9 P!MN !' M!O' 7' 2' I MT' HMCM O' GJKH' M!' PWL PGG !' NHP' JNNP' ' %%' 7' NHP' L P%G !' 7PP9 !QG' 7 I' NH GP' 7' H KH' HP' G' MN' !KP' NHP' LM !NP' M!O' NHP' M!M9TGN SNHMN' NH JQH' NHP' P T' GJAEPKN' KM!! N' AJN' OPN MKN' 7 I' NHP' L9PMGJ P' 7' M' OPHKMNP' I !O' TPN' !P P' MG' L P I' 9PGG' OM!QP JG' !' M' I M9' MKK J!N+R' 7

' HP' KN T' 7' OM NH8' M!O' NHP' P I !G+' T' ?J9 JG' HM 9PG' "M P' +#+' -+' +

A'MGD'N G' H' CFG' KDGOGN'H' OF?KCGD' A>' F' =' $'CGD?DE' $'>G I' ?E R' =' %BD'H' CFG' >D C' EG?D' CF?C' &D' ADN JADCF' ?HN' ' JGDG' HG' FLABD' ABD' OAHPGD ?C'AH' CBDHGN' >DGQBGHCME' AH' CFG' CJA' O?DN'H?M' KA'HC' A>' KAGCDE R CFG' KAJGD' A>' G O'C'H' CFG' E@K?CFE' A>' CFG' DG?NGD' LE' ?' >?CF>BM' ?NFGDGHOG' CA' CFG' CDBCF' A>' H?CBDG' ?HN' CFG' KAJGD' A>' P'H' CFG' HCGDG C' A>' HAPGMCE' LE' CFG' @AN>E'H' OAMABD' A>' @? H?C'AH c' H' AMGD'N G8' =' $'CGD?DE' "G@?'H I' CFG')GHB' ?HN' NAH ' ' O'CGN' ?' >BDH' F'H' ?' H?M' G ?@KMG' A>' =' CF?C' ?>>GOC'AH?CG' MAPG' A>' H?CBDG' ?HN' H?CBD?M' ALSGOC' J'CFABC' JF'OF' HA' @?H' OABMN' F?PG' AL GDPGN' A' CG?N'ME' AD' K?'HCGN' A' CDBME' ?HN' K? AH?CGME' CFG' PGDE' @'HBCG C' LG?BC'G' A>' CFG' G CGDH?M' JADMN I' #FG' NG OD'KC'AH' A>' CFG' F?DG' FBHC' ' CFGDG' PGH' ?C' MGH CF' ?' ?' KGO'@GH' A>' CF' ' KAJGD' ' DG@?D(-?LMG' KDAA>' A>' CFG' OA@KMGCGHG ' ?' JGMM' ?' ?OOBD?OE' A>' F?(KGDG8' NG OD'KC'AH' KDG GHCGN' C GM>' CA' ABD' @'HN' H' DBHH'H' CFDAB F' ?' MCCMG' PAMB@G' >BMM' A>' C?MGHC' KBLM' FGN' H' 625 R = ! ?E' ?HN' (GCOFG' A>' F?D?OCGD' LE' CFG' M?CG' "OF?DN' ECAH' ! Q I' #FGDG' ' ?' K?KGD' AH' FBHC'H ' ?HN' G KGO'?MME' AH' F?DG FBHC'H ' G' ?E R =' ' ?@' HAC' AHG' A>' CFG' KGD>GOC' >A FBHCGD' A>' CFG G' DG?M@ ' LBC' F?P'H' LGGH' H' CFG' J?E' A>' M?CG' A>' GG'H' ?' AAN' NG?M' A>' P?D'AB' @ANG' A>' FBHC'H ' ' JABMN' >AD' CFG' LGHG>C' A>' CFG' BH'H'C'?CGN' GC' NAJH' CFG' DG BMC' A>' @E' AL GDP?C'AH I' H' CF' ' @?CGD' FG' JD'CG' J'CF' ?' KGD>GOC' BHOAH-O'AB HG ' CF?C' FG' ' NG OD'L'H' JF?C' ?HE' AHG' F?' NG OD'LGN' LG>ADG' .BC' ?' ?OOBD?CG' ?H' AL GDPGD' $ 'LGGH' LG>ADG' F'@' R

6' HP' @NHP' HM P' QP!P M99T' PNJ !G' N 'NHP' GPMN' 7 I' H KH' GHP' MG' LJN' JL' J!! !Q' MG' M99' NHP' 9O' U! G' !' M' K K9P' ' G I PNH !Q' G I PN I PG' 9 UP' N' P' HMO' APNNP' GMT' NHMN' P' I MT' UPPL' !' Q O' NP I G' NH' NHP' I MNHP I MN KM9+' #N' GNM N !Q' GHP' NPM G' M MT' MN' HP' JN I GN' GLPPO' 7 ' M' I 9P' ' I P' M!O' O GNM!KP' NHP' O QG' M97 MT' GHP' NHP!' PNJ !G' O P Q !Q' M' 9 NN9P' N ' NHP' QHN' 9P7N' NHMN' GHP' I MT' ! N' J!' !N 'NHP' I JNHG' 7' HP' P!P I PG SM' !PKPGG NT' H KH' MKK J!NG' 7 ' HMN' P' KM99' NHP' K KJ9M NT' 7' HP' K J GP+' " P' 79 QHN' 7 I' H I P' G O PKN' M!O' L PK_ L NMNP' 8 AJN' !' HP ' MT' AMKU' HP!' GHP' HMG' QM !OO' M' 9 NN9P' N I P' 7 ' K !G OP MN !' M!O' GN MNMQP I' GHP' OPGK APG' M' KJ JG' 9MAT !NH' 7' GH N' NJ ! !QG' M!O' !O !QG' MG' 7' N 'LP L9PW' NHP' O QG' AT' NHP' !N KMKT' 7' HP 'N MKU+R

A@K?DG' CF' J'CF' F?(KGDG R

6' # !O' HP!' NH J' HMGN' !' 7 N' NHP' LJ A9 !O' HM P M U' NHP' L ' PNKH' N ' P GH N' H G' N JA9PG+ " 'HP' JN J!G' NHP' !O' M!O' NH' HMN' KM P" P' K M!UG' M!O' K GGPG' NH' M' NH JGM!O' O JA9PG' HP' I M!T' I JG NG' NH JQH' NHP' H KH' HP' Q PG' # P' 9 UP' M' 9MAT !NH' N 'M I MCP' H G' 7 PG+R

&D' ECAH' CFB' AG' AH' R

6' HP' H J!OG' H I' P' 9P7N' !' 7J99' K T' K !N !JP' NHP ' I JG K' NH JN' P I GG !' MG' 9 !Q' MG' NHPT' M P' 7M NH7J9 N ' NHP' GKP!N8' MG' M' GJ I I !G' N' GH J9O' GPP I ' 9 UP' NHP' GPM I M!%G' K T' N ' LJ99' N QPNHP ' 'UPPL' N QPNHP ' M!O' N' G' M' KP NM !' L 7' N 'NHP I '', GP9 PG' M!O' NHP ' 7 99 P G' NHMN' NHPT' M P' !' NHP' QHN' MT+' 1!' NHP' !GNM!N' NHMN' NHPT' M P' Y MN' 7MJ9N % ' 9 GP' NHP' GKP!N' NHPT' M P' G 9P!N++++++++++' HP' PMNHP ' !' NG IL PGG !' !' NHP' GKP!N' G' NHP' Q PMN' 7MNHP ' 7' Y 7MJ9NG' 8% AJN' NHPT' I MT' M GP' 7 I' NHP ' MKK OP!NG' P P!' HP!' NHP' OMT' G' !' P P T' PGLPKN' 7M J MA9P+' HP' !NP P!_ N !' 7' L9 JQHPO' 9M!O' !' H KH' NHP' GKP!N' G !' K 9G' ' P ML MNPG' G' MN' 9PMGN' LP 9 JG8' AJN' GHPPL GNM !G' PKP!N9T' 9P7N' AT' M' 79 KU' M P' 7MNM9' NHPT' KJN' 77' NHP' GKP!N' PK P MA9T SI MU !Q' M' QML' MG' N' P P' !' NHP' K9JP' !' H KH' NHP' O QG' HM P' ! N' P P!' M' H !N' 7 'NHP ' QJ OM!KP+R

A@K?DG' F?(KGDG' ? ?'H' R

6' IPN I P' HP' J!G' M I !Q' M' 79 KU' 7' GHPPL ' I MUP' NHP' KJ!! !Q' H J!OG' I GNMUP' NHP ' G I P99+ #!O' G IPN I P' HP P' PM NH OP9 !Q' K ! PG' UPPL+ 'GN L' NHP' 9 JO' LJ GJP G' !' NHP ' TP998 #!O' G IPN I P' G NPNH' NH' M' HP O' 7' OPP 8 5M!QP' OP GPNH' GH 7NG8' N' M NG' !' 7PM 8

O 'NHP P' H G' G I P99' NH' NHP G' AP !Q' I !Q9PO+ HP' H N' GKP!N G!J77 !Q' H J!OG' M P' O P!' N ' O JAN+ PMG !Q' NHP ' K9M I JG' K T' N 99' NHPT' HM P' G !Q9PO' ; X NH' I JKH' MO 'NHP' K 9O' 7MJ9N' K9PM!9T' JN8 HP!' O 'NHPT' GLP!O' NHP ' I JNHG' 3KH ' PL9 PG+ #G' 7' M! NHP ' KHMGP' P P' !' NHP' GU PG+R

N' Q MLH M' / NP M M' ' 9+' +' L+' 2 ' 1/+' 22+ ' 2

7 ? E , , , E7

HG @ADG OA@K?D AH' ?HN' JG' F?PG G F?B CGN' F?(KGDG'
NG ODKCAH R

6' TNH G'L ' XMN'7M' 77JL i'M H 99+
NMIOG' i'H G'H iOP'9PQG' NH'9 GNPi iQ'PM +
'HPM UPi' 7'H G'7 PG LJ GJP'H I'GN 998
#i i'NHP '9 JO'M9M J1G'HP' O NH'HPM 8
#iO'i 'H G Q P7 IMT'AP'K ILM PO' P ' +
' iP'G P'G KU'NHMN'HPM G'NHP'LMGG iQ'AP99D

HP1'GHM9N'NH J'GPP'NHP'OP APOMAA9PO' PNKH'
J i'MiO' PNJ i'iOPiN iQ' NH'NHP' MT8
3MKH'pi JG A p'H G PM T'9PQG O NH'GK MNKH+
3MKH'GHMO 'IMUPG'H I'GN L'PMKH'I J I J'GMMT'
O 'I GP T G'N OOPi' i'AT'IMIT+
#iO'Ap iQ'9 'ip p' p9 p %O'AT'MiT+R

GDG'CFGH'LG CC AL GDPGN'?DG HAC' AHME' CFG ?@G ALSGOC 'CFG ?@G
?OONGHC ' CFG ?@G @APG@GHC' CH G?OP' NG ODKCAH' LBC' CFG PGDE'
JADN 'G@KMAEGN' CA' OAHPGE' CFG OGHG' CA' CFG @CHN' ?DG A>CGH' CFG ?@G
CH G?OF' C' JABMN' LG' G? E' CA' ?E' CF?0 & D' ECAH' OAKCGN' F?(KGDG'

G'LGMCGPG'FG' NCN' HAC' #FGDG C ' ?' CBDNE CH GHBAB HG ' ?LABC' FC '
JDCCH ' JFCOF' JABMN' FCPG MGN' FC@' CA' HACCOG' CFG) GHB ' ?HN' NAH' '
C' FG' F?N' CC' CH' FC ' @CHN' F?(KGDG ?HN' FG' FZN' G?OF' MAA(GN'
@CHBCGME' ?HN' KD?OCO?MME' BKAH' CFG ?@G OGHG' ?HN' CFG JAHNGD' C '
HAC' CF?C F?(KGDG J ? ' ?H' ?OODBD??CG C ' GN' JCCF' CFG KAGCO?M' CF?C CC C ' AHG ?HN'
?OODBD??CG C ' A' CFADAB FME>B GN' JCCF' CFG KAGCO?M' CF?C CC C ' AHG ?HN'
CFG ?@G M>G

#FG' OGMGLD??CGN' NG ODKCAH A>' CFG OABD GD CH CFG) GHB ' ?HN' NAH' '
C ' ?HACFGD' DG@?D(?LMG'CH C?HOG' A>' CFG ?OOBD?OE' A>' CFG EABH ' F?(-
KGDG8 ' AL GDP?CAH' AC' CFG @A C G KGDGHOGN' NG?MGD' GPGD' (HGJ' CFG

' Q MLH M' / NP M M' 9' ;L' +

6'/ '[HP P'NHP' QPiN9P'9M U' PM T' 7 pGN
F '$'%' %' " ' %' -' ';$ $+
#iO'8) %' $ ' ' ' ,8$ % '%' ' ,"' %'
$ 'GJi'M GPNH' i'$%' A % 2;
&$ 'O NH' NHP' 9O'G 'Q9 JG9T' APH 9O
HP'KPOM N LG'MiO'H 99G'GPPI'AJ i GH%O'Q 9O+R

G >GGN' CF?C G ' ' ,CDBG' A@K?DG R

' Q MLH M' / NP M M' 9' ;L' +

6'&PO'I I 'NHMN'P P'TPN'APN UPi%O'
X PKU'N 'NHP'GPM1MI'NP1LPGN'N 'NHP'7 P9OR S

CFG >C FGO'CF?C'>ADLG?D ' CFG = BH DAJH'>DEI R CFG FGGK = AHG' CA' >AMNI'
R CFG O?CGDK'MN?D '>GGN'H ' AH' = CFG' CGHNGD'MG?PG I R?HN' HAC' CA' JG?DE'
JCCF' G ?@KMG ' CF?C G QB CCG C@? G

6'/ U'H 'N'A QHN'GMM'GH NPNF'7 I'NHP'GUT+
'Q9 OPO'HP' i'NHP'i QHN'7 I' PiJG%'PTP'R S

?N' CFG G LG KG?(' ?'KAGC JFA' F?N' >AD@GN' F C@ GM?' BKAH' ?CBDG ' ?HN'
HAC' BKAH' LAA(' #A' BHNGD C?HN' CFG P?MBG ' ?' JGMN' ? ' CFG D?DCE' A?'
CF ' QB?MCE'H' F?(KGDG ' JG' FABMN' AKGH' ?HE' OAHCG@KAD?DE' KAG@'
#?(G' &?DMAJG8 ' = GDA' ?DN' $G?HNGDI'>AD' G ?@KMG ' G DG?N' MHG
?>CGD' MHG ' LG?BC>BM' AD GAB ' DBHHCH 'APGD' JCCF'?' ?C?CH 'MB BDAB -
HG ' LBC' JG' MAA(' H P?H' >AD' ?' H MG '?@C?D' C@?' G' F?(KGDG
NG ODLG ' JF?C' FG' F?' GGH' CFDAJCH ' APGD' CFG' DG?M' CFG NGMCOAB '
D?DGME ' LBC' FG' (HAJ ' ?M' CFG' OAHPGHCAH?M' C@? G ' LE' JFCOF' CFG' DG?M
C' A?' F ' AJH' C@? 'H?CAH' &?DMAJG' MAA(' ?C ?CBDG' FGD GM?' PGDE'
AJH'KAJGD>BM'?HN' AHADAB 'M?H B? G'H' FC ' G?ME' KDANBOCAH 'LDG?CFG '
ABC' FC ' CFAB FC

' ,'NHP'5 MI'I O'
1'7?JNPG'MiO'G 7M' PK OP +R

#FG' B C?HGN' JGGCHG 'A>'CFG PGD C>O?CAH' HGPGD' OMAEH ' ?HN' EGC
CFGDG' ?DG' HA' P'AMGHC' OAHCD? C ' HA' BNNGH' GMGP?CAH ' ?M' ' GQB?LMG
H' C ' H>H>HCCG' P?D'GCE' ' #FG' G?DME' OA@GNG ' ?DG' >BM' A>' CFG ?@G' D?DG
LG?BCE' H' $APG8 '$?LAB8 '$A CR #FG' A@GNE' A>' iDDAD R ' &'N-
B@@GD' FC8 ' %DG?@R JG' F?PG' PhD G ' A>' ?MCGDH?CG' DFE@G ' >AD@GN'
BKAH' CFG ?@G @ANGM' ? ' CFA G A>' CFG) GHB ' ?HN' NAH' ' ?HN' KDA-
NBOH ' CFG ?@G >GG@ ' A>' KM?OCN' NGM' FC' LE' CFGCD' G QB' CCG' F?D@AHE'
#FG' ?@G' KDHOKMG ' AH' JFCOF' FG' LBMC' CFG PGD' >CO?CAH' A>' CFG) GHB '
?HN' NAH' ' G FLCCGN' CA' FC@' CFG' D?OG' JFCOF' CFG G GMG' C?D@AHG ' F?D@AHE '

G' ?DG' C?B' FC' CF?C' G :' ' OM? CO?M

AMGDCN G' F?' AL GDPGN' CF?C' ,'CH CFG) GHB ' ?HN' NAH' ' CFG' >CD C
?HN' @A C ALPCAB ' G' OGMMGHOG' C ' CFG' KGD>GOC' JGGCHG ' A>'CFG' PGD' C>O?-
CAH ' CC ' ?N?KC?CAH' CA' CFG' BLSGOC ' ?HN' CFG' KAJGD' NC KM?EGN' CH' P?DE-
CH ' CFG' @?DOF' A>' CFG' JADN ' JCCFABC' K? CH ' CHCA' ?' MA>CGD' ?HN' @ADG'
@?SG CCO' DFECF@' CF?H' J ?' NG@?HNGN' LE' CFG' CFAB FC ' AD' KGD@CCGN'
LE' CFG' KDAKDCGCE' A>' KDG GDPCH ' ?' GH G' A>' @GMANE' KDGNA@CH?HC I'C
#FC ' GM> OAHCDAMCH ' KAJGD' A>' = P?DECH ' CFG' @?DOF' A>'CFG' JADN ' JCCF-
ABC' K? CH ' CHCA' ?' MA>CGD' ?HN' @ADG @?SG CCO' DFECF@'I' C ' KGDF?K ' AHG'
A>' CFG' @A C C ? ' H?H' CH C?HOG ' A>' F?(KGDG8 ' OAH B@@?CG' @? CGDE A>'
FC ' ?DC' GPGH' ? ' ?' PGDE' EABH ' @?H' G' JFA ' ?' CFG' KDAKGD' G? AH '
(HGJ' FAJ' CA' CD((G CFG' D?HNG C' @B CO' JCCFH' CFG' OA@K? ' A>' ABD'
AJH'KAJGD>BM'?HN' AHADAB 'M?H B? G'H' FC ' G?ME' KDANBOCAH 'LDG?CFG '
ABC' FC ' CFAB FC

' ,'NHP'5 MI'I O'
1'7?JNPG'MiO'G 7M' PK OP +R

#FG' B C?HGN' JGGCHG 'A>'CFG PGD C>O?CAH' HGPGD' OMAEH ' ?HN' EGC
CFGDG' ?DG' HA' P'AMGHC' OAHCD? C ' HA' BNNGH' GMGP?CAH ' ?M' ' GQB?LMG
H' C ' H>H>HCCG' P?D'GCE' ' #FG' G?DME' OA@GNG ' ?DG' >BM' A>' CFG' ?@G' D?DG
LG?BCE' H' $APG8 '$?LAB8 '$A CR #FG' A@GNE' A>' iDDAD R ' &'N-
B@@GD' FC8 ' %DG?@R JG' F?PG' PhD G ' A>' ?MCGDH?CG' DFE@G ' >AD@GN'
BKAH' CFG ?@G @ANGM' ? ' CFA G A>' CFG) GHB ' ?HN' NAH' ' ?HN' KDA-
NBOH ' CFG ?@G >GG@ ' A>' KM?OCN' NGM' FC' LE' CFGCD' G QB' CCG' F?D@AHE'
#FG' ?@G' KDHOKMG ' AH' JFCOF' FG' LBMC' CFG PGD' >CO?CAH' A>' CFG) GHB '
?HN' NAH' ' G FLCCGN' CA' FC@' CFG' D?OG' JFCOF' CFG G GMG' C?D@AHG ' F?D@AHE '

G' ?DG' C?B' FC' CF?C' G :' ' OM? CO?M

AMGDCN G' F?' AL GDPGN' CF?C' ,'CH CFG) GHB ' ?HN' NAH' ' CFG' >CD C
?HN' @A C ALPCAB ' G' OGMMGHOG' C ' CFG' KGD>GOC' JGGCHG ' A>'CFG' PGD' C>O?-
CAH ' CC ' ?N?KC?CAH' CA' CFG' BLSGOC ' ?HN' CFG' KAJGD' NC KM?EGN' CH' P?DE-
CH ' CFG' @?DOF' A>' CFG' JADN ' JCCFABC' K? CH ' CHCA' ?' MA>CGD' ?HN' @ADG'
@?SG CCO' DFECF@' CF?H' J ?' NG@?HNGN' LE' CFG' CFAB FC ' AD' KGD@CCGN'
LE' CFG' KDAKDCGCE' A>' KDG GDPCH ' ?' GH G' A>' @GMANE' KDGNA@CH?HC I'C
#FC ' GM> OAHCDAMCH ' KAJGD' A>' = P?DECH ' CFG' @?DOF' A>'CFG' JADN ' JCCF-
ABC' K? CH ' CHCA' ?' MA>CGD' ?HN' @ADG @?SG CCO' DFECF@'I' C ' KGDF?K ' AHG'
A>' CFG' @A C C ? ' H?H' CH C?HOG ' A>' F?(KGDG8 ' OAH B@@?CG' @? CGDE A>'
FC ' ?DC' GPGH' ? ' ?' PGDE' EABH ' @?H' G' JFA ' ?' CFG' KDAKGD' G? AH '
(HGJ' FAJ' CA' CD((G CFG' D?HNG C' @B CO' JCCFH' CFG' OA@K? ' A>' ABD'
AJH'KAJGD>BM'?HN' AHADAB 'M?H B? G'H' FC ' G?ME' KDANBOCAH 'LDG?CFG '
ABC' FC ' CFAB FC

' ,'NHP'5 MI'I O'
1'7?JNPG'MiO'G 7M' PK OP +R

#FG' B C?HGN' JGGCHG 'A>'CFG PGD C>O?CAH' HGPGD' OMAEH ' ?HN' EGC
CFGDG' ?DG' HA' P'AMGHC' OAHCD? C ' HA' BNNGH' GMGP?CAH ' ?M' ' GQB?LMG
H' C ' H>H>HCCG' P?D'GCE' ' #FG' G?DME' OA@GNG ' ?DG' >BM' A>' CFG' ?@G' D?DG
LG?BCE' H' $APG8 '$?LAB8 '$A CR #FG' A@GNE' A>' iDDAD R ' &'N-
B@@GD' FC8 ' %DG?@R JG' F?PG' PhD G ' A>' ?MCGDH?CG' DFE@G ' >AD@GN'
BKAH' CFG ?@G @ANGM' ? ' CFA G A>' CFG) GHB ' ?HN' NAH' ' ?HN' KDA-
NBOH ' CFG ?@G >GG@ ' A>' KM?OCN' NGM' FC' LE' CFGCD' G QB' CCG' F?D@AHE'
#FG' ?@G' KDHOKMG ' AH' JFCOF' FG' LBMC' CFG PGD' >CO?CAH' A>' CFG) GHB '
?HN' NAH' ' G FLCCGN' CA' FC@' CFG' D?OG' JFCOF' CFG G GMG' C?D@AHG ' F?D@AHE '

ABCR LGCJGGH CFG KAJGD JF□OF F?(KGDG8 ,@□HN KA G GN A>' A□H '
ABC A>'□C GM>'H ?' H?DD?□PG KAG@ '?HN CFG ND?@?C□D KAJGD' #FG' ?@G
G O□CG@GHC ? ' 0ADDG KAHN 'H A@G NG DGG CA' CFG G O□CG@GHC A>' CFG
KAGC' ?HN CFB ' OMG?D ' ?J?E CFG @□ C ' A>' A*D ADN□H?DE P□ □AH ' ?HN'
0AH O□AB ' CA' CFG BH□PGD ?M' ?J ' G GHC□?M CA' CFG F□ FG C G OGMMGHOG' A>'
□DD?N□?CG ' CFG JFAMG 0A@KMG '@AD?M JADMN' H' JF□OF' JG >AD' ?' C□@G' M□PG'
?HN' @APG ' ?HN' F?PG' ABD' LG□H ' J□CF CFG' LD□ FCHG '>A>' F□ ' A JH' □HCGM-
MGOCB?M' BHM□ F□' A J 'C CF?C ?MCFAB F'CFG 8) GHB ?HN'
NAH□ ' ?HN' CFG' $B ODGOG' NA' HAC' KDBCGHN' CA' LG' CFG' ODG?C□AH ' A>' CF□ '
JAHNGD>BM' KAJGD□R CFG□D >AD@ 'N□N' HAC' NG@?HN' □C ' 0A@KMGCG G GDO□ G
R CFGE' 0ABM' HAC' F?PG' LGGH' KDANBOGN' LE' ?' @?H' JFA' N□N' HAC' HA' G '
CFG' KAJGD' ?HN' F?N' HAC'? □NBAB ME' 0BMC□P?GGN' C□ H'□C ' AJH' KDAKGD'>GMN'
H' CFG GOAHN' KAG@' @ADG G KGO□?MME' NA' JG' CF□H(' CFG' KAJGD' F?'
FC ' @□HN' ABC A>' F□ 8AJH' K?DC□OBM?D' LG□H ' ?HN' >GM' ?HN' @?NG' ACFGD '
JAHNGD>BM' KAJGD□R CFG□D >AD@ 'N□N' HAC' NG@?HN' □C ' 0A@KMGCG G GDO□ G
0AHC□G@KM?CAH' ?HN' CF?C' BLM□@G >?ODBMCE' LE' JF□OF' ?' DG?C @□HN'
LGOA@G ' CF?C' AH' JF□OF □C @GN□C?CG I 8Z' .BC' CF□ '= BLM□@G' >?OBMCE'I'
JGHC' DG?CME >?DCFGD' JFGH' □C' LGO?@G' ND?@?C□O' H' CFG' H?DD?C□PG'
KAG@ ' V>' ?H' ADN□H?DE' @?H' J G' KGDKGCB?MEE' GG CFG' H?DD?CAD' AMG-
□N G' □H' ?' K? ? G' KDGP□AB ME' QBACGN' F?' FAJH' CFG G GHC□?M
BKGD□AD□CE' A>' F?(KGDG8 ' H?DD?C□PG KAG@ ' JFGDG CFG' PFAMG □ ' KM?OGN'
LG>ADG' ABD' P□G J ' CFG' KAGC' BHK?DC□O□K?C?H ' □H' CFG' K? □AH ' #FGDG' □ '
?' DG@?D(?LMG' G ?@KMG' A>' FAJ' CD□OCME' F?(KGDG ?NFGDGN' CA' CF□ '
KD□HO□KMG' □H' F□ ' LG?BC□>BM' KAG@' A>' ' $APGD8 ' A@KM?□HC' #FGDG'
CFG' KAGC□ ' ?OCB?MME' KDG' GHC' CA' CFG' OGHG' R

6'O I' 77M'H 99' H GP'K iKM P' IA' P OPO'
#'L9M iN7ig'GN T'7 I'M'G GNP iQ' M9P
T'GL NG'N 'MMNPiO'NH G O JA9P' KP'MKK OPO
#iO'O i'2'9M O'N '9 GN'NHP'GMO NJ%O'MM9P+R

6'O I'NHP'APG PQPO'# OPM'M99' i'L GN
iP'AT'NHP'N JGN9PGG' , iQG 7'7M9GP OPG P
/JGN A PMNHPO' M]J i'9PM PG'NHP'& IMi'H GN+
#iO'N ' MN J1'APM G R' BK+

#FG' KDGOGN□H ' O□DOB@ C?HOG ' J F□OF' □@KGM' CF□ ' SABDHGE' ?DG' CFGH'
D?K□NME' CAMN' ?□H ' ?>CGD' CFG' ODA J H□H ' ?OC□AH' A>' CFG' CD? GNE ' CFG

' / NP M T'&PIM iG' 9# #'L') +

6"p p' NH' N' G QH'MG' 7'HP'HPM N' J9O'A PMU
HP'NH G7 NH' M]J i%G'iM I p' Y"p'HP%GHP'GMTG#
JN' I p'NHMI'Y'HP%HP'L 'N iQJP'K J9O'i N'GLPMU'8
*)

#FG' F?HN' CA' J F□OF' CF?C MAPG' LGMAH ' □ ' NG ODLGN' □H' CFG' PGDE' KGD-
>GOC□AH' A>' KAGCDE R

6'X NH JN' NHP' APO' HP' NHP'7M 'HMiO' MG+
1i'NHP'Q ppi'K p 9PN8 H GP'LP 7PK N' H NP'
9 5 %O'9 UP'MI'#L 9'OM GT' i'NHP'Q MGG+R
V

H' CFG' 0F?@LGD' A>'□HHAOGHOG'#?DQB□H'□ 'K?□HCGN' J□CF' CGDD□>D' D?HNGBD'
J F□OF□ ' APGDKAJGD□H 'LE' CFG' >ADOG' A>'OAHCD? C

6'H G GM O'HP' GHMUPG' M9 7N'H G'& I M1'A9MOP+
X H KH'9 UP'M'7M9K i'N p iQ' i'NHP' GU PG
JKHPN'NHP'7 9 AP9 ' NH'H G iQ%G'GHMOP+R

#FG' 0A@KM?HC' A>' $BODGOG' ?>CGD' #?DQB□H' F?' NGK?DCGN' J?' @G?HC' CA'
LG' BHND?@?CO' #FG' ?OC□AH' ?NP?HOG ' HAC' .BC' CFG' KAGC' @?(G ' F□ ' FGDA□HG' LGJ?M' FGD'
HAC' □C GM>' □H' CFG' ?OC□AH' .BC' FG' F?' CA' CGMM' F□ ' K?□H>BM' CADE'
>?CG' □H' GPGDE' P?D□GCE' A>' M?@GHC' CF?C' F□ ' LABHNMG ' 0A@@?HN' A>'
□@?' GDE' OABMN' >BDH□ F' #FG' MGCCGD' CA' AM□?C□HG' □ ' J□CCGH□R ?' MGCCGD'
A>'CFG' @A C' CAB0F□H ' □@KM□O□CE R

6' H J' NHT'9 Q'
1 7'NHMN'JI NHT' 7P'NHMN'Q PPNPNH'NHPP+
"PM9NH'N 'NHT'LP G i'[ipWN' JKHGM7P'N 'M77 Q'
@27'P p'9 p'NHT'/JK pKP'NH J' 9N'GPP
IP'L pGpiN'GLPPO'N 'K IP'MiO' G N'IP'
'2'K I IpiO'IP'7 I' J'H JGP'i'Q P78
'T' pG M P'NPO JG'NH JQH'I T' OG M P'A P7+R

6' U 97J9'LM iN iQ'IMOP'7 '- MI %G' T'R

6' 'K I7 NMA9P'GNM'O O'9piO'H G'9 QHN R

A>' #?DQB□H' MG?KC□H '>DA@' F□ ' LGN'?HN' A>?CME' @□C□H '?□ '>?MOF□AH' AH
?' >M□HC'M□ F□C□H '?' CADOF

□ 'AHG' A>'CFG' @A C' GM?LAD?CG' K? ? G 'A>'CFG' KAG@' G GHC□?MEE' O? C□H
?H' BHND?@?C□O' @ABMN' .BC' CF□ '□ 'LBC' ?' KDGMBNG' CA' CFG' O?C? CDAKFG'
JFGDC'□>' JG @□ C?(G HAC'?' CDGH CF' A>' K? □AH' □ 'KBC' >ADCF' JF□OF□ ' R
JADCFE F□@' JFA' NDGJ'CFG' CGDD□LMG' ? AHG□'A>'$G?D' R

6'"p p' NH'N'G QH'MG' 7'HP'HPM N' J9O'A PMU
HP'NH G7 NH' M]J i%G'iM I p' Y"p'HP%GHP'GMTG#
JN' I p'NHMI'Y'HP%HP'L 'N iQJP'K J9O'i N'GLPMU'8
*)

99 MZ%P 'I M!T MKKPIUG MIO' OP9MTG
IN I P9T' A PMMH !QG' G KU' MIO' GH N MGGMTG
HP' JWP G NH G' 6' "'P' HP'7M '9 OG' %W G HP+
HM%' Q JPG NH G HMIO'N 'Q P' MH G' J!O' N 'I P+%R

; &?MAHG'HF F□' OAHOMBN□H ' DG@?D(' BKAH' CFG)GHB ' ?NH' NAH□ ' ?NH' $BODGOG ' ?E R = G' FABMN' NA' F?(KG?D' □HSB C□OG' J GDG' JG CA' CDE' CFG@' LE ' ? OA@K?D□ AH' J□CF' @ADG' @ANGDH' ?NH' KAM□ F'N KDANB0-C□AH ' AD' J□CF ABD' KDG GHC' □NG?' A?' KAGC□O?M G OGMMGHOG I' #F□ ' J? ' J□CCGH' HF CFG' EG?D' DE A'R CFG KGD□AN' J F□OF' DGSA□OGN' HF CFG = KAM□ F'GN' KDANBOC□AH 'I' A?' ?EM@E' ?NH' &□ ' G J?DN' ?NH' >ABHNGN' □C ' =';NG?' A?' KAGC□O?M G OGMMGHOG I' AH' A@G' C?HN?DN' J F□OF' GOBDG' HF □C ' 0AHPGH-C□AH?M' >AD@ ' @□ FC' NGK?DC ? ' >?D' ? ' >?D' KA □LMG' >DA@' □@KM□OC□E' ?NH' H?CBDG' CA' □PG' B ' J□ADN ' J□CFABC' CFAB' FC' ?DD?H GN' HF PGD G ' J□CFABC @B □O' C' J?ABMN' LG' □HSB C□OG' □HNGGN' CA' F?(KGDG' CA' CDE' CFG)GHB ' ?NH' NAH□ ' ?NH' $BODGOG' LE' BOF' ?' C?HN?DN' A?' =';NG?M G OGM-MGHOG I' .BC' J G' F?PG' ABCM□PGN' CF?C' KGD□AN' . E' J ?E' A?' ?KAMA E' >AD' F?(KGDG' &?MAHG' ?NN ' ,'CF?C' >G'J' ?BCFAD' □□ G' @B0F' ?LAPG' CFG ? G □H' J F□OF' CFGE' M□PG I' G' >BDCFGD' ?E R =';#FG' KAG@ ' A?')GHB ' ?NH' NAH□ ' ?NH' CFG' "'?KG' A?' $BODGOG' J F?CGPGD' AK□H□AH' @?E' LG' HA'J' GHCGDC?□HGN' A?' CFG@' J GDG' GDDC?□HME' @B0F' ?N@□DGN' □H' F?(KG?DG8' M□>GC□@ I' #F□ ' □ ' OAH' AM?CADE' H' F?(KGDG8 ' M□>GC□@G' CFGDG' J GDG' ?' >G'J' @GH' CF?C' CFG' JADMN' F?' □HOG' CFAB FC' A@GJF?C' QB?M□>GN' CA' G C?LM□ F' ?H = □NG?' A?' KAGC□O?M G OGMMGHOGI R KGH GD' %D?ECAH ' 0AH ' AH' M□GCOFGD' F?K@?H ' >AD' G ?@KMG' #FG G' J GDG' HAC' @B0F' P?MBGN' □H' &?MAHG8 ' AMNGH ? G A?=' @ADG' @ANGDH' ?HN' KAM□ FGN' KDANB0C□AH 'I' LB□' MGC' CF?C' K? ' G' ?DG' OA@□H ' L?O(' CA' CFG' AK□H□AH ' A?' CF□ ' AL' AM□GCG' OFAAM ' ?HN' J G' PGHCBDGN' CA' CF□H(' CFG' @?SAD□CE' A?'DG?NGD ' HA'J' J□MN' HAC' DGQB□DG' B ' CA' @?(G' ?H' ?KAMA E' >AD' F?(KGDG8 ' KAG@

>' &?MAHG' CFAB F□' C' HGOG ?DE' CA' AM□O□C' □HNBM' GHOG' >AD' CFG)GHB ' ?NH' NAH□ ' ?NH' $BODGOG ' FG' NDG'J' GPGH' ?' @ADG' C□@□N' LDG?CF' J FGH' FG' PGHCBDGN' CA' KG?(' A?' CFG' AHHGC ' =' ' NA' HAC' >GGN' ?HE' DG?'C' KDA-KGH □CE' CA' C?HN' >ADCF ? ' CFG' OF?@K7' A?' CFG G' OA@KA □C□AH ' A'J-

?' ' - P7MKP'N ' - PN KM9' X UG+

n - P7MKP'N ' - PN KM9' X UG+

6' HP P' G PWMMI'N' M'G I M99' 9J1P' 7 I GKP99MIP JG'L P I'G i' H K'H' HMUGLPM P' PWL P8GPG' H G' 7PP9 I'QG' i'H G' i+ 2N' G i N' O 77 K3'9N ' K iKP P'NHMN' NHP' PO N ';:P Q9' NPP PIG';GH J9O' HM P' APPI' IGPIG A9P'N 'NHP' APMJN PG' 7 IP'L N i' 7NHMN' 9J1P' NHP' iIPN58 NH JQH' NHP P' G i N'MLM N' 7NHP' N IQG' 7'NH G' L PN' HP P' G 7 J!O' i'MI' P]JM9'K ILMGG' M' Q PMMP ' iJ1 AP ' 7 PW]J G NP' 7PP9 I'QG

9M I PIMA9P' G' H G PN ' H 'KMI'AP9 P' P'NHMN' NHP P' G'MITNH IQ' 7O ' IP' I7M99 A 9 NT' i'NHP' K9M I J ' 7'NHMN' G I M99'NH JQH'9 JO'L N i' 7'NHP'K I I J!' NT'P P'G Q' P IPO' ATN7MKN N JG' I79JPIKP' H K'H' J!OP' NHP'IM I P 7'NHP' (S ' LMGGPG' NGP97'JL i' NHP'J!NH IU IQ'7 'NHP'-31-/3+R'7

C' □ ' CF□ ' KGDKGCB3'M @□ C?(G A'; CFG' KBL□O' >AD' CFG' KGAKMG' CF?C' F? ' MGN' CA' CFG' LGM□G' CF?C' CFGDG J ? ' ?' KGD□AN' JFGH' F?(KGDG' J ? ' HG' MGOCGN' G' J ? ' O ' □H' CFG' FG?DC'A'; CFG' KGAKMG' #FGDG ' □H' CF?C' NGGK' D□OF' A□M' F?PG' CFG' AHHGC ' DG CGN' NBD□H ' CJA' OGHCBD□G ' ?NH' FGDG ?NH' CFGDG' □H' DG@ACG' KM?OG ' F?PG' CFG' GGN ' KBC' >ADCF' MG?PG ' ?NH' >MAJGD ' MM' EABH ' □@? □H?C□PG' @□NH ' HAJ' DGSA□OG' □H' CFG□D' FBG ' ?NH' CFG□D' >D? D?HOG' . BC' CF□ ' KDG>GDGHOG' A'; CFG' >DG F' ?NH' LG?BC□>BM' A'; KAGC□O?M' M□>G' CA' CFG' ?N@□D?C□AH' J F□OF' HAJ' KDGP?□M ' >AD' CFG G BC-#FA G' JFA' GGH ' CFG' ?N@□D?C□AH' J F□OF' HAJ' KDGP?□M ' >AD' CFG G BC-KAB□H ' A'; =';G QB□ □CG' >GG□H ' >GMO□CAB M□ G KDG GN I' C?M(' A'; CFG AHHGC ' ? ' GQB?M' □'; HAC' BKGD□AD' CA' CFG' DG?CG C' A'; CFG KAGC8 ' @□ F□CE ND?@? ' 0A@K?D□ CF□H ' CF?C' ?N@□C' A'; HA' 0A@K?D□ AH' FA' JABMN' KG?(' □H' CFG' ?@G' LDG?□F' A'; CFG G Q@' A'; BK□N' ?HN' CFG ?D□CFGHAH'W H' CFG' AHHGC ' G Q B□ □CG' ?' ' CF□E' ?D□' CFG' KAG□ AG ' HAC' ABC' A'; F□@ GM'; V?□C MG? C' □H CFG' >AD@' A'; CFG' 0A@KA □C□AH ' ?NH' FG' J?M(' FG' CFGDG>ADG' □H' ?' H?DDA?' O□DOMG' A'; ?□C' H' CFG)GHB ' ?NH' NAH□ ' ?NH' CFG' $BODGOG ' CFG' O□DOMG' J□NGH ' .BC' □H' CF□ %D?@? ' CFG' OGHCDG □ ' CFG' B@?H' AB M' CFG' O□DOB@>GDGHOG' CFG' *H□PGD G

#899) 0 : $' : 0' : ' : 0' 9 03#6

7P9 K N JG9T' PWL' PGGPO*' JN'7 I' PQM O'N 'NHP' K N K%G' i' K PO N' HP' J9O' i N' HM P' PIN,PO N ' NM9U' 7 M!' MK\' 7 LM 9 M I PIN' I N Ap I Q' GN iQ' pi JQH' N 'K I L'P9 NHP' LP' JGM9 7 NHPGP' 'MITL OJ!KN i' 7 HMJUPM P' 7 HP' HMO' i N' Ui i' NHMN' NHP' LP L9P' 7 3IQ9MIO' p P' QI MIN' 7 NHP' N PMGJ PG' K iNM IPO' i' NH GP' 9 NN9P' L PKPG+R'

#F?C' □ HAD?HOG' F?' LGGH' DG@APGN ' ?HN' HA' AHG' F?' 0AHCD□LBCGN' @ADG' CA' □C ' DG@AP?M' L'E' ODG?C□H ' ?' OFAAM' A'; KAGCDE' >ABHNGN' BKAH' #DBC F' ?HN' ?CBDG';CF?H' ADN JADCF' F□@ GN>' #FG' OD□C□O ' A'; CFG' M?' C' OGHCBDE' F?PG' K?' GN' ? J ?E R

6' -PP'MIO' MM9 I'
O GMUP'NHP 'NP I L9PG' O I +R

6' HP P' IP P ' HMG' APPI'M' LP O'MIO' LP HMLG' IP P ' 99 AP' I' H K'H' K JG' L PN T' 7 G IP'U I O' ' NHP 'HMG' I N'PWK NPO' I P' CPM9 JG' MO I MN i'MIO'APPI' 7M' I P' P'QPIP M99T' PMO' NHMI' Q O8 AJN' NH G' MO N'IMQP' MNNP'IOG' NHP' Q O' NHMN' ',NHP' '*' MG' P99 MG' NHP' GLPK PG' GJ PG 7 I' MQP' N 'MQP' 8 HP PMG' 7' NHP' OPL M PO' NH JQH' NHP' GLPK PG' AP' I I MM9'NHP' IO OJM9']J KU9T' - %$ %';' NHP' AEPK\' 7 L PGPIN' MO I MN i' MI GHPG' AP I Q' GJLL9MINPO' AT G IP' NHP' MG' PMG 9T' L OJKPO' H K'H' NH JQH' i APNNP 'A IQG' NH' N M\' 9PMO\' NHP' MMN i' 7 i PQNT' S NH' MOMLNMN i' I P' 9PGG' GU 97J9' N ' NHP' KHMIQ I0' HJ I J G' 7 NHP' I NE' NT' 7 NH GP' H 'M' I GN' MN' 9P GJ P' N ' PQM O' L PN KM9' UG' HPI' NPT' 7 GN' G 9 K\N NHP' MNNPIN i+ 2 ' N' NHP' PGJ9N' 7 NHP' H 9P'NHMN' I'NHP' L I i' 7 NHP' NP 'NHP' EJOQ I PIN' 7 NHP' LP' L9P' G I N' N ' AP' PGLPKNPO'*' HP' NH JQH\' G I GN' iEJ' JG8' MIO' K J9O' NHP' KHM QP' AP' A JQH\' MQM IGN' H I ' HP' J9O' PLP9' N' IO QIMN i+' KMN i' HPI' N' G' GM O' MA PS NHMN' 7 ' L PN T' NHP' '*' MG' P99 MG' NHP' GLPK PG' % %' #'IO' H ' O PG' N' GJ P' AJN' NH JQH' NHP' LP L9P' ' HMN' L P_ GP PG' N' AJN' NHP ' INP99PK\N' MIO' NHP ' GO I'

HP' KP' NHMN' GGJPG' 7 I' NH G' GL N' G' NHMN' J'- - ' ' H K'H' NHP' 5P NT' IG+ P+G+
O 9 GH' I JGN' HP' AP' H 'KMI' I GNMUP' 7 ' NH G' N' 9 KM9' MKK9M I MN i' 'N' N MIG N T'
JNK' T SN MIG N T' NH JQH' N' AP' 7 'TPM G' 9 KM9' NHP' JQH' 7 I' N' I MIN i+ N 99' I P'

ÜG+ P7MKP'N ' - PN KM9' X UG+

-/#4 ' # &2 35' 1' " # -3&3+

>? 7 7 % 7 7

C?>>ADN #FG CFGADE A> CGGPGH J CF DG ?DN CA <<$AOD HG I CF?C C J? JD CCGH LE &?DMAJG JFA NGN H (+&) CF?C C J? GHCGDGN AH CFG C?C AHGD LAA(? &?DMAJG MG>C C CF?C A@G DGP AH J? HGOG ?DE ?HN CF?C C J? KBLM FGN J CF CFG HC?M A> CFG DGP GD MM?@ @CF H 515 H (+&* MM?@ @CF KD HCGN ? OAMMGOC AH A>>CE AHHGC GHC CMGN = FMAD AD CFG A@KM?HC A> CFG K? AH?CG NG K GN FGKFG?DN I H = !H M?HN8 GM OAH I KD HCGN H 477 CFGDG ? M CCMG KAG@ GHC CMGN = +AD H8 %DG?@ A> F >?D FMAD I LG?D H CFG HC?M JF OF HA NABLC LE CFG ?@G MM?@ @CF G G CD?OC CFG >D C G FC M HG A> CF KAG@ R

= F?C C@G LD FC #C?H H CFG TGH CF ?C
HN GQB?MME CFG > GN KAMG N N FG?C
FGH CA @E >MAO(@E N?ME JAG 0F?C
HN BHNGDHG?CF ? LDA?N LGGOF CAA(@E G?C
#FG NDG?@H AN JF OF &ADKFGB KAGC O?MM
B @GHC H >BGM CA @E Z!CH?8 >DG
CF MGGK KA G H @E JG?(GH G ?MM
H ?KK?D C AH @?(G @E FAKG ? K DG I

H CFG = GH BD? $ CGD?D ? I VPAM P K 3 ?H ?OOABHC PGH A> ?
JAD(KD HCGN H 5 GHC CMGN = #FG +AMNGH KFDAN C ? KMG? ?HC
N OABD G KGHHGN LE OAFH +D?H G GHCMG@?H I H JF OF ? KAG@
  ?M A >ABHN LE JF OF CFB?NG OD LGN R = ! FCGGH OA@-
@GHN?CADE M HG BOOGGN LE #F KDAL?LME J? @ @CF
CFG JD CGD A> ACFGD KAG G F?(KG?DG C OABMN HAC LG LACF AH
?OOABHC A> CFG N?CG ?HN LGO?B G FG CFB B GCF CFG OA@@AHKM?OG
KDAOG A> OA@KM@GHC G@KMAEGN H CF?C ? G H JF OF @ECFAMA E
?HN KGD AH> O?C AH ?DG @?NG CA F?MC >AD C I G G CD?OC >ABD M HG
>DA@ CFG G OA@@GHN?CADE PGD G R

= GDG) DCBG GG@ CA OFGO(?C) OG ?HN NA@ AMME C?BHC
GDG) GHB FG G C ?C HAB FC ?HN N?@G %?HG FG P?BHC
GDG ?MM? BK N NACF NGCG C ?HN ?MM F O?DKGC (H FC
GDG NACF FG FAJ CF?C EABCF>BM @K H >AMME @A C NGM FC I

GDG CFGH J? ? ?KKG?D H ? ? KAG@ H 5 ?HN ? ?H H
514 = $AOD HG I H 515 G HGJME GC >ADCF YO LE #FG
?@G ?HAHE@AB KGD AH @ FC F?PG JD CCGH ? KM?E H CFG PGDE G?DME
N?E A> CFG !H M F C? G OAHCG@KAD?DE JCF CFG >D C KGD>AD@?HOG
A> GGMG +DGGHG &?DMAJG ?HN EN FG @ FC F?PG DGP GN C ?HN
KBLM FGN C H 515)GDE MCCMG (HAJH A> CF ?BCFAD HACF H
A> F KGD AH?M F CADE OAKE AD CJA ?DG H G CGHOG A> F >D>CE
AHHGC ?HN D> CF?C LG >?@G F MCCMG LAA(F? LGGH AMN >AD
H ABD AJH N?E GPGHCE EG?D ?>CGD CFG >D C KBLM O?C AH A>
= $AOD HG I C DGKD H CGN H ? OAMMGOC AH A> F?(KGDG8 JAD(LBC
JG F?PG HAC ? K?DC OMG A> GP NGHOG CF?C C J? CD?N C AH?MME ? OD LGN
CA F?(KGDG #FG KD HO KMG JF OF ?KKG?D CA F?PG NGCGD@ HGN CFG
KBLM FGD A> ABD KAGC8 JAD(H 44/ CA ?NN CA CFG D = @KDG AHI
? OAMMGOC AH A> = GPGH KM?E HGPGD LG>ADG KD HCGN H >AM A I ?KKG?D
CA F?PG LGGH ? PGDE @KMG AHG #FGE CAA(?MM JF OF CFGE >ABHN
LG?D H CFG HC?M AD CFG H?@G MM?@ F?(KGDG ? @?E LG
GGH >DA@ CFG >AMMAJ H C?LMG R

N9P 7-9MT+	2! N M9G M I P ! N9P+	5MNP+
-P K9PG - !KP 7 T P +	X 99 M I HMUPGLPM P	=
MQPO P 7 / K !P + + +	X + +++++++++++++++++++++++++++	)=)
O GN -M N 7 NHP / 7P 7	2+ !M I P ! N M9	
? H! 19OKMGN9P + + +	+ X 99 M I HMUPGLPM P+	
H ! K9P " GN P 7 H I MG	2+ !M I P ! N M9	
/ O I P99 + + + E	8 X + ++++++++++++++++++++++	
HP / !O ! - O QM99+ + +	X 99 M I HMUPGLPM P	)
HP -J NM !P++++++++++++++++++	X + ++++++++++++++++++++++++++	
# 4 UGH P MQPO P + + +	X + HMUPGLPM P + + +	

#FG A> F?(KGDG ?>> GN CA CFG CCMG A> ?HE A> CFG G KM?E
O?HHAC ? JG F?PG LG>ADG AL GDPGN H ABD HAC OG A> GD OMG LG
DGOG PGN ? GP NGHOG A> CFG ?BCFAD F K = D 0AFH MNO? CMG I A> JF OF
CJA GN C AH JGDG KBLM FGN H 477 LE CFG ?@G LAA(GMMGD CFG AHG
J CF F?(KGDG8 H?@G CFG ACFGD J CFABC VCFG AHG J CFABC ? H?@G
LG H CFG @A C OADDGOC J? BHQBG C AH?LME HAC JD CCGH LE F?(-
KGDG LGO?B G JG F?PG DGOADN A> ? K?E@GHC CA CFG ?OCB?M JD CGD
* *

#F O DOB@ C?HOG OA@KGMMGN B CA HQB DG HCA CFG ?BCFAD F K A>
GD OMG ?M@A C JFAMME J CF DG>GDGHOG CA CFG HCGDH?M GP NGHOG HN
BKAH CFG ?@G KD HO KMG JG @B C G ?@ HG = #FG $AHNAH DAN ?M I
?HN = #FG , AD(F DG #D? GNE I C @?H>G C CF?C CFG H C?M
BKAH CFG C CMG K? G A> CFG G?DME OAK G O?HHAC LG DGOG PGN ? ZP NGHOG
?C ?MM A> CFG ?BCFAD F K FAJGPGD OAHPGH GHC C @ FC F?PG LGGH
>AD ? KBLM FGD CA ?OOGKC CFG@ ? GP NGHOG >D>CE EG?D ?>CGD F?(KGDG8
NG?CF @ FC J CFABC ?HE ?CCG@KC CA OAHPGE CFG HAC AH CF?C
= $AOD HG I J? JD CCGH LE F?(KGDG F?PG >?DME CAAN >AD MM?@
@CF ?HN H CFG ?@G J?E CFG A> = #FA@? $ADN DA@JGMM I
?HN CFG A> = #FG BD C?H I @ FC F?PG DGKDG GHCGN GHCJADCF
@CF ? JGMM (HAJH ND?@?C O ?BCFAD ?C CFG N?CG A> CFG KBLM O?C AH
A> CFA G KM?E JFA JDACG @?HE K GOG H OAHSBHOC AH J CF CFG LG C
KAGC A> CF?C KDAM>D KGD AN A> CFG C? G G KDAOGGN CA ?H
?H?ME A> = $AOD HG I HAC ? JG JABMN DGKG?C CA ?CCG@KC ?HE
N KM?E A> H GHB CE H >HN H K?D?MMGM AD OAHCD? C LBC HQB D H
HCA CFG LDA?N KD HO KMG A> F?(KGDG8 ?DC CA ?KKME A@GCF H M(G
? CG C A> CFG GHB HGHG A> CFA G KDANBOC AH JF OF F?PG LGGH
? HGN CA F@ ?C P?D AB KGD AN HOG CFGE JGDG JD CCGH A@G PGDE
MAA GME ?HN F? C ME ? JG CF H(?HN ACFGD BKAH DABHN CF?C
NG@?HN ?K?C GHC ?HN O?DG>BM G ?@H?C AH

OOADN H CA #GO(= $AOD HG I CFG G?DM G C A> F?(KGDG8
ND?@? G F? ? CFGADE CF?C C F? ?MCA GCFGD ? KAM C O?M CGHN-
GHOE R = C GG@ CA F?PG DG>GDGHOG CA CFG C @G JFGH !H M?HN
J? B>>GD H CFDAB F CFG K?DC G >AD@GN H >?PABD A> & ?DE CB?DC
?HN CA F?PG LGGH JD CCGH LG>ADG FGD G GOBC AH JF MG ?CC?O(JGDG
>G?DGN ?C FA@G ?HN HP? AH >DA@ ?LDA?N I C J? OADDGOCGN LE
CFG ?BCFAD ?HN KD HCGN FG >BDCFGD ?E H 515 JFGH ?HACFGD
K?H F HP? AH J? >G?DGN G OAH>G ABD GMPG BCCGDME ?C ?MA
CA DGOA H G H = $AOD HG I CFG @ANG H JF OF F?(KGDG B B?MME
?J?(GH CFG MAPG A> OABHCDE #FG @?H? G@GHC H CF K?DC OBM?D
 G GHC?MME OAHPGHC AH?M LG H CFG DG>MGOC AH A> CFG ?BCFAD8 OFAAM
MG?DH H C @B C LG GP NGHC CA ?MM ABD DG?NGD CF?C CFG G OF?D?OCGD-
 C O ?DG CFG PGDE DGPGD G A> F?(KGDG OFMG GM ?E A> = $AOD HG I
R = #FG KDAA> A> CFG GHB HGHG A> CF K GOG ?DG HAC ?MCA GCFGD
BH?@L BAB CFG DABHN >AD NABLC AH CFG ACFGD F?HN ?DG GHC CMGN
CA ?CCGHC AH AJGPGD CF QBG C AH @@GN?CGME OAHHGOCGN J CF
CF?C DG KGOC H #CB HNDAH OB ?HN @B C LG ?C CFG ?@G C @G
DG AMPGN H CFG ?>>D@?C PG AD HG ?C PG I G N GHC GHC DGME >DA@
CF AK H AH C ?KKG?D CA B CF?C CFG N>>GDGHOG ?DG ? CD (H ME
@?D(GN LGCJGGH = $AOD HG I ?HN #CB HNDAH OB ? LGCJGGH #CB
HNDAH OB ?HN CFGMMA #FA G KDANBOC AH JGDG GK?D?CGN LE ?C
MG? C CJGHCE EG?D #FG EABCF @ FC F?PG KDANBOGN ?DAH CFG
KGD>GOC @? CGD A> F ?DC M? A #FGDG CFG LDA?N @?D(A> AD H-
?M CE H CFG OF?D?OCGD T?C AH ?HN M?H B? G A> #CB HNDAH OB #FG
CGDD LMG K? AH JF OF ?DG CFGDG NGPGMAKGN LE CFG ?OC AH >HN CFG D
PGHC H CFG ?KKDAKD?CG M?H B? G A> K? AH CFG LAMN ?HN A@GC@G
DBNG ABCKABD H A> H?CBDG #FG OF?D?OCGD A> = $AOD HG I ?DG @APGN
CA K? AH LBC >D C ?HN M? C CFGE KG?(ABC A> LAA(H F?(KGDG
F F KAGCDE CFG @A C H?CBD?M M?H B? G A> K? AH C LGMAH CA
CFG C?CG A> G O CG@GHC H JF OF CFG OF?D?OCGD KM?OGN C F?D-
@AH TG JCF CFG G O CGN C?CG A> CFG DG?NGD AD A> CFG ?BN GHOG
. BC CFG JFAMG @? GDE A> = $AOD HG I @ECFAMA O?M H ? KGGOF

A>' CJGHCE' M□HG ' JG' F?PG' "F?N?@?HCFB ' GDOBMG ' !BDEN□OG ' !DGLB ' MBCA ' &AD ' #?HC?MB ' GMAK ' #□CFAHE ' &□HA ' 0BK□CGD ' &?D ' ?HN' #□ □KFAHG ' #FG' @ECFAMA □O?M' KGN?HCDE' □ ' O?DD□GN' CA' BOF' ?H' G CGHC ' CF?C' CFG' KM?E ' CFAB F' BHQBG C□AH?LME' JD□CCGH' □H' ALGD' ?NHG ' □ ' ?' KGD>GOC' CD?PG CE' A>' CF□ ' KGOBM□?D□CE' A>' CFG' G?DME' ND?□F?C□ C ' AHPGH-C□AH?M' ? ' +DGGHG' ?HN' &?DMAJG' ?DG' □H' CFG□D' □@? GDE ' ?' □H MG' ?OC' A>' =' $AOD□HG' I' OAHC?□H ' @ADG' A>' CF□ ' C□H GM' CF?H' ?MM' CFG□D' KM?E ' KBC' CA GCFGD ' KDAHG' ? ' CFGE' ?DG' CA' CF□ ' KGO□G ' A>' NGOAD?C□AH ' H' CFG' ?BCFAD' A>' =' $AOD□HG' I' □C' LGOA@G ' A' GHC□DGME' D□N□OBMAB ' CF?C' CF□ ' QB?M□CE' ?MAHG' JABMN' NGO□NG' B ' CA' ?E' CF?C' &?DMAJG' F?N' HACF□H ' CA' NA' J□CF' □C ' AD' +DGGHG' G□CFGD ' #FGDG' □ ' ?HACFGD' KGOBM□?D□CE ' ?M A ' □H' =' $AOD□HG' I' JF□OF' N□ C□H B□ FG ' □C' ? ' @BOF' >DA@' #□CB ' HNDAH□OB ' ? ' □C' NAG ' >DA@' CFG' ?OODGN□CGN' JAD(' A>'CFG' LG C' ND?@?C□ C ' A>' CFG' G?DME' KGD□AN ' G' ?MMBNG' CA' CFG' □HOG ?HC' DGKGC□C□AH ' A>' ?' KFD? G ' □H' CFG' GHNG?PABD' CA' LG' >ADO□LMG' ?HN' DF□GCAD□O?M' K?D□H ME' B GN ' ?MM' KAGC ' (HAJ ' CFG' KAJGD' A>' ?H' GOFA' JF□OF' □HCGH □>□G ' CFG' AD□ □H?M' ABHN ' LBC ' JG' J□MM' GMGOC' ?' >GJ' BOF' K? ? G ' >DA@' =' $AOD□HG' I' JF□OF' ?DG' CFG' @GDG' KM?C□CBNG ' A>' JG?(HG ' ?HN' □HG KGD□GHOG' R

=' #FG G' ?D@ ' @E' MADN ' CFG G' HGPGD N?BHCGN' ?D@ I
=' #F□ ' FG?DC ' @E' MADN ' CF□ ' HG8GD ?KK?MMGN' FG?DC I
=' OOBD GN' C?D ' N?@H8N' ?HN' ?OOBD GN' C?D I
=' .DBCB ' CF?C' J?' ?' MADE' CA' >C ' ?MM
.DBCB ' CF?C' J?' ?' CGDDAD' CA' F□ ' >AG I
=' AD' ?C' CF□ ' C□@G ' EG?' ?C' CF□ ' KDG GHC C□@G I
=' ? C ' BOF' ?' FG?C ' EG?' BOF' ?' OADOF□H ' FG?C I
=' □HOG' @□ FCE' (□H ' ?DG' BLSGOC' CA' @□D□□?K'
V E ' @□ FCE' (□H ' ?DG' BLSGOC' CA' @□ F?K I
=' .BC' C F□ ' >ABM' N?E ' CF□ ' >ABM' ?OOBD GN' N?E I

A' NABLC' JG' @?E' >□HN' CF□ ' DFGCAD□O?M' >AD@' ?@AH C' CFG' >ABHNGD ' A>' ABD' ND?@?' ?HN' A>CGH' □H' ?H' G OG ' JF□OF' ?KKDA?0FG ' CA' CFG' D□N□OBMAB ' C?(G' ?' K? ? G' >DA@' +DGGHG8 ' =' DM?HNA' BD□A AI' >AD' G ?@KMG R

=' MCFAB F' @E' OABHCDE8 ' MAPG ' NG?DGD' CF?H' KG?DM
D' @□HG ' A>' AMN' @□ FC' JGMM' F?PG' (GKC' @G' L?0(
#FG' JGGC' OAHPGD □H ' J□CF' @E' (□H ' ?HN' >D□GHN
$G>C' ?MM' >AD' MAPG ' @□ FC' JGMM' F?PG' (GKC' @G' L?0(
#FG' G? ' LE' GKCBHG' FA□ GN' CA' CFG' FG?PGH
FA G' N?H GDAB ' >M?J ' @□ FC' JGMM' F?PG' (GKC' @G' L?0(
#FG' ?P? G' &AAD ' ?HN' HCFDAKAKF? □
FA G' M?HN ' ' K? 8N' @□ FC' JGMM' F?PG' (GKC' @G' L?0(
#FG' NABLC' A>' GHCGDC?□H@GHC' □H' CFG' GPGHC'
FGH' ' ?DD□P8N ' @□ FC' JGMM' F?PG' (GKC' @G' L?0(
.BC' A' CFG' >?@G' A>'>?□D' H GM□O?
C?@K8N' □H' @E' CFAB FC CFG' >□ BDG' A>' FGD' MAPG
' HG□CFGD' OABHCDE ' (□H ' AD' G? ' AD' O?HH□L?M
ABMN' LE' NG K?□D□H ' (GGK' DM?HNA' L?0(I

G' F?PG' CFG' ?@G' ADC' A>' GM?LAD?CG' DGKGC□C□AH' □H' =' $AOD□HG R

,' >' ADCBHG' >?PABD' @G' □H' @□HG' ?CCG@KC
#FAB' F?MC' LG' QBGGH' A>' MAPGME' ML□AH
ADCBHG' F?MM' >?PABD' @G' □H' @□HG' ?CCG@KC
HN' @?(G' CFGG' QBGGH' A>' MAPGME' ML□AH I

#FG' M?CCGD' K? ? G' ?' JGMM' ? ' CF?C' A>' +DGGHG ' □ ' GP□NGHCME' K?DC' A>' CFG' E CG@' A>' DFGCAD□O' BKAH' JF□OF' LACF' JD□CGD ' KDAOGGNGN ' ?MCFAB F' □H' +DGGHG' CFG' @?H? G@GHC' □ ' @ADG' K□D□CGN ' G' (HAJ' A>' HACF□H ' M□(G' G ?@KMG ' A>' CF□ ' E CG@' □H' F?(KGDG ' G OGKC' □H' AHG' KM?E>BM' K□GOG' A>' OA@GNE ' JFGDG' CFG' KD□HO□KMG' □ ' ?KKM□GN' J□CF' CFG' DG?CG C' H□OGCE' A>' ?DC R

=' 5 ' JGGC' ADC□?
>' EAB' N□N' (HAJ' CA' JFA@' ' ?PG' CFG' D□H
>' EAB' N□N' (HAJ' >AD' JFA@' ' ?PG' CFG' D□H
HN' JABMN' OAHOG□PG' >AD' JF?C' ' ?PG' CFG' D□H
HN' FAJ' BHJ□MM□H ME' ' MG>C' CFG' D□H
FGH' HAB FC' JABMN' LG' ?OOGKCGN' LBC' CFG' D□H
,AB' JABMN' ?L?CG' CFG' CDGH CF' A>' EABD' N□ KMG? BDG
' >' EAB' F?N' (HAJH' CFG' P□DCBG' A>' CFG' D□H
' >' F?M>' FGD' JADCF□HG ' CF?C' ?PG' CFG' D□H
D' EABD' AJH' FAHABD' CA' OAHC?□H' CFG' D□H
,AB' JABMN' HAC' CFGH' F?PG' K?DCGN' J□CF' CFG' D□H I
$ ' ' :' OC')

$GC' B ' FAJGPGD ' KDAOGGN' CA' ?' D?K□N' G ?@□H?C□AH' A>' =' $AOD□HG' I' □H' □C ' ?OC□AH' ?HN' OF?D?OCGD□T?C□AH

#FG' NB@L FAJ ' ? ' □C' □ ' O?MMGN ' A>' =' $AOD□HG I' □ ' CAMGD?LME' NGO□ □PG' ? ' CA' CFG' N?CG' A>' CFG' KGD>AD@?HOG ' C' LGMAH ' G GHC□?MME' CA' CF?C' KGD□AN' JFGH' CFG' DG KGOC□PG' KAJGD ' A>' ?OC□AH' ?HN' A>' JADN ' JGDG' □@KGD>GOCME' BHNGD CAAN ' JFGH' JF?C' J? ' G F□L□CGN' CA' CFG' GEG' DGQB□DGN' CA' LG' G KM?□HGN ' ?HN' JF?C' J? ' OAHPGEGN' CA' CFG' □DH? □H?C□AH' A>' CFG' ?BN□GHOG' LE' KGGOF' J? ' CA' LG' @?NG' @ADG' □HCGMM□ □LMG' LE' ?' □ H-K?□HC□H ' K?HCA@□@G ' ACF□H ' OABMN' LG' @ADG' 0F?D?OCGD□ C□C' A>' ?' PGDE' DBNG' C?CG' A>' ?DC ' ?M@A C' CFG' DBNG C ' CF?H' CFG' NB@L FAJ ' JF□OF' □HCDANBOG' G?0F' ?OC' A>' =' $AOD□HG I' OC' ' □ ' CFB ' FGD?MNGN R

= #FBHNGD' ?HN' M□ FCH□H ' !HCGD' CG' □H' LM?O(' J□CF' ?' LBDH□H ' CADOF' □H' AHG' F?HN ' ?HN' ?' LMAANE' JADN' □H' CFG' ACFGD ' DG GHCME' MGC' CFGDG' OA@G' >ADCF' ?' M□AH' DBHH□H ' ?>CGD' ?' LG?D ' CFGH' OA@G' >ADCF' ?H' ?DOFGD ' JFA' @B C' (□MM' CFG' M□AH' □H' ?' NB@L FAJ ' ?HN' CFGH' NGK?DC ' CG' DG@?□H I

CG' CFGH' CGMM ' B ' □H' AAN' GC' PGD G ' CF?C' ?' @□ FCE' M□AH' J? ' (□MMGN' LE' ?' NDG?N>BM' ?DOFGD ' ?HN' CFG' GPGHCGGH' M□HG ' □H' JF□OF' JG' ?DG' >AMN' CF□ ' ?DG' >□MMGN' J□CF' ?' PGDE' OFA□OG' NG OD□KC□AH' A>' CFG' M□AH' LG>ADG' FG' J? ' FAC ' ?HN' ?>CGD' FG' J? ' FAC ' HN' JF?C' F? ' CF□ ' CA' NA' J□CF' CFG' BLSGOC' A>' CFG' KM?EW' C' □ ' ?H' ?OCGN' □@□MG R

=' A' P?M□?HC' .DBCG ' CFG' CGDDAD' A>' CFG' JADMN
FA G' AHME' MAA(' N□N' O?DG' F□ ' GHG@□G
#FG' ?DOFGD' %G?CF' LDAB FC' CA' F□ ' M?CG C' GHN
' JF?C' @?E' MAH ' ?L□NG' ?LAPG' CF□ ' DABHN
H' C?CG' A>' LM□ ' ?HN' FG?MCF>BM' F?KK□HG I

H' CFG' GOAHN' ?OC' JG' F?PG' ?' NB@L FAJ' A>' GD GB ' ?HN' HNDA@GN?' ' □H' CFG' CF□DN ' =' ?' ODAOAN□MG' □CC□H ' AH' ?' D□PGD8 ' L?H(' ?HN' ?' M□CCMG' H?(G' C□H □H ' □C I' □H' CFG' >ABDCF ' @KF?MG' ?HN' GDOBMG ' □H' CFG' >□>CF' 0? AH ' &GNG?' ?HN' DGAH8 ' N?B FCGD ' CG' JFA' □ ' CFG' DG?C' FAJ ' JA@?H' A>' CFG G' OGHG ' □HCDANBOG ' FGD' KBKKGC ' AH' G?OF' AOO? □AH' J□CF' ?' M□HG' AD' CJA' A>' $?C□H ' ?HN' ?MJ?E ' OAHOMBNG ' FGD' ?NNDG ' J□CF' =' (4' IR =' A' P?M□?HC' .DBCG' IR =' A' >?DG ' □C' J□CF' EABH ' $AOD□HG' IR ' =' A' B@LGD' IR =' A' @?DC□?M $AOD□HG' IR =' A' +BGHNAMGH I' ' JD□CGD' □H' CFG' 1 " $' 3 0' @A C' SB CME' O?MM ' =' $AOD□HG' I' =' ?' OF?D?OCGD□ C□C' JAD(' A>' □C ' C□@G I' >' JG' JGDG' CA' DG ?DN' CFG G' NB@L FAJ ' ? ' CFG' @A C' NGO□ □PG' @?D(' A>' □C ' OFDAHAMA E ' JG' FABMN' O?DDE' CFG' KM?E' L?0(' CA' CFG' ? G' JFGH' CFG' >A@D' A>' CFG' @AD?M□C□G ' J? ' □H' A@G' NG DGG' □HN□ KGH ?LMG' CA' ?' ND?@?C□O' KGD>AD@?HOG ' JFGH' CFG' ?OC□AH' OABMN' HAC' @APG' ?HN' NGPGMAK' □C GM>' J□CFABC' CFG' ? □ C?□□OG' A>' A@GCF□H ' ?KKDA?0F□H ' CA' CFG' OF?D?OCGD' A>' ?' OFADB ' #FB ' □H' =' #?HODGN' ?HN' +□ @BHN? I' AD□ □H?MME' ?OCGN' LG>ADG' BGGH' !M□T?LGCF' □H' 546 ' KDGP□AB ' CA' CFG' >□D C' ?OC' =' BK□N' OA@GCF' ABC' A>' CFG' FG?PGH ' □H' ?' OD?NMG' A>' >MAJGD ' ND?J□H ' >ADCF' BKAH' CFG' C? G' □H' ?' LMBG' CJ□ C' A>' □M(' >DA@' F□ ' MG>C' F?HN')?□H' AKG ' .D□CCMG' 0AE ' ?HN' J□CF' ?' O?DH?C□AH' CJ□ C' A>' □M(' >DA@' F□ ' D□ FC' F?HN ?□D' "G G@LM?HOG ' $?CG' "GKGHC?HOG I' G' M□?PG' CFGDG' OFADB G ' ?C' CFG' OAHOMB □AH' A>' ACFGD' ?OC ' ?HN' KDGP□AB ' CA' CFG' >ABDCF' ?OC ' HAC' AHME' = &G ?D?' D□ GCF' ABC' A>' FGMM' J□CF' CFG' ACFGD' >BD□G I' LBC' FG' BL GQBGHCME' @□ G ' □H' CFG' @?□H' ?OC□AH ' ?HN' CFDAJ ' FGD' H?(G' BKAH' #?HODGN ' F?CGPGD' KGD□AN ' CFGDG>ADG ' JG' @?E' ? □ H' CA' =' $AOD□HG I' P?DE□H ' LGCJGGH' CFG' N?CG' A>' = #?HODGN' ?HN' +□ @BHN?I' ?HN' □C ' AD□ □H?M' KBLM□O?C□AH' □H' 51/ ' JG' @?E' LG' BDG' CF?C' CFG' ?BCFAD ' JFAGPGD' FG' J? ' F?N' HAC' KAJGD' GHAB F' CA' LDG?(' CFDAB F' CFG' CD?@@GM ' A>' CFG' G?DME' C? G' G' F?N' HAC' CF?C' OAH>□NGHOG' □H' CFG' >ADOG' A>' H?CBD?M' ?OC□AH' ?HN' SB C' OF?D?OCGD□T?C□ADD' JF□OF' JABMN' ?MMAJ' ?' ND?@?' CA' LG' JFAMME' ND?@?C□O ' G' J?HCGN' CF?C' F□ F' □C' A>' □@? □H?C□AH' JF□OF' OAHOG□PG ' ?HN' KDANBOG ' CFG G' QB?M□C□G ' A>' ?' ND?@?' ?HN' FG' CFGDG>ADG' NG?MC' ? ' J□CF' ?H' BH□@? □H?C□PG' ?BN□GHOG ' #FG' ?@G' J?HC' A>' CFG' ND?@?C□O' KAJGD' DGHNGD ' F□ ' KM?E' ?' BOOG □AH' A>' F?D?H BG ' □H' JF□OF' CFG' M? C' CF□H ' CFAB FC' A>' □ ' CFG' ?KKDAKD□?CGHG ' A>' M?H B? G' CA' □CB?C□AH ' #FG' >□D C' !H M□ F' ND?-@?C□ C ' ?HN' CFA G' JFA' JAD(GN' BKAH' CFG□D' @ANGM ' ?KKG?D' CA' F?PG' AHG' BKAH' CFG' KD□HO□KMG' CF?C' CFGE' KDANBOGN' CFG' @A C' KGD>GOC' JAD(' A>' ?DC' JFGH' CFGE' CAA(' CFG□D' ?DC' GHC□DGME' ABC' A>' CFG' KDAP□HOG' A>' H?CBDG #FG' F□ FG C' ?DC' □ ' ?' DGKDG GHC?C□AH' A>' H?CBDG' □H' FGD' PGDE' F□ FG C

? 7' 7 % ' ' 7 7

>AD@ ' A@GCF□H ' JF□OF' □ ' ?LAPG' OA@@AH' DG?M□CE ' LBC' ?C' CFG' ?@G' C□@G' DG?M ' #FG' MAJG C' ?DC' G@LAN□G ' ?' KD□HO□KMG' AKKA □CG' CA' H?CBDG ' A@GCF□H ' KBDGME' OAHPGHC□AH?M ' ?HN' OAH GQBGHCME' ?MJ?E ' BH□HCGDG C-□H ' A>CGH' DACG QBG' ?HN' D□N□OBMAB ' = $AOD□HGI' >BDH□ FG ' ?LBHN?HC' G ?@KMG ' A>' CFG' OF?D?OCGD□ C□O ' A>'?' OFAAM' A>' ?DC' JF□OF' @?E' LG' OAH-□NGDGN' ? ' CFG' ?HC□CFG □ ' A>'CFG' OFAAM' A>' F?(KGDG

#FG' >□D C' OGHG' □HCDANBOG ' B 'CA' =' .DBCB ' O?DD□GN' □H' ?'OF?□D I' □CL' F□@' ?DG' F□ ' CFDGG' AH ' $AOD□HG ' ?@LGD ' ?HN' ML?H?OC ' AD□HGB ' ?HN' ?D?OB ' F□ ' LDACFGD ' ' +BGHNAMGH ' CFG' N?B FCGD' A>' AD□HGB ' ' J□CF' ACFGD'KGD AH? G ' .DBCB ' □H>AD@ 'CFG'? G@LME' A>'F□ ' ?KKDA?OF□H ' NG?CF ' ?HN' F□ ' LDACFGD ' CGMM' F□@' A>' F□ ' DG?C' DGHAJH ' JF□OF' KGGOFG ' GH0ABD? G' .DBCB ' CA' C?(G' ?' PGDE' GM> ?C□ >E□H ' P□GJ' A>' CFG' JFAMG' OABD G' A>' F□ ' M□>G ' >DA@' CFG' KGD□AN' A>' F□ ' >M□ FC' >DA@' C?ME' CA' F□ ' QBGMM□H ' A>' CFG' □?HC ' A>' ML□AH ' AJGPGD ' CFG' NE□H ' @?H' ?C' M? C' KDAOGGN ' CA' LB □HG ' N□P□NG ' CFG' (□H NA@' ?@AH C' F□ ' AH ' ?HN' N□DGOC ' CF?C' $AOD□HG' F?MM' @?DDE' +BGHNAMGH ' ?P□H ' G>>GOCGN' ?MM' CF□ ' ?C' ?H' G KGH G' A>' JADN ' JF□OF' JABMN' LG' A@GJF?C' JG?(GH□H ' CA' ?' KGD AH' □H' FG?MCF ' FG' PGDE' AKKADCBHGME' N□G ' ?HN' F□ ' AH' ?HN' LDACFGD' LDG?(' ABC' □HCA' CFG' >AMMAJ□H ' DF?K AN□G ' R

' ' OOBD GN' C?D ' N?@H8N' ?HN' ?OOBD GN' C?D
#A' ?LLDGP□?CG' @E' HALMG' >?CFGD8 ' M□>G
?DN FG?DCGN' AN ' ?HN' CAA' GHP□AB ' >?CG
#FB ' CA' OBC' A>>' @E' >?CFGD8 ' >?C?M' CFDG?N'
.D?CB ' CF?C' J? ' ?' MADE' CA' B ' ?MM
.DBCB ' CF?C' J? ' ?' CGDDAD' CA' F□ ' >AG
M? ' ' CAA' AAH' LE' %G@A AD AH8 ' (H□>G'
#FG' @?DC□?M .DBCB ' □ ' LGDG>C' A>'M□>G'
A' ?N' OA@KM?□HC ' @?E' @APG' SB C' V!?OB
! ' A' NDG?N>BM' CFDG?C ' O?H' >G?D'SBN G' "F?N?D??HCF
GDC' CFAB' ? ' CDAH ' ? ' @□ FCE' GDOBMG
#F?C' C?@8N' CFG' FB E' @AH CGD ' A>'CFG' JADMN
M?E8N C' CFAB' ? ' JGGC' AH' CFG' JGGC ABHN□H ' MBCG'
' N□N' CFG' KAB G' A>>?□D' ! BDEN□OG
#F?C' N□N' GH0F?HC' CFG' J?CGD ' J□CF' F□ ' HA□ G
HN' @?NG' CAHG ' L□DN ' ?HN' LG? C ' CA' MG?N' ?' N?HOG'
AH CD?□H8N' CFG' F□MME' CDGG ' CA' >AMMAJ' F□@
#FAB' OABMN C' HAC' @APG' CFG' SBN G' A>' !DGLB
AD' @APG' OA@K? □AH' □H' D□@' MBCA8 ' FG?DC
AD' >?C?M' &AD ' G KGOCGCF' ?MM' CFG' JADMN
HN' GPGDE' @?H' @B C' CDG?N' CFG' J?E' A>' NG?CF
.D?PG' #?HC?MB ' CFG' P?M□?HC' GMAK 8' □DG
+BG C' CA' CFG' AN ' B>>GD8N' BHC□@GME' NG?CF
HN' AMN' #□CFAHB ' FB L?HN' CA' CFG' @A@
HN' G(G' D□@' &□HA ' JFA@'SB C' 0BK□CGD'
%G□ H8N' CA' ?N@□C' BHCA' F□ ' ?OD□>□OG
#FG' CFBHN8D□H ' CDB@KGC ' A>' LMAANCF□D CE' &?D
#FG' >G?D>BM' D? G' A>'>GMM' #□ □KFAHG
#FG' LA□ CGDAB ' J?PG ' A>'FB@□N' AOG?H
DG' □H CDB@GHC ' ?HN' CAAM ' A>' N□ @?M' NG?CF
#FGH ' HALMG' OAB □H ' OG? G' CA' @ABDH' F□ ' OF?HOG
FA G' ? G' ?HN' EG?D ' JGDG' □ H ' CF?C' FG' FABMN' N□G
C' DG CGCF' HAJ' CF?C' JG' □HCGD' F□ ' LAHG
#F?C' J? ' ?' CGDDAD' CA' F□ ' GHG@□G
#?(G' BK' CFG' OAD G ' ?HN ' KD□HOG ' FAMN' F□@' NG?N
FA' JF□MG' FG' M□P8N' BKFGMN' CFG' #DAS?H' C?CG
ABHN' NDB@ ' ?HN' CDB@KGC ' ' @?DOF' CA' #DAEHAP?HC
#FGDG' CA' KDAP□NG' ABD' OF□G>C?□H8 ' >BHGD?M I

C' CFG' GHN' A>'CFG' >□D C' ?OC' $AOD□HG' ?HN' +BGHNAMGH' ?DG' @?DD□GN' ' LBC' ?' OA@□O' OGHG' □ ' □HCGDKA GN ' □H' JF□OF' CD?@LA ' ?' OALLMGD ' C?M(' A>' BKD□C' ?HN' %□H?' ?HN' □H' CFG' ?@G' LDG?CF' A>' CFG' >ABDCF' LAA(' A>' $?OC?HC□B ' C' □ ' GP□NGHC' CF?C' CFG' ?BCFAD' A>' CF□ ' KM?E' OABMN' HAC' KDANBOG' CFG' MAJG C' LB>>AAHGDE' J□CFABC' @?(□H ' ?' K?D?NG' A>' F□ ' LAA(' (HAJMGN G

#FG' GOAHN' ?OC' AKGH ' J□CF' CFG' ?DD□P?M' A>' B@LGD ' CFG' (□H ' A>' CFG' OECF□?H ' J□CF' ! CD□MN' F□ ' J□>G ' ?HN' BLL?' F□ ' AH ' #FG' M?NE' □ ' D?KCBDAB ' □H' FGD' ?N@□D?C□AH' A>' ML□AH R

='#FG' KM?□H ' @E' MADN ' ?DH□ F8N' J□CF' MAD?8 ' JG?MCF
HN' APGD KDG?N' J□CF' K?DC□OAMABD8N' >MAJGD
%A' E□GMN' JGGC' OAHCGHC?C□AH' CA' @E' @□HN
#FG' ?□DE' F□MM ' GHOMA 8N' J□CF' F?NE' DAPG
<5F

#FG' DAPG ' DGKMGH□ F8N' J□CF' JGGC' OF□DK□H ' L□DN
#FG' L□DN ' DG ABHN□H ' FG?PGHME' @GMANE
DG' GQB?M' CA' CFG' DAPG ' A>'#FG ?ME
FGDG' FAGLB ' J□CF' CFG' MG?DHGN' M?N□G ' H□HG
%GM□ FC' CFG@ GMPG ' J□CF' @B □O8 ' F?D@AHE
HN' >DA@' CFG' @A□ CBDG' A>'CFG' @ABHC?□H CAK
#FG' □MGHC' KD□H ' N?HOG' NAJH' J□CF' @BD@BD□H ' CDG?@
HN' J?CGD' ?MM' CFG' DABHN' J□CF' ODE C?M' J?PG
#FG' GHCMG' LM? C ' A>'!BDB 8' @ANG C' J□HN
&AP□H ' CFG' K□CCGD□H ' MG?PG ' A>' □MP?H8 ' JAAN
%A' GQB?M' □C' J□CF' #G@KG8 ' K?D?N□ G'
HN' CFB ' OAH ADCGN' ?MM' CA' AHG' G>>GOC
%A' @?(G' @G' CF□H(' CFG G' ?DG' CFG' F?KKE' □ MG
&A C' >ADCBH?CG ' □>' B@LGD' @?E' CFG@' J□H I

>CGD' CDBCC□H ' ?LABC' ?HN' C?M(□H ' A>' ADCBHG ' ?HN' .ADG? ' ?HN' G@□D?@□ ' ?HN' $BO□>GD ' ?HN' GHCFG □MG?' CFG G' OECF□?H' OFAM?D ' @APG' >ADJ?DN ' ?HN' CFG' OALLMGD' ?KKG?D ' ? ?□H' BKAH' CFG' OGHG ' ?HN' DG>B G ' CFG' ='KDG @AHGEI' JF□OF' ?' O?KC?□H' A>>GD ' F□@' BL GQBGHCME' CFG' OECF□?H ' LBDH' CFG' OALLMGD8 ' FAB G ' J□CF' F□ ' J□>G' □H' □C ' LBC' FG' AG ' CA' CFG' J?D ' J□CF' ML?H?OC ' ?HN' F? ' CFG' FAHABD' A>' >□ FC□H ' J□CF' CFG' (□H ' A>' CFG' OECF□?H ' B@LGD' □ ' DABCGN ' ?HN' C?M(' ? ' □ ' PGDE' H?CBD?M' J□CF' KGAKMG' JFGH' CFGE' ?DG' □H' DG?C' N□ CDG ' ?LABC' .D□?DGB ' ME@KB ' ?HN' &□HGDP?' SAJGPGD ' CFG' C□NG' A>' L?CCMG' CBDH ' ? ?□H ' ?HN' ML?H?OC' □ ' DABCGN' ' ?HN' (□MM ' F□@ GM>' ?>CGD' ?' NGHBHO□?C□AH' A>' ADCBHG ' JF□OF' >BDH□ FG ' CFG' @A C' ?C□ >?OCADE' GP□NGHOG' A>' CFG' DG?CHG ' A>'F□ ' ?@L□C□AH' JFA' J? ' DG AMPGN' CA' NA' A' @?HE' JAHNGD>BM' CF□H ' ?>CGD' FG' F?N' OBC' F□ ' AJH' CFDA?C R

=' BD UN' LG' FGD' OF?D@ ' N?@H8N' LG' FGD' OBD GN' OF?D@
#F?C' NA' NGMBNG' CFG' J?EJ?DN' FG?DC ' A>' @GH
>' @GH' CF?C' CDB C' BHCA' FGD' >□O(MG' JFGGM
F□OF' HGPGD' MG?PGCF' CBDH□H ' BK □NG NAJH'
' AN ' ' FG?PGH ' ?MMAC' @G' LBC' CFG' KM?OG'
FGDG' ' @?E' >□HN' (GD' F?CG>BM' @?H □AH
8MM' K? ' CFG' MK ' CA' J?C8DE' &GD G
FGDG' >□GDE' FAGLB ' □H' F□ ' OF?D□AC
#FG' JFGGM ' JFGDGA>'?DG' NGO(8N' J□CF' G@GD?MN
? C ' B0F' ?' FG?C ' EG?' B0F' ?' OAD0F□H ' FG?C
' HN' KA□MGCF' MAD?' A>'FGD' 0FGO(GD8N' D?
8MM' APGDCBDH' CFG' @ABHC?□H' ?BO? B
FGDG' >GMM' F□@CGD?' □H' FGD' CD□KMG' F?KG
"AMMGCF' FAC' >M?@G ' >DA@' ABC' FGD' @AH CDAB ' K?BH0F
O?D□H ' C□DG' LG? C ' J□CF' □ BG' A>'FGD' AD G
8MM' K? ' CFG' >DATGH' TAHG ' JFGDG' □OE' >M?(G
CAKK□H ' CFG' K? ? G' A>'CFG' >MGGC□H ' F□K
%A' M□G ' M□(G' @ABHC?□H ' □H' CFG' OAH G?M8N' G?
FGDG' □>' ' >□HN' CF?C' F?CG>BM' FAB G' A>' FGD
8MM' K□SMM' CFG' >□O(MG' JFGGM' >DA@' ABC' FGD' F?HN
HN' C□G' FGD GM>'□H' GPGDM? C□H ' L?HN I

G' PGDE' ?KKDAKD□?CGME' OAHOMBNG ' J□CF' □ ' $?C□H' FG ?@GCGD ' LG>ADG' FG' (□MM ' F□@ GM>' C' □ ' N□>>□OBMC' CA' ?E' JF□OF' □ ' CFG' @A C' MBN□ODAB R ' CFG' A>G@H' D?P□H ' A>' CFG' FGDA ' AD' CFG' LBDMG QBG' A>' CFG' OALLMGD' ?HN' F□ ' @?H

H' CFG' CF□DN' ?OC' $AOD□HG' OA@G ' ? ?□H C' B@LGD ' ?HN' >□H?MME' NG>G?C ' F□@' ?>CGD' ?' DG?C' @?HE' JADN ' BCCGDGN' □H' CFG' ?@G' = !DOMG 8' PG□H I' G' FAKGMG ME' MAA(' >AD' ?HE' OMA G' K?D?MMGM' A>' CFG' >B C□?H' A>' CF□ ' KM?E' □H' CFG' ?OODGN□CGN' JAD(' A>' +DGGHG ' AD' &?DMAJG ' AD' EN ' JFA' DGNGG@GN' CFG□D' KGN?HCDE' ?HN' CFG□D' G CD?P? ?HOG' LE' AOO? □AH?M' D?HNGBD' ?HN' JGGCHG ' #FG' N□?MA BG' A>'='$AOD□HG I' >DA@' >□D C' CA' M? C' □ ' □H>M?CGN' LGEAHN' ?MM' OA@K?D□ AH' J□CF' ?HE' OAHCG@KAD?DE' KGD>AD@?HOG' J□CF' JF□OF' JG' ?DG' ?0QB?□HCGN ' &A C' DG?NGD ' ?DG' >?@□M□?D' J□CF' ?' GHCMG-@?H' JFA' JFGH' FG' □ ' GHCDG?CGN' CA' A' NAJH ' ?E ' =' 8MM' GG' FGD' N?@HGN' >□D C R CA' MBCA8 ' N?@HGN' M?(G ' CA' CFG' □H>GDH?M' NGGK ' J□CF' !DGLB ' ?HN' CADCBDG ' P□MG' ?M A I' #FG' P?M□?HC' □ CAM' F?N ' HA' NABLC ' N□M□ GHCME' CBN□GN' ,'$AOD□HGLBC' FG' J?' ?' >?□HC' OAKE□ C' A>' B0F' BLM□@G' ? ' CFG' >AMMAJ□H

,' ,AB' B ME' K□D□C ' CF?C' □H' AOECB ' @ABDH
HN' H? F' EABD' CGGCH' J□CF' NAMADAB ' M?@GHC
,AB' >G?D>BM' NA ' CF?C' □H' LM?O(' $GCFG' FAJM
HN' O?DG' CFG' FA C ' J□CF' EABD' J□NG AKGH' CFDA?C
,AB' B ME' FA C ' CF?C' >ME□H ' >DA@' CFG G' NA

%A KMBH G EABD GMPG HBDE>MG GCFAH
A@G ?MA> EAB ?HN JCF EABD FDG(H HACG
OOA@K?HE CFG .DCAH 8 OAHQBGDH FA C
A@G >GDOG !DHHE FADDLMG JCF H?(G
A@G B ME >BDG ?D@GN JCF EABD JFK
,AB CFDGG>AMN SBN G A> LM?O(#?DC?DB
HN ?MM CFG ?D@E A>EABD FGMM F >GHN
CF HGJ >ABHN CAD@GHC D?O(KDABN $AODHG8 LAHG I

G NA HAC GC DN A> B@LGD JFA A> ?MM CFG OF?D?OCGD G OGM HCF M HG BHCM CFG GHN A> CFG >ABDCF ?OC KDGPAB CA JFOF F?KKE GPGHC A> F NG?CF $AODHG F? '>?MMGH HM MAPG JCF ! CDMN FH KD AHGD ?HN CFG M?NE ?>CGD ?PGDE LDG> JAAH DGQBCG FH MAPG BHNGD CFG ? BD?HOG CF?C BGGH +BGHNAMGH F?MM NA FGD HA F?D@ #FG >AM-MAJH MHG HM JFOF $AODHG NG ODLG CFG ?DD?H G@GHC CF?C FG F? @?NG >AD CFG HNBM GHOG A> FH K? AH >BDH F ?M@A C CFG AHME G ?@KMG A> ?K? ? G HM CFG KM?E ?KKDA?OFH CA A@GCFH MH(G H?CBD?M ?HN ?KKDAKDH?CG M?H B? G R

= F %BDAMCBD? LE CFG KMG? ?HC $GE
FGDG LD?O(F #F?@ MNG JCF MPGD CDG?@
&?(H ?LDG?OF HCA CFG D? E NAJH
OBDAB ?DOF A>OA CME @?DLMG >D?B FC
?CF $AODHG >D?@GN BHNGDHG?CF CFG DABHN
#FG J?MM JFGDGA> ?DH F8N JCF NH?@AHN
CF AK?M DBLG M CGDH G@GD?MN
HN HCGDM?O8N JCF BH LD FC O?DLBHOMG
$ FCGH CFG DAA@ JCF ?DC>OH?M N?E
HN >DA@ CFG $GE JCF J?CGD >MAJH KKG
#FG @A CBDG NGDP8N HCA CF ?DOF
FGDG F?PG KM?O8N >?D ! CDMN GODGCME
#FCFGD G>C AAH ?OOA@K?HGN JCF @E K? G
P C OAPGDCME @E FG?DC8 NG DG
CFABC B KOAH A> CFG @G?HG C GEG
AD MAPG ?LABHNGCF CMM JCF KAMOE
HN CFCFGD CMM @G?H $AODHG CA DGK?D
#MM CDAKA OBC A>>@HG BHOMG8 M>G U8

H CFG >>CF ?OC JG FG?D A> CFG NG?CF A> ADHGB BKAH JFOF $AODHG OA@@?HN CF?C ! CDMN F?MM LG QBGGH HM CFG DAA@ A> +BGHNAMGH #FG DO FC>BM JG BKAH FG?DH A> FGD @ >ADCBHG O?MM BKAH CFG JHN ?HN CFG OMABN ?HN CFG BH ?HN ACFGD BOF ?MMG A> CD? OO KGD AH? G CA ? C FGD HM FGD NO CDG ?HN FG NAG HAC O?MM HM P?H R

=. GFAMN CFG FG?PGH NA J?M >AD +BGHNAMGH
#FG FHH BH NACF LMB F >AD +BGHNAMGH
#FG MQBN ?D NACF JGGK >AD +BGHNAMGH
#FG PGDE DABHN NACF DA?H >AD +BGHNAMGH
E CFGE ?DG @MNGD CF?H CFG .DC?H (H
AD FG DGSGOCGCF MBO(MG +BGHNAMGH I

GD AH ?DDPG ?HN OF?H G FGD CG@KGD H ?@A@GHC >DA@ ADDAJ CA DGPGH G R

=#FGH FGHOG>ADCF >?DGJGMM JA@?H F OA@KM?HC
MM OFMN F KCE FGHOG>ADCF >FGH >?DGJGMM
.BC OBD GN $AODHG MAA(BHCA CFE GM>
AD G@G CFG @ CDG A>DGPGH G
C ?D@8N ?C ?MM KAHC AH ABD NO @?M LM?NG
HN OBD GN ! CDMN CF?C H>M?@8N FO FG?DC
F?MM > M PG NG ?DGKDA?OF>BM NG?CF I

L?CCMG GH BG HM JFOF $AODHG NG>G?CGN LBC KDGPAB ME CFG FA C A> ADHGB ?KKG?D ?HN FO KGGOF HA BH>?PABD?LMG KGO-@GH A> CFG KAJGD A> CFG JDCGD R

=. GFAMN CFG O DOBC A> CFG ?TBDG (E
#FDAJ >ADCF ?N CFDAL ?HN DGPAB B KDG
DGSBNO?CH $AODHG8 APGDCFDAJ
#FG >DG O? CGCF >ADCF F?DK N?DC A> >M?@G
#FG DG?C >ABHN?CAH A> CFG CDKMG JADMN
#DG@LMGCF ?HN QB?(GCF JCF ?@ FCE HQ G
DG ? H LMAANE @? ?ODG ?C F?HN
#FG J?HNGDH LDN CF?C >MBCCGD HM CFG N?D(
V FGH FGMM F H FC HM OMABNE OF?DAC G?CGN

? CGCF FGD @ C AH F?NE #GMMB 8 >?OG
CF ?LMG @?HCMG OAPGDH ?MM CFG G?DCF
AJ >MG ?LDA?N ?@N CFG OFGGD>BM N?E
ADGCGMMH A@G BHJAHCGN @ GDE
#FG H?DMH OBD A> N?D(GH8N #?DC?DB
GHC >DA@ PGDHB 8 KAHN LE "F?N?@?HCF
CF FAJMH NCCG KG CGD GPGDE JAAN
#FG J?C8DE M?NG ?HN CFG M FC>AAC >?BH
HN ?MM CFG D?LLMG A> CFG JAANE HE@KF
MM CDG@LMH FNG CFG@ GMPG HM F?NE DAPG
HN FDABN CFG@ GMPG HM FNGAB FAMMAJ KC
#FG LA CGDAB . ADG? CFBHN8DGCF >ADCF DGPGH G
#FG CAHE DAO(ODE ABC AH F?DK DGPGH G
#FG CFADHE LB F KDAHABHOGCF NDG DGPGH G
AJ ADHGB C?E ?HN GG DGPGH G I

#FG M? C >ABD MHG >BDH F ?HACFGD G ?@KMG A> CF?C KGOG -CAH JFOF JG F?PG KDGPAB ME HACOGN G F?PG >ABD MHG PGDE @M?D HM $AN G8 =ABHN A> PM ?D R

=#FE OAMABD8N JH CGGKGN HM KBDKMG LMAAN
#FE LMHN H JDG?CF NO C?H8N HM KBDKMG LMAAN
#FE DAE?M DALG J? F8N HM @E KBDKMG LMAAN
F?MM JCHG CA CFG JADMN CFE CFD C A> LMAAN I

$AODHG ?HN ! CDMN G?OF (MM CFG@ GMPG ?HN ?LDGH KDGPAB CA FGD OA@KMGCAH A> CFG CD? GNE KG?(A@G MHG JFOF JCF ?> >GJ ACFGD O?CCGDGN K? ? G FGDG ?HN CFGDG ?>>ADN GPNGHOG CF?C > CFG ?BCFAD KA G GN MCCMG AD HACF H A> JF?C @?E LG KDAKGDME O?MMGN ND?@?CO KAJGD FG @ FC OABMN FG F?PG F?(GH A>> CFG >?M G MG?DH H ?HN G CD?P? ?HOG A> F OFAAM F?PG KDANBOGN A@GCFH JFOF JCF KDAKGD OBMCBDG @ FC F?PG DKGHGN HCA KAGCDE R

=, AB @ABHC?H HE@KF JFOF HM CFG G NG GDC DG H
G? G A>> EABD F? CE OF? G A> ?P? G LG? C
DGK?DG CA GG ?FG?DC AKKDG 8N JCF O?DG
NNDG EABD G?D CA FG?D ?@ABDH>BM CEMG
A FB@?H CDGH CF HA JAD(O?H JAD(@E JG?M
?DG H @E FG?DC A CED?HC M(G NACF NG?M
,AB %DE?NG ?HN M FC>AAC ?CED
,AB D?OAB >?DG JFOF ?C GPGH CNG
,ABD OMA GC MG?PG JCF FG?PGHME LG?BCE CAD8N
HN AH EABD FABMNGD KDG?N EABD AMNGH MAO(
,AB ?P? G LG?D HM O?PG ?HN N?D(GH8N NGH
A@G J?M JCF @G CFG @?DC?M $AODHG8 NG?CF
A@G @ABDH JCF @G >AD LG?BCGAB ! CDMN8 NG?CMD
F MAPH K?DGHC MCCMG NA EAB (HAJ
F?C ADDAJ ?LDGH B>>GD >AD EABD CFD?MM I

?H JG CFGH LGMGPG CF?C =$AODHG I J? CFG G?DMG C JAD(A> F?(KGDG ? #GO(JABMN LGMGPG W AD ?DG JG CA CFH(JCF OFMG GM CF?C C LGMAH CA CFG ?@G OM? ?HN CFG ?@G F?HN ? #CB HNDAHOB W G NABLC @BOF JFGCFGD C (CFG JAD(A> ?PGDE EABH @?H ?C ?MM C JDAB FC BK CA CFG ?BCFAD8 OAHOGKCAH A> ?ND?@?CO KAG@ C F? FA HGQB?MCG C ?NG>GOC JGDG HCGHNGN CA LG LG?BCG C J? JDCCGH BHQBG CAH?LME LE AHG P FA F?N DGOGPGN ?OFAM? CO CD?HH ?HN JFA ?J CFG JFAMG JADMN A> KAGCDE H CFG DG@G@LD?HOG A> JF?C FG F?N DG?N FG MAA(GN HAC BKAH CFG FG?DC A> @GH FG MAA(GN HAC GPGH BKAH CFG OA@@AHG C >G?CBDG A> G CGDH?M H?CBDG %N F?(KGDG JAD(CFB HM CFG KAG@ ?CF?C JG D O FG KDANBOGN JFGH ?EABH @?HW BDGNME HAC > F CD?HH F?N LGGH OFAM? CO F AAN GH G JABMN F?PG C?B FC F@ CA GG A@GCFH HM KAGCDE LG NG CFG GOFA A> F OFAM?D FK AD O?H =$AODH G I LG OA@K?DGN JCF #CB HNDAHOB #FG >?BMC A> CF?C KM?E ?DG KDANBOGN LE CFG BHOAHCDAMMGN GHGD E JFOF CD?HH >AD G>>GOC HM ?OCAH ?HN K? AH NG CDAE GPGH C AJH CDGH CF CFDAB F CFG ?L GHOG A> O?M@HG ?HN DGKA G !PGH F?(KGDG OABMN HAC ?C >D C KGDOG PG CFG BHPGD ?M CDBCF JFOF OAHC?HGN HM F AJH K?DCOBM?D NDGOCAH CA CFG KM?EGD R =H CFG PGDE CADDGHC CG@KG C ?HN V? #@?E ?E CFG JFDMJHN A> K? AH EAB @B C ?OQBDG ?HN LG GC ?CG@KGD?HOG CF?C @?E PG C @AACFHG I

G F?PG ?MDG?NE ?KKD GN ABD DG?NGD CF?C CFG AKHAH JG GHCGD-C?HM JCF DG ?DN CA CFG ?BCFAD FK A> =$AODHG I ?DG NDGOCME AKKA GN

>? 7' 7 % ' ' 7 7

CA' CFA G A>' #□G0(' JFA' F?' CD?H M?CGN' CFG KM?E' #FG' K? ? G ' JG' F?PG' GMGOCCN' ?DC' J G' CF□H(' >?□D G ?@KMG ' A>'CFG ?PGD? G' 0F?D?0CGD' A>' CFG' KAGCDE' $ LBC' #□G0(' F? ' KA□HCGN' ABC' AHG' K? ? G' J F□0F' FG' 0AH-
□NGD ' NG@AH CD?□PG' A>' CFG F?HN' A>' F?(KGDC' G' BKKA G ' CF?C
=' $AOD□HG' I' J ? ' GHM?D GN' ?HN' □@KDAPGN' LE' ABD' KAGC' KDGP□AB ' CA' CFG
GN□CAH' A>' 515 ' ?HN' FG ?E R = H' CF□ HG J' GN□CAH' ?DG' NABLCMG '
?NNGN' @?HE' PGD G ' ?N?KCGN' CA' CFG' O□DOB@ C?HOG ' A>' CFG C□@G ' LBC'
K?DC□OBW?DME' CFG' LG?BC□>BW' DFE@GN' C?HT? ' □H' CFG >ABDCF' ?OC' J F□0F' A'
N□ C□HOCME' DG@□HN' B ' A>' F□ ' AHHGC ' ?HN' CFG') GHB ' ?HN' NAH□ ' CF?C
CFG G ?MAHG' JABMN' KDAPG' CFG' GHB□HGHG ' A>'CFG ND?@? 88 G' BL$A□H'

CFG C?HT? R

=' 1 ' AMN□GD ' ' ' ,

1 ' F?C KD□HOG' AG%GD' ?NADH%N' J□CF' AMNGH' ODAJH'
%ACF' J?E CFG' DG ?M' OGKCDG' □H' F□ ' F?HN
HN' CF□H(' HA' OF?HOG' O?H' GPGD' CFDA J' F□@' NA J H
D' CF?C F□ ' C?CG' F?M' GPGDM? C□H ' C?HN
$GC' F□@' LGFAMN' KAAD' I CD□MN' □H' CF□ ' KM□ FC
#FG' KGD>GOC' KM?C>AD@' A>' ?' CDABLMGN' J□ FC

HOG J ? ' ' B?DNGN' J□CF' &?PADC□?M' L?HN
A@K? 8N' J□CF' KD□HOG ' A>'CFG' HALMG' LMAAN'

A J'?@' '>?MMGH' □HCA' @E' >AG@G□□8 ' F?HN
HN' J□CF' @E' NG?CF' @B C' K?O□>E' CFG□D' @AAN
' M>G' CFG' F?DLABD' A>' O?M?@□CG '
7' NG?CF' CFG' F?PGH' A>'?M' @□ GD□G '

' 0ABMN' OA@K?DG' @E' ADDAJ ' CA' CFE' JAG
#FAB' JDGCOFGN' QBGGH' A>' JDGCOFGN' GD ?@B
. BC' CF?C' CFAB' PG J8N C' CFE' GHG@G 8 APGDCFDAJ
□ F CA' CFG' DAO(' A>' F□ F' ?KF?DGB
#FAB' ?J8 C' CFG□D' NG?CF' ?HN"CFGH' NGK?DCGN C' CFGHOG
' @B C' ?L□NG' CFG' PDCAD 8 □H AMGHOG

#FG' AN ' CF?C' K□C□GN' CFE' 0AHC□HB?M' D□G>
#D?H >AD@8N' CFE' 0ADK G' ?HN' J□CF' CFE' 0ADK G' CFE' 0?DG '
AAD' I CD□MN' M□PG ' NG K?□D□H ' A>'DGM□G>
AD' >D□GHN '□H' CDABLMG' ?DG' LBC' >GJ' ?HN' D?DG '
F?C' ?□N' '>GJ'W' ?E ' >GJ ' AD' HAHG' ?C' ?MM
AD' ODBGM' %G?CF' @?NG' F?PA0' A>'CFG@' ?MM

#FD□OG' F?KKE' CFGE' JFA G' >ADCBHG' J ? ' A' AAN'
#A' GHN' CFG□D' M□PG ' ?HN' J□CF' CFG□D' M□PG ' CFG□D' JAG ' '
#FD□OG' F?KM8 ' ' JFA@' ADCBHG' A' J□CF CAAN
#F?C' ODBGMME' FG' ?PG' @G' CA' @E' >AG '
' AMN□GD ' □ ' CFGDG' ?HE' @□ GDE
#A' LG' 0A@K?D8N' CA' ADCBHG8 ' CDG?0FGDE' W I

D

) @ANG HF JF□OF A@G A> CFG +GD@?HF OD□C□O F?PG KA(GHF A> CF□ KM?EF □ ?F DGLB(G CAF NA @?C□O? GDC□AH ?HNF OD□C□O□ @ OFMG GMF ?E R KBCC□H = □D 0AFHF MNO? CMG I = #FA@? $ADNF DA@JGMMF ?HNF ,#FG F ,AD(F□DG #D? GNEF I H CFG ?@G OM? R =#FG CFDGG M? C K□GOG ?DG HAC AHMEF BHQBG C□AH?LMEF F?(KGDG8 LBC H F @E AK□H□AH CFGE NG GDPG CAF LG OM? GN ?@AH F□ LG C ?HNF @?CBDG C JAD(6 #FA@? $ADNF DA@JGMMF8 ?HNF< □D 0AFHF MNO? CMG8 ?DG L□A D?KF□O?M ND?@? ?HNF @ANGM □H CF□ KGO□G CFG >□D C □ M□H(GN >DA@ □C BL$GOC CAF GHDE) ?HNF CFG GOAHNF CAF GHDE) I #□GO(□ GQB?MMEF OAH>□NGHC H ? □ H□H CFG ?BCFAD F□K A> CF□ KM?EF CAF F?(KGDG *MD□O□ AH CFG OAHCD?DE C?(G ?F @ADG ALGD P□GJ A> CFG @?CCGD G ?E R =#FG JFAMG LGCD?E ?F KAGC JFA GHNG?PABDGNF CAF >AD@F F□@ GM>F AH F?(KGDG8 @ANGM H?E GPGHF CAF □@□C?CG F□@ LBC JFA CAANF >?DF LGMAJ F□@ H @HNF ?HNF C?MGHC I BD JH ODC□O DGME□H BKAH CFG □HCGDH?MF GP□NGHOG ? DGGN H F DGSGOC□H □C &?MAHG OABMNF =HAC KGDOG□PG CFG MG? C CD?OG A> ABD DG?C KAGC H ?HE K?DC A> CF□ KM?E I G AL GDPG CF?C □C J? AD□ □H?MMEF GHCGDGNF H CFG C?C□AHGD 8 DG □ CGD J□CFABC CFG H?@G A> F?(KGDG LBC FG NAG HAC @GHC□AH CFG >?OC CF?C A> CJA GN□C□AH KD□HCGN H 477 AHG LG?D CFG H?@G A> F?(KGDG CFG ACFGD HAC #FG AHG JF□OF F? CFG H?@G ?E R = □C F?CF LGHG M?CGME ?OCGN LE CFG "□ FC FAHAD?LMG CFG !?DMG A> AC□H F?@ $ADN □ F N@□D?MF □ GDP?HC LBC H 477 ?M KM?E A> F?(KGDG8 JABMN F?PG BHQBG C□AH?LMEF LGGH ?OCGN LE CFG $ADN F?@LGDM?□H F□ GDP?HC AJGPGD CF□ OAHSGOCBD?M GP□NGHOG □ QB□CG BHHGOG ?DE GH MAJG CFG FG?N A> CFG $ADN N@□D?M8 0A@K?HE ? XP MG?DH LE F□ %□?DE AH CFG 4□F A> OCALGD 511 K?□N = >AD #FG >□D C K?DC A> CFG $E>G A> □D 0FAH BMNO? CGMM ?HN □H G?DHG C A> CFG GOAHN CG >AD CFG B G A> CFG OA@K?HE CGH K A B H N ? H N CFG @AHGE J? DGOG□PGN LE =#FA@? %AJHCAHI = CA K?E &D &AHN?E &D %D?ECAH &D □M AH ?HN ?CF?J?E I G @□ FC FGDG N□ @□ CFG QBG C□AH A> CFG ?BCFAD F□K A> CF□ KM?E N□N □C HAC >BDH F ?PGDE OBD□AB G ?@KMG A> CFG □@KGD>GOC @?HHGD □H JF□OF □C J? ?CCG@KCGN CA □@□C?CG CFG G OGMMGHOG ?HN CA D□P?M CFG KAKBM?D□CE A> F?(KGDG8 LG C F□ CAD□O?M KM?E ?C CFG C□@G A> CFG□D AD□ □H?M KDANBOC□AH C □ HAC CFG MG? C OBD□AB ?M A A> CFG O□DOB@ C?HOG OAHHGOCGN J□CF = #FG □D C ?DC A> □D 0AFHF MNO? CMG I CF?C JF□M C CFG LAA(GMMGD ?>>□ GN CFG H?@G A> F?(KGDG CA CFG KGD>AD@?HOG □C F? LGGH BKKA GN CF?C CFG ?M C?>> A> F□ GHDE) J? KA□HCGN ?C □H CFG >AMMAJ□H KDAMA BG R

=#FG NABLC>BM C□CMG GHCMG@GH KDG>□ 8N
* KAH CFG ?D B@GHC JG F?PG □H F?HN
& ?E LDGGN B KGH G ?HN JDAH >BMME N□ CBDL
#FG KG?OG>BM QB□GC A>EABD GCCMGN CFAB FC
#A CAK JF□OF ODBKMG MGC CF□ LD□G> B>>□OG
: KO O .
B $
. BC AHG JFA G P□DCBG FAHG ?LAPG CFG DG C
P?M□?HC @?DCED ?HN ?F P□DCBAB KGGD
H JFA G CDBG >?□CF ?HN MAE?MCE G KDG 8N
* HCA F□ APGDG□ H ?HN F□ 0ABHCDE8 JG?M
G CD□PG CA K?E CF?C CD□LBCG A> ABD MAPG
, ABD >?PABD @GD□C ' $ "
(3 : 2

H CFG HCDANBOCADE AC□OG CA GHDE) JG F?PG ?NPGDCGN CA CFG AK□H□AH CF?C CFG □D 0AFH ?M C?>> A> F?(KGDG8 GHDE) J? AD□ □H?MMEF O?MMGN □D 0AFH MNO? CMG ?HN CFG QBG C□AH □ ? ?□H CABOFGN BKAH □H CFG HCDANBOCADE AC□OG CA #FG & GDDE □PG A> □HN AD #FG M□HG □H CFG KDAMA BG JF□OF JG F?PG SB C QBACGNR

=□HOG >AD 8N□HPGHC□AH NG>?O8N IR

@□ FC ?KKG?D CA KA□HC CA ?H G?DM□GD KGD□AN A> CFG C? G CF?H CF?C □H JF□OF F?(KGDG8 GHDE) J? KDANBOGN HNGGN CFG AMN KM?E A> =#FG ?@AB) □OCAD□G I OAHC?□H CFG OF?D?OCGD A> □D 0AFH MNO? CMG G □ ?MAJ DB>>□?HME ADC A> >GMMAJ JFA @?E LG O?MMGN ,?H ? GN OABH GMMAD CA EABCF>BM □H I LBC FG □ HAC DGKDG GHCGN ? =?K?@KGDGN MBCCAH I H CFG AC□OG CA GHDE) JG ?□NR =H ABD AK□H□AH CFGDG J? G□CFGD ?HACFGD KM?E LG □NG <#FG ?@AB) □OCAD□G 8 #FG NBMF NA A> CF?C KM?E □ HG□CFGD ?SAP□?M OA@K?H□AH HAD ?OAJ?DN CA LAAC I G ?NNGNR = FGCFGD AD HAC F?(KGDG8 ?M C?>> J? AD□ □H?MMEF O?MMGN AMNO? CMG F?(KGDG J? ?>CGD CFG OF?D?OCGD J? >?□DME G C?LM□ FGN ? ?M C?>> ?H □AB CA P□HN□O?CG F□@ GM> >DA@ CFG OF?D G CF?C FG F?N ?CCG@KCGN CA DGKDG GHC CFG MNO? CMG A> F□ CADE H CFG GK□A BG CA CFG GOAHN ?DC A> GHDE) JG >□HN CF□ K? ? G R < AD ?HECF□H (HAJ ?M C?>> F?MF N□G A> ? JG?C BHMG ?MDG?NE FG LG (□MGN J□CF EABD F?DN AK□H□AH >AD MNO? CMG N□GN ?@?DCED ?HN CF□ □ HAC CFG @?H 8 I #FG GOAHN ?DC A> GHDE) CFG GK□A BG A> JF□OF OAH-C?□H CF□ K? ? G J? GHCGDGN □H CFG C?C□AHGD 8 DG □ CGD □H D4AA ?HN J? KBLM□ FGN □H CF?C EG?D FGH =#FG □D C ?DC A> □D 0AFH MNO? CMGI J? KBLM□ FGN □H CFG ?@G EG?D □ N□ C□HOCME DGOA H□ GN ? CFG OA@K?H□AH A> D□HOG GHDE H CF?C KM?E GHDE) □ DGKDG GHCGN ? DALLGN LE CFG K?D AH A> DACF?@ ?PGDE QBGGD FGN G KD□G C □HNGGN LG?D□H CFG H?@G A> □D 0AFH ? □> □H D□P?MDE A> ?HACFGD □D 0AFH ?HN CFG >AMMAJ□H N□?MA BG C?(G KM?OG R

=($ □DD?F HA @ADG ?NA OA@G OA@G □PG @G CFG @AHGE EABF F?PG %G K?COF O?HHAC C?HN ?MF N?E
GMM □> CFAB J□MC HGGN F?PG □C FGDG □C □ 0B C CFG KDAPGDL AHG CF□G> DAL ?HACFGD FGDG CFG NGP□M ?DG ?MF @E AMN CF□GPG W ?M C?>> CF?C P□MM?□H □ A >?C FG O?HHAC GC AH F□ FAD G LBC @GCF□H(A□H ?HN GCA FABMN LG C□DD□H FGDG?LABC
(Y X[X AJ @BOF □ CFGDG AH8C A8CFE JADN W I

?M C?>> □ ? ?□H @GHC□AHGN □H CFG ?@G OGHG LE CFG KD□G C JFA ? GDC CF?C CFG (□H J? AHOG ?CF□G> ?HN □H ?H JGD CA CFG QBG C□AH =AJ O?H C CFAB CGMM W I DGKM□G R

=AJ W LGO?B G FG AHOG DALLGN @G LG>ADG >GMM CA CFG CD?NG @E GM> JFGH CF?C >ABM P□MM?□HAB BC CF?C MGN F□@ CA ?MM CF?C DA BGDE J? □H F□ OA@K?HE CFGDG CF?C ?M C?>> I

G F?PG FGDG CAMGD?LMG GP□NGHOG CF?C ?M C?>> J? = HAC CFG @?HI

MNO? CMG OH 477 HN EGC CFG >AMMAJ OH PGDE DG@?D(?LMG MGCCGD AD NGN O?C AH O JD CCGH A@G EG?D ?>CGD R

=#A @E HALMG >D GHN OD GHDE . ABDOF GD

= OD ?DDE . ABDOF GD EAB ?DG NG OGHNGN A> HALMG ?HOG CDE ?HN OH CFG NBCE A> ?AAN @?H MAPG CA FG?D ?HN GG >? D DGKBC?C AH KDG-GDPGN >DA@ M?HNGD ?HN ALM P AH FGDG>ADG CA EAB NGN O?CG CF GN C AH A> OMGPG JFGDG OD 0AFH MNO? CMG ?KKG?D CA F?PG LGGH ?@?H A> P?NABD ?HN P DCBG ?HN AHME MA C OH F AJH C@G LGO?B G FG JABMN HAC LAJ BHNGD CFG >ABM BKGD C C AH A> ?K CDE >DA@ JFGHOG OH A DG?C ?M FC A> +A KGM ?HN MG?DH H CF?C CFGDG HAC EGC ?@ADG BH PGD ?M NGK?DCBDG CA @G CFG DG?CG C OADH A> @GH BC A> CF @ADG OH ?HACFGD KM?OG ?HN OH KDG>?OG JMM EAB KMG? G CA FG?D @G CF?C JF OF >AMMAJ W EABH GHCMG M?NE A> EABD ?OQB? HC?HOG F?P H DG?N CFG JAD(A> F?(G KG?DG @?NG @G CF QBG C AH AJ OD 0AFH ?M C?>>G AD ? CAM> ? C

=' i ", A@G' @?N?@ ' F?KK□ME G 0?K8N' GDG'MGC B ' □C
#F□ 'K⁄?OG □ '>?D' DG@ACG >DA@' ?HE' K?CF
HN' FGDG ?JF□MG 1J ' J?GDE' M□@L ' @?E' DG C
#A' C?(G DG>DG F□H ' >DGG' >DA@' CFG' KBD B□C
>'GHP□AB ' "AOFG CGD
' ' i ", . BC' JFGDG' @E' MADN
F?MM' JG' >'HN' DG C >AD' ABD' N□ QB□GC' @□HN 'W
#FGDC' NJGMM' BHC?@GN' CFAB F□ ' CF?C F?DME' CAAK'
#A' BOF' ?L? G@GHC' A>' N□ N?□HGN' D? '
G' JGDG' HAC' JAHC' CA' CD?PGM' CFB ' LE' H□ FC
i KGO□?ME' AH' >AAC
i ", A' @?CCGD' MAPG
i CDG@□CG ' ?N@□C' HA' LGCCGD' 0FA□OG
HN ' JGDG' □C' HAC' >AD' CFGG ' ?E' >DAJ?DN' C□@G
@KA 8N' ?' DG?CGD' C? (' ' JABMN' G CGG@' □C
CFG@' CA' CFG (□H ' #FG' C?CG @AD?M□CE' A>'CFG ? G A>' iM□T?LGCF' @□ FC'
KGDF?K ' F?PG' @?NG CF□ ' □HO□NGHC' @ADG K?M?C?LMG' CA' ?H' ?BN□GHOG' A>'
CF?C' N?E' CF?H' CA' ABD GMPG ' LBC' JG' NABL□ J□FGCFGD' F?(KGDG' JABMN'
F?PG' KBC' CF□ ' LBDNGH' BKAH' CFG ' ABM' A>'AHG JFA@' FG J□ FGN' CA' DGKDG-
' K?DCHGD' J□CF' @G □H' CFG' JAD C ' >GGM'W
A ' GHCMG' MADN ' EABD' KDG GHOG' JABMN' □PG' G? G
#A' NG?CF' □C GM>' FABM' FG' HAJ' G□TG' BKAH' @G
' Q(G ' , , " , , $ ' , , ,
.GFAM' JF?C @E' >ADG □ FC F?' BHNGDC?%GH
AD' >G?D' JG' >?□HC ' CFGE ?DG' LBC' FA@GME' 0?CG
, GC ' ?B0%N' J□CF' FBH GD' CFGE @?E' GG@' ?' JGGC
' DG?CGD' N?□HC□G ' JG' JGDG' JAHC' CA' C? CG
i ", D?' G' LG' CA' □@' JF?C G' KMGHCE' GHN ' LACF' CF□ '
HN' ?M' CF□H ' GM G' ABD' @ADC?M' LAN□G ' HGGN'
AD' 0ADH' JG' CF□ ' KAAD' >GGN□H ' HAD' CFG' C?CG
G' HAJ' ?DG'□H ' >AD' JF?C□ ' □C AH' G?DCF
?E' BHNGD' FG?PGH' 0AHC□HBG ' ?C ?' C?E #
iLL ' HAC' CFG G?' JFGH' □C F?CF' APGD>MAJ8N' W
AMMAJ ' HAC' N?D(HG ' JFGH' CFG N?E' □ ' AHG' W
HN' GG' JG HAC' A@GC□@G ' CFG' GEG' A>'FG?PGH'
1/'22+'

=' i ", A@G' @?N?@ ' F?KK□ME G 0?K8N' GDG'MGC B ' □C
#F□ 'K⁄?OG □ '>?D' DG@ACG >DA@' ?HE' K?CF
HN' FGDG ?JF□MG 1J ' J?GDE' M□@L ' @?E' DG C
#A' C?(G DG>DG F□H ' >DGG' >DA@' CFG' KBD B□C
>'GHP□AB ' "AOFG CGD
' ' i ", . BC' JFGDG' @E' MADN
F?MM' JG' >'HN' DG C >AD' ABD' N□ QB□GC' @□HN 'W
#FGDC' NJGMM' BHC?@GN' CFAB F□ ' CF?C F?DME' CAAK'
#A' BOF' ?L? G@GHC' A>'N□ N?□HGN' D? '
G' JGDG' HAC' JAHC' CA' CD?PGM' CFB ' LE' H□ FC
i KGO□?ME' AH' >AAC
i ", A' @?CCGD' MAPG
i CDG@□CG ' ?N@□C' HA' LGCCGD' 0FA□OG
HN ' JGDG' □C' HAC' >AD' CFGG ' ?E' >DAJ?DN' C□@G
@KA 8N' ?' DG?CGD' C? (' ' JABMN' G CGG@' □C
CFG@' CA' CFG (□H ' #FG' C?CG @AD?M□CE' A>'CFG ? G A>' iM□T?LGCF' @□ FC'
KGDF?K ' F?PG' @?NG CF□ ' □HO□NGHC' @ADG K?M?C?LMG' CA' ?H' ?BN□GHOG' A>'
CF?C' N?E' CF?H' CA' ABD GMPG ' LBC' JG' NABL□ J□FGCFGD' F?(KGDG' JABMN'
F?PG' KBC' CF□ ' LBDNGH' BKAH' CFG ' ABM' A>'AHG JFA@' FG J□ FGN' CA' DGKDG-
' K?DCHGD' J□CF' @G □H' CFG' JAD C ' >GGM'W
A ' GHCMG' MADN ' EABD' KDG GHOG' JABMN' □PG' G? G
#A' NG?CF' □C GM>' FABM' FG' HAJ' G□TG' BKAH' @G
' Q(G ' , , " , , $ ' , , ,
.GFAM' JF?C @E' >ADG □ FC F?' BHNGDC?%GH
AD' >G?D' JG' >?□HC ' CFGE ?DG' LBC' FA@GME' 0?CG
, GC ' ?B0%N' J□CF' FBH GD' CFGE @?E' GG@' ?' JGGC
' DG?CGD' N?□HC□G ' JG' JGDG' JAHC' CA' C? CG
i ", D?' G' LG' CA' □@' JF?C G' KMGHCE' GHN ' LACF' CF□ '
HN' ?M' CF□H ' GM G' ABD' @ADC?M' LAN□G ' HGGN'
AD' 0ADH' JG' CF□ ' KAAD' >GGN□H ' HAD' CFG' C?CG
G' HAJ' ?DG'□H ' >AD' JF?C□ ' □C AH' G?DCF
?E' BHNGD' FG?PGH' 0AHC□HBG ' ?C ?' C?E #
iLL ' HAC' CFG G?' JFGH' □C F?CF' APGD>MAJ8N' W
AMMAJ ' HAC' N?D(HG ' JFGH' CFG N?E' □ ' AHG' W
HN' GG' JG HAC' A@GC□@G ' CFG' GEG' A>'FG?PGH'
1/'22+'

F?PG' A@GCF□H ' M□(G' CFG ?@G' □HO□NGHC' □H' CFG' K⁄?E' A>' CFG =' □HHGD'
A>' ?(G>□GMN I' #FG' 0GHG' 0F?H G ' CA' $AHNAH ' JFGDG' JG' F?PG' ?H'
?' G@LME' A>' DGLGM ' JFA' □PA' ABC' CF?C' MNO? OMG' J□MM' LG' CFG□D' GHGD?M'
L□MCDG ' A>' BOF' ?' 0GHG' >BD□' F' ?H' A00? □AH' >AD' CFG' N□ KM?E' A>' F□ F'
KAGC□O?M' KAJGD' #FG'□HCGDP□GJ'LGCJGGH' GHDE' ?HN' F□ ' >?□CF>B⁄M' >D□GHN'
?HN' ?NFGDGHC ' CFG ?H □GCE' A>' CFG' DG>AD@GD' CA' P□HNO?CG' F□@ GM>' >DA@'
N□ MAE?MCE ' J□M C FG FAHG CME' BKKADCGN' F□ ' AJDC' AK□H□AH ' CFG' H?CBD?M
NG □DG' A>'CFG' (□H ' CA' DG □ C □HHAP?C□AH ' J□M C FG DG KGOCGN' CFG' P□DCBG '
A>' CFG' □HHAP?CAD R KA□HC ' M□(G CFG G' JABM' F?PG' LGGH' F?HNMGN' LE'
F?(KGDG ' AD' AHG' □@LBGN' J□CF' F□ ' K□DC' □H' ?' @?HHGD' CF?C' JABM'
F?PG' M□PGN' ?HN' ?'LNGN' □H' ABD' @G@AD□G ' #FG' M□HG ' CF?C' J□G' F?PG'
QBACGN ' J□F□OF' ?DG' CFG' LG C □H' CFG' OGHG ' >BD□' F' ?' B>>□O□GHC' KDAA>'CF?C
CFG' BL5GOC' J ?' □H' >GGLMG' F?HN
#FG' CF□D' ?OC' AKGH ' CA' B ' CFG' 0AH K□D?0E' A>' ?@LD□N G ' 0DAAK'
?HN' +DGE ' #FG' OAH K□D?CAD ' @GGC' $ADN' ALF?@' #FG' @ANG' □H'
:>CF□OF CFGE' □HCDANBOG' CFG□D' KBDKA G' □ ' K□DCGN' ?HN' ND?@?C□O' ALF?@'
F?' '□HP□CGN' CFG@' CA' F□ ' FAB G ' ?HN' KDA@□ G ' CFG@' FBHCGD ∦>?DG' ?HN' ?'
FBHC' ?@LD□N G' CFB ' DGKM□G ' LG>ADG' FG' KDG GHC ' CFG' K?KGD' J F□OF'
N□ 0MA G ' CFG' KMAC

=' i ' ?E ' LBC CFG' C?' ' J F□OF' JG' NG □DG' CA' CD□(G
$?PG ' HAC □H' A J M□H ' ' □>'EAB' J□MM' 0AH GHC
HN' A' J□CF' B ' J GMM' LD□H ' EAB' CA' ?' >ADG C
FGDG' DBH ' ?' M□B CE' FGDN' ' ?@A ' CFG' JF□OF'
#FGDG' ' ?' C?' BKGD□AD' CA' CFG' DG C
' C?CGME' LG? C' CF?C' J'FGH' F□ ' >GMMA J ' DBH
G' M□2N ' CFG' D?OG ' ?HN' LG?C ' CFG' BMMGH' G?DCF
' CFAB F' FG' 0ADH8N' □C' J□CF' F□ ' CD?@KM□H ' FAA>
M⁄A>C' FG' LG?D ' F□ ' FG?N' ?HN' J□CF' F□ ' LDG? C
$□(G'?' FB' LBMJ?D(' 0ABHCGDOFGO(' CFG' J□HN'
HN ' JFGH' FG' C?HNGCF' C□M' FG' CDGCOFGCF' >ADCF'
□ ' KDABN' ?@L□CAB ' HGO(' ? ' □>' FG @G?HC'
#A' JABHN' CFG' >D@?@GHC' J□CF' >AD(GN' FADH
i "' 8#□ ' K□CE' BOF' ?' AANME' LG? C' FABM' N□G
HN' ' AC' A' □D' 0AF H ' >AD' FG □ ' CED?HHAB
i ' AC' A' □D' 0AF H ' >AD' FG □ ' CED?HHAB

#FG' .□ FAK' A>' "AOFG CGD' ?KKG?D ' ?HN' NGHABHOG ' ALF?@' >AD' CFG
0AHCG@K□ FAJH' CA' F□ ' O□C?C□AH ' CFG' (□H ' DGKDAPG ' CFG' L□ FAK' ?HN'
N□ @□ G ' MNO? CMG' □H' ?'GCE' C □ ' GP□NGHC' CF?C' CFG' ND?@?C□O' 0?K?-
L□MCDG ' A>' BOF' ?' 0GHG' >BD□' F' ?H' A00? □AH' >AD' CFG' N□ KM?E' A>' F□ F'
KAGC□O?M' KAJGD' #FG'□HCGDP□GJ'LGCJGGH' GHDE' ?HN' F□ ' >?□CF>B⁄M' >D□GHN'
?HN' ?NFGDGHC ' CFG ?H □GCE' A>' CFG' DG>AD@GD' CA' P□HNO?CG' F□@ GM>' >DA@'
N□ MAE?MCE ' J□M C FG FAHG CME' BKKADCGN' F□ ' AJDC' AK□H□AH ' CFG' H?CBD?M
NG □DG' A>'CFG' (□H ' CA' DG □ C □HHAP?C□AH ' J□M C FG DG KGOCGN' CFG' P□DCBG '
A>' CFG' □HHAP?CAD R KA□HC ' M□(G CFG G' JABM' F?PG' LGGH' F?HNMGN' LE'
F?(KGDG ' AD' AHG' □@LBGN' J□CF' F□ ' K□DC' □H' ?' @?HHGD' CF?C' JABM'
F?PG' M□PGN' ?HN' ?'LNGN' □H' ABD' @G@AD□G ' #FG' M□HG ' CF?C' J□G' F?PG'
QBACGN ' J□F□OF' ?DG' CFG' LG C □H' CFG' OGHG ' >BD□' F' ?' B>>□O□GHC' KDAA>'CF?C
CFG' BL5GOC' J ?' □H' >GGLMG' F?HN
#FG' CF□D' ?OC' AKGH ' CA' B ' CFG' 0AH K□D?0E' A>' ?@LD□N G ' 0DAAK'
?HN' +DGE ' #FG' 0AH K□D?CAD ' @GGC' $ADN' ALF?@' #FG' @ANG' □H'
:>CF□OF CFGE' □HCDANBOG' CFG□D' KBDKA G' □ ' K□DCGN' ?HN' ND?@?C□O' ALF?@'
F?' '□HP□CGN' CFG@' CA' F□ ' FAB G ' ?HN' KDA@□ G ' CFG@' FBHCGD ∦>?DG' ?HN' ?'
FBHC' ?@LD□N G' CFB ' DGKM□G ' LG>ADG' FG' KDG GHC ' CFG' K?KGD' J F□OF'
N□ 0MA G ' CFG' KMAC

=' i ' ?E ' LBC CFG' C?' ' J F□OF' JG' NG □DG' CA' CD□(G
$?PG ' HAC □H' A J M□H ' ' □>'EAB' J□MM' 0AH GHC
HN' A' J□CF' B ' J GMM' LD□H ' EAB' CA' ?' >ADG C
FGDG' DBH ' ?' M□B CE' FGDN' ' ?@A ' CFG' J F□OF'
#FGDG' ' ?' C?' BKGD□AD' CA' CFG' DG C
' C?CGME' LG? C' CF?C' J'FGH' F□ ' >GMMA J ' DBH
G' M□2N ' CFG' D?OG ' ?HN' LG?C ' CFG' BMMGH' G?DCF
' CFAB F' FG' 0ADH8N' □C' J□CF' F□ ' CD?@KM□H ' FAA>
M⁄A>C' FG' LG?D ' F□ ' FG?N' ?HN' J□CF' F□ ' LDG? C
$□(G'?' FB' LBMJ?D(' 0ABHCGDOFGO(' CFG' J□HN'
HN ' JFGH' FG' C?HNGCF' C□M' FG' CDGCOFGCF' >ADCF'
□ ' KDABN' ?@L□CAB ' HGO(' ? ' □>' FG @G?HC'
#A' JABHN' CFG' >D@?@GHC' J□CF' >AD(GN' FADH
i "' 8#□ ' K□CE' BOF' ?' AANME' LG? C' FABM' N□G
HN' ' AC' A' □D' 0AF H ' >AD' FG □ ' CED?HHAB

HN' AD□ ' CFG' ACFGD' NGGD ' ?HN' J□M' HAC (GGK'
#F□ 'K⁄?OG □ '>?D' DG@ACG >DA@' ?HE' K?CF'
HN' FGDG ?JF□MG 1J ' J?GDE' M□@L ' @?E' DG C'
#A' C?(G DG>DG F□H ' >DGG' >DA@' CFG' KBD B□C'
>'GHP□AB ' "AOFG CGD
' ' i ", . BC' JFGDG' @E' MADN
F?MM' JG' >'HN' DG C >AD' ABD' N□ QB□GC' @□HN 'W
#FGDC' NJGMM' BHC?@GN' CFAB F□ ' CF?C' F?DME' CAAK'
#A' BOF' ?L? G@GHC' A>'N□ N?□HGN' D? '
G' JGDG' HAC' JAHC' CA' CD?PGM' CFB ' LE' H□ FC
i KGO□?ME' AH' >AAC
i ", A' @?CCGD' MAPG
i CDG@□CG ' ?N@□C' HA' LGCCGD' 0FA□OG
HN ' JGDG' □C' HAC' >AD' CFGG ' ?E' >DAJ?DN' C□@G
@KA 8N' ?' DG?CGD' C? (' ' JABMN' G CGG@' □C
CFG@' CA' CFG (□H ' #FG' C?CG @AD?M□CE' A>'CFG ? G A>' iM□T?LGCF' @□ FC'
KGDF?K ' F?PG' @?NG CF□ ' □HO□NGHC' @ADG K?M?C?LMG' CA' ?H' ?BN□GHOG' A>'
CF?C' N?E' CF?H' CA' ABD GMPG ' LBC' JG' NABL□ J□FGCFGD' F?(KGDG' JABMN'
F?PG' KBC' CF□ ' LBDNGH' BKAH' CFG ' ABM' A>'AHG JFA@' FG J□ FGN' CA' DGKDG-
' K?DCHGD' J□CF' @G □H' CFG' JAD C ' >GGM'W
A ' GHCMG' MADN ' EABD' KDG GHOG' JABMN' □PG' G? G
#A' NG?CF' □C GM>' FABM' FG' HAJ' G□TG' BKAH' @G
' Q(G ' , , " , , $ ' , , ,
.GFAM' JF?C @E' >ADG □ FC F?' BHNGDC?%GH
AD' >G?D' JG' >?□HC ' CFGE ?DG' LBC' FA@GME' 0?CG
, GC ' ?B0%N' J□CF' FBH GD' CFGE @?E' GG@' ?' JGGC
' DG?CGD' N?□HC□G ' JG' JGDG' JAHC' CA' C? CG
i ", D?' G' LG' CA' □@' JF?C G' KMGHCE' GHN ' LACF' CF□ '
HN' ?M' CF□H ' GM G' ABD' @ADC?M' LAN□G ' HGGN'
AD' 0ADH' JG' CF□ ' KAAD' >GGN□H ' HAD' CFG' C?CG
G' HAJ' ?DG'□H ' >AD' JF?C□ ' □C AH' G?DCF
?E' BHNGD' FG?PGH' 0AHC□HBG ' ?C ?' C?E #
iLL ' HAC' CFG G?' JFGH' □C F?CF' APGD>MAJ8N' W
AMMAJ ' HAC' N?D(HG ' JFGH' CFG N?E' □ ' AHG' W
HN' GG' JG HAC' A@GC□@G ' CFG' GEG' A>'FG?PGH'
1/'22+'

HN' AD□ ' CFG' ACFGD' NGGD ' ?HN' J□M' HAC (GGK'
#F□ 'K⁄?OG □ '>?D' DG@ACG >DA@' ?HE' K?CF'
HN' FGDG ?JF□MG 1J ' J?GDE' M□@L ' @?E' DG C'
#A' C?(G DG>DG F□H ' >DGG' >DA@' CFG' KBD B□C'
>'GHP□AB ' "AOFG CGD
' ' i ", . BC' JFGDG' @E' MADN
F?MM' JG' >'HN' DG C >AD' ABD' N□ QB□GC' @□HN 'W
#FGDC' NJGMM' BHC?@GN' CFAB F□ ' CF?C' F?DME' CAAK'
#A' BOF' ?L? G@GHC' A>'N□ N?□HGN' D? '
G' JGDG' HAC' JAHC' CA' CD?PGM' CFB ' LE' H□ FC
i KGO□?ME' AH' >AAC
i ", A' @?CCGD' MAPG
i CDG@□CG ' ?N@□C' HA' LGCCGD' 0FA□OG
HN ' JGDG' □C' HAC' >AD' CFGG ' ?E' >DAJ?DN' C□@G
@KA 8N' ?' DG?CGD' C? (' ' JABMN' G CGG@' □C
CFG@' CA' CFG (□H ' #FG' C?CG @AD?M□CE' A>'CFG ? G A>' iM□T?LGCF' @□ FC'
KGDF?K ' F?PG' @?NG CF□ ' □HO□NGHC' @ADG K?M?C?LMG' CA' ?H' ?BN□GHOG' A>'
CF?C' N?E' CF?H' CA' ABD GMPG ' LBC' JG' NABL□ J□FGCFGD' F?(KGDG' JABMN'
F?PG' KBC' CF□ ' LBDNGH' BKAH' CFG ' ABM' A>'AHG JFA@' FG J□ FGN' CA' DGKDG-
' K?DCHGD' J□CF' @G □H' CFG' JAD C ' >GGM'W
A ' GHCMG' MADN ' EABD' KDG GHOG' JABMN' □PG' G? G
#A' NG?CF' □C GM>' FABM' FG' HAJ' G□TG' BKAH' @G
' Q(G ' , , " , , $ ' , , ,
.GFAM' JF?C @E' >ADG □ FC F?' BHNGDC?%GH
AD' >G?D' JG' >?□HC ' CFGE ?DG' LBC' FA@GME' 0?CG
, GC ' ?B0%N' J□CF' FBH GD' CFGE @?E' GG@' ?' JGGC
' DG?CGD' N?□HC□G ' JG' JGDG' JAHC' CA' C? CG
i ", D?' G' LG' CA' □@' JF?C G' KMGHCE' GHN ' LACF' CF□ '
HN' ?M' CF□H ' GM G' ABD' @ADC?M' LAN□G ' HGGN'
AD' 0ADH' JG' CF□ ' KAAD' >GGN□H ' HAD' CFG' C?CG
G' HAJ' ?DG'□H ' >AD' JF?C□ ' □C AH' G?DCF
?E' BHNGD' FG?PGH' 0AHC□HBG ' ?C ?' C?E #
iLL ' HAC' CFG G?' JFGH' □C F?CF' APGD>MAJ8N' W
AMMAJ ' HAC' N?D(HG ' JFGH' CFG N?E' □ ' AHG' W
HN' GG' JG HAC' A@GC□@G ' CFG' GEG' A>'FG?PGH'
1/'22+'

? 7' 7 % ' ' 7 7

%"@@8N' J"CF' A8GD >ME"H ' 0MABN ' W #FGDG8 ' HAC' CF?C' JAD(' >'0?DG>BM' H?CDBC ' AD' A>'0BHH"H ' ?"C A J' "DAH ' FAJ' LG?BCGAB ' AD' FAJ' D"0F' "C' LG . BC' >?M ' "H' C"@G' CA' DB"H' GDG ' GHCMG' @?N?@ H' CF" ' AHG' ND?B FC' ' J? F' @E' ADDAJ' NAJH' 0 ? D / #FG' KGD GOBCGN' K?"D' >?M' ? 'MGGK ' ?HN' ?' @BDNGDGN' LANE' LG"H ' >ABHN' HG?D' CFG@' CFGE'?DG' ?KKDGFGHNGN' ? ' CFG' @BDNGDGD ' ?HN' 0AHNBOCGN' CA' CD"?M' #FGE'?DG' N" OF?D GN' CFDAB F' CFG N" OAPGDE' A>' CFG' DG?M' @BDNGDGD' ?HN' >ME' J"CF' $ADN' AJ" ' "HCA' ?MG C' J"M' LG' GP"NGHC' >DA@' CF" ' ?H?ME " ' CF?C' = #FG' "D C' ?DC' A>' "D' 0AFH' MNO7 CMG I' " ' GHC"DGME' NG>"O"GH?' "H' ND?@?C"D' BH"CE' F?(KGDG' ?CCG@K?' CA' B C?"H' CF?C' BH"CE' A>'"NG?' J F"OF' JG' GG' A' CD"(H ME"H' F" ' LG C' CD? GN"G ' ?HN' 0A@GN"G ' G' F?PG' HAC' AHG' DG?C' ?OC"AH ' LBC' ? K"?E ' LBC' ?>CGD' ?M' CFG' CF"H ' NA' HAC' ?N@"C' A>'0A@K?D" AH BOOG "AH' A>' ?OC"AH ' ?HN' EGC' CFDAB F' F" ' JAHNGD>BM' KAJGD' A>' 0F?D?OCGD"T?C"AH' ?HN' F" ' (M' "H' DABK"H ' ?' GD"G ' A>' GPGHC ' DABH" AHG' MG?NH ' GPGHC' J G F?PG' ?' KD"HO"KMG' BKAH' JF"OF' CFG' @"HN' 0?H' NGCGD@"H?CGME' DG C' ?HN' D" FCME' 0A@KDGFGHN' CFG' JFAMG' ND?@?C"O' @APG@GHC' H' CFG' KM?E' LG>ADG' B ' CFGDG " ' HA' N" C"HOC' DGM?C"AH' LGCJGGH' AHG' OGHG' ?HN' ?HAC?GD' G' >AD' GC' CFG' OAHHGOC"AH' LGCJGGH' MNO7 CMG' ?HN' CFG' GPGHC ' "H' JF"OF' FG " ' "@KMO?CGN ' ?HN' JFGH' FG F"@ G%' ?KKG?D ' AH' CFG' OGHG ' CFG' NGPGMAK@GHC' A>'0F?D?OCGD ' "H' JF"OF' ?' DG?M' KAGC' JABMN' F?PG' MB BD"?CGN ' " ' @?NG' BLADN"H?CG' CA' MFG FBDZ' A>' CFG' KGDKMG GN' CFAB F' @AHACAHAB ' @APG@GHC' A>' CFG' CADEZ #FADAB FME' CA' BHNGD C?HN' CFG' BDK?" H ' KAJGD' A>' F?(KGDG' @?H? G@GHC' A>'CFG' F" CAD"O?M' ND?@?'"C @" FC LG' NG "D?LMG' CA' 0A@K?DG' 0AFH ' AD' "'OF?DN' ' AD' "'OF?DN' ' AD' GHDE') ' J"CF' CF" '

! ' ' !)

' >D C GN C AH A> CF ' KM?E J? ' KBL M FGN H 6Y>/ ' BHNGD CFG C CMG A> = #FG FDAH OMG CADE A> #FA@? ' $ADN DA@JGMM I' A' H?@G AD H C?M ' A> ?HE ?BCFAD ?KKG?D H CFG C CMG K? G ' H 4 3' ?KKG?DGN ='#FG CDBG FDAH OMG CAD G A> CFG JFAMG M>G ?HN NG?CF A>'#FA@? ' $ADN DA@JGMM ' 'C F?CF LGGHG BHNDE C@G ' KBL M (GME OCGN LE CFG H ' &?SG C G ' GDB?HC ' D CCGH LE ' I' H 6Y>/' CFG DG CGD ' A> CFG C?C AHGD ? A@K?HE F?N CFG GHCDE A> = ' .AA(G O?MMGN CFG $E>G ?HN %G?CFG A> CFG $ADN DA@JGMM ' ? ' EC J? ' M?CGME ?OCGN LE CFG $ADN F?@LGDMGEH F ' GDP?HC I' C ?KKG?D ' CFGDG->ADG ' CF?C CFG KM?E J? ' AD H?MME KGD>AD@GN ' ?HN OAHC HBGN CA LG KGD>AD@GN ' LE CFG OA@K?HE H JF OF F?(KGDG J? ' ?' OF G> KDAKD GCAD ' H' CFG HCDANBOCADE AC OG CA GHDE) ' JG F?PG ?CCG@KCGN CA FAJ' CF?C F?(KGDG KDANBOGN CF?C KM?E ? ' ?' 0' KM?E H 6Y6R ' C ' G? E CA BHNGD C?HN JFE ' H 6Y6R ' C @ FC DGOA@@GHN CFG ?MG A> ='#FA@? ' $ADN DA@JGMM I' CA KBC ' AH CFG C CMG K? G ' JFGCFGD CFA G H C?M ' DGKDG GHCGN CFG DG?M JD CGD ' AD JGDG @G?HC CA @KME CF?C CFG JD CGD J? ' MM?@' F?(KGDG ' .GEAHN CFG G H C?M ' CFGDG ' FA' G CGDH?M GP NGHOG JF?CGPGD CA ?CCD LBCG CFG KM?E CA CFG DG?C ND?@?C TGD A> !H M F F CADE

' OFMG GM ' ? ' JG F?PG GGH ' O?MM ' = D' 0AFH MNO? CMGI' ?HN ='#FA@? ' $ADN DA@JGMM I' = L A D?KF O?M ND?@? ' ?HN @ANGM ' H CF ' KGO G I' G' F?PG HA' FG C?C AH H ?>>D@H ' CF?C ?' L A D?KF O?M ND?@? ' G KGO?MME' BOF ?' ND?@?' ? ' = #FA@? ' $ADN DA@JGMM I' ' G GHC?MME' BHND?@?C O ' =' MNO? CMG I' C?(G ' ?' KADC AH AHME A> CFG M>G A> C ' FGDA ' LBC =' DA@JGMM I' PG ' B ' CFG CADE A> CFG @?H >DA@' F ' LAEFAAN CA F ' G GOBC AH ' #FG' DG G@LM?HOG JF OF C LG?D ' CA ?HE KM?E A> F?(KGDG8 ' ' AMGME H CFG CDBOCBDG A> CFG C CMG ' ?HN CF?C K?D?MMGM FAMN ' AAN AHME J CF DG ?DN CA AHG KM?E ' $G?D ' ?OOADN H ' CA C ' AD H?M C CMG ' CFG ='#DBG FDAH OMG CAD G A> CFG M>G ?HN NG?CF A> H ' $G?D ?HN F ' CFDGG %?B FCGD I' H CFG>AM A OAMMGOC AH A> 423' JG F?PG ' HNGGN ' ='#FG' $>G ?HN %G?CF A> H ' 0AFH I'='#FG' $>G ?HN %G?CF A> "OF?DN I'='#FG' >G A> H ' GHDE) I'='#FG' $>G ?HN %G?CF A> "OF?DN I?HN= #FG' $>G A> H ' GHDE) I' A ' H CFG ?@G GN C AH ' JG F?PG ' = #FG' $>G ?HN %G?CF A> 0BM B ' ? ?D I' . BC ABD DG?NGD ' ?DG KGD>GOCME ?J?DG CF?C H ?MM CFG G ND?@? ' ?' PGDE @?MM KADC AH A> CFG M>G A> CFG FGDA A> G?OF ' HOMBNGN H CFG ?OC AH ' F?(KGDG (HGJ F ' ?DC CAA JGMM CA ?CCG@KC CA CG?OF F CADE ND?@?C-O?MME LE OAHHGOC H ' ?' GD G ' A> AM?CGN GPGHC ' AMGME LE CFG D DGM?C AH CA ?' KD HO K?M ? GHC ' J CFABC ?HE ACFGD NGKGHNGHOG ' ACF H ' >AD G ?@KMG ' O?H LG @ADG OA@KMGCG H C GM> CF?H CFG ?OC AH A> "OF?DN ' AD CF?C K> GHDE) ' A> "OF?DN ' ?HN A> GHDE) ' G F?PG H CFG G KGOG ' HG?DME ?MM CFG OAHNGH ?C AH JF OF KBDG CD? GNE DGQB DG ' .BC H ='#FA@? ' $ADN DA@JGMM I' AH CFG OAHCD?DE ' JF?C F?(KGDG JABMN F?PG ' H ?' >GJ' JADN ' DG GDP H ' F @ GM> >AD ?H G F L C AH A >' OF?D?OCGD H CFG @ADG CD (H ' CB?C AH ' ' ?OCB?MME ' CA B ' H ?' BOOG AH A> OGHG ' CF?C F?PG HA DGM?C AH CA ?HE ?OC AH A> NGGKGH H ' HCGDG CR OF?KCGD BKAH OF?KCGD A> JF OF @ FC F?PG LGGH PGDE JGMM K?DGN ' >' AHG OF?KCGD ' CF?C A> CFG GMGP?C AH ?HN >?MM A> DA@JGMM ' F?N AOOBK GN ?' K?OG KDAKADC AHGN CA C ' @KAD-C?HOG

G' LG H CFG ND?@?' H CFG FAK A> AMN DA@JGMM ' CFG LM?O(-@CF ' ?C BCHGE ' JFGDG EABH ' DA@JGMM ' J CF ?' J?HC A> GH G CF?C MM ?OOADN ' J CF F ' >BCBDG ?NP?HOG@GHC ' H C ' CF?C F ' >?CFGD8 ' @GH F?MMC MG?PG A>> JAD(' LGO?B G CFG D HA G N CBDL ' F ' CBNE ' ' >?CFGD OA@G ' ?HN ' M(G ?' GH LMG ?HN FAHG C @?H DGKDAPG ' F ' AH >AD F ' P? ?D G ' ?HN CFGH CFG ?@L C AB ' EABCF ' JFA' KDAOM?@ ' CFG' KBDKA G A> F ' KDG ? H ' ABM ' CF?C FG' J MM' LB MN' ?' K?M?OG

=' '>HG' ? ' ' (H ' GHDE(' FAB G ?C FGGH I'

CFB ' AM MAQB G R

=' FE' FABMN @E' L DCF' (GGK' NAJH' @E' @ABHC H ' KD C'W
DG' HAC' ?MM' ODG?CBDG ' BLSGOC' BHCA' C@G
#A' C@G ' JFA' NACF' ?LB G' CFG' OFG?CGN' JADMN
HN' >MM ' C' >BMM' A>' FAN G KAN G' L? C?DNE'W
#FGDG8 ' MG AH ' HAJ' A>' LG ?D ' AH' CFG' G?DCF'
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HN' -,1' *,-2@:(' ,*;';:*(%' -+:%2(' ;%2%'
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HN' >DA@' CFG' NBH F MM' @MM AH ' NA' ?NP?HOG'
' C?CG' ?HN' @?D(' H' CF ' ?N@D H ' JADMN
#F ' ' LBC' OABD G' JF OF' H' CFG' H?@G' A>'>?CG'
' GGH' ? ' A>CGH' ? ' C' JF DM ' ?LABC
#FG' DPGD' #F?@G ' CF?C' LE' ABD' NAAD' NACF' K?
' >D C' LG HH H ' ' LBC' @?MM' ?HN' F?MMAJ
,GC ' (GGK H ' AH' F ' OABD G ' DAJ ' CA' ?' G?
HN' M(GJ G' AM GE ' CFG' JAHNGD' A>' ABD' ? G
('9 2+:'-(' %-,'-(' ,%'-'9'+@:%28(' (*,J
AJ' JFA' J CF H' CF ' M?HN' ?' DG?CGD' @?H' W
#FGH ' DA@JGMM ' OFGGD' CFGG' BK ' ?HN' CGMM' CFE' ABM
#F?C' CFAB' @?E8 C' M PG' CA' >MABD F' ?HN' OAHCDAM I

#FG' EABH ' @?H' JFA' NG K G ' JAD(' @@GN?CGME' GC ' G@KMAE@GHC' J CFABC' GG(H ' CR CA' LG' GODGC?DE' CA' CFG' !H M F' @GDOF?HC ' ?C HC-JGDK ' #FGH' OA@@GHOG ' CFG' GOAHN?DE' ?OC AH' A>' CFG' ND?@?' JF OF' OAH C ' A>' CFG' ?NPGHCBDG ' A>' AHG' .?H CGD' ?H' !H M F' @GDOF?HC' JFA' ' KGD GOBCGN' LE' .? AC' ?' B BDGD' ?HN' DGM GPGN' LE' ?' >ADG H' @GDOF?HC' C' ' LE' HA' @G?H ' OMG?D' JF?C' CF ' F? ' CA' NA' J CF' #FA@?' $ADN DA@-JGMM ' LBC' C' @?E' LG' ?C >?OCADE' CA' (HAJ' CF?C' GPGHCB?MME' CFG' B BDGD ' F?H GN ' ?HN' CFG' @GDOF?HC ' DG CADGN' CA' OA@KGCGHOG

C' JABMN' F?PG' LGGH' N>>OBMC' J CF' ?MM' CFG' ?BCFAD8 ' OAHCG@KC' >AD' BH CE' A>' ?OC AH ' CA' F?PG' OAHCD PGN' CA' F?PG' CAMN' CFG' JFAMG' CADE' A>' DA@JGMM' ND?@?C O?MME ' ?HN' A' FG' AOO? AH?MME' PG ' B ' ?' OFADB ' #FG' GOAHN' ?OC' CFB ' AKGH ' R

=' AJ ' GHCMG@GH ' @? HG' CF?C' EABH ' DA@JGMM8 '
H' HCJGDK ' MG GD' >AD' CFG' !H M F' @GDOF?HC
HN' .?H CGD ' CA' FBH' CF ' .? AC8 ' F?CG
G?D H ' CF?C' FG' F?CF' AC' A@G' A>' F ' NGLC
'>MGN' CA' HCJGDK ' J CF' F ' J>G' ?HN' OF MNDGH'
F OF' .? AC' FG?D H ' ' AHG' ?>CGD' CFG@
HN' CF CFGD' GHN ' F ' L MM ' A>' NGLC' LG>ADG
#A' LG' DGPGH 8N' AH' DGCOFGN' .?H CGD
F?C' NACF' >?MM' ABC ' J CF' K?C GHOG' C' ?HN' GG
'SB C' DGQB C?M' A>'>?M G' CDG?OFGDE I

DA@JGMM' F? ' HACF H ' CA' NA' J CF' CF ' = SB C' DGQB C?M' A>'>?M G' CDG?OFGDE I'
R JF OF' DGQB C?M' OAH C ' H' CFG' B BDGD' LG H ' ?DDG CGN' >AD' KBDOF? H '
CFG' (H 8 ' CAMGH' SGJGM ' DA@JGMM' GC ' ? ' C DGN' A>' (GGK H ' ?OOABHC '
? ' FG' KDGP AB ME' J? ' A>' CFG' N H' A>' F ' >?CFGD8 ' @ CFE ' A' ?MM' H' ?'
@A@GHC' FG' CFDAJ ' BK' F ' OA@@ AH ' ?HN' GC ' A>>' BKAH' F ' CD?PGM '
CA' C?ME ' F?P H ' PGDE' AKKADCBHGME' @GC' H' HCJGDK' J CF' AN G '
F ' >?CFGD8 ' @?H ' HN' A' JG' GC' CFDAB F' CFG' GOAHN' ?OC ' '
H' CFG' CF DN' ?OC' CFG' O?KD O AB ' M?N' ?HN' F ' GDP?HC' ?DG' C?HN H

? 7' 7 % ' ' 7 7

KGHH□MG 'BKAH'CFG L□□N G ?C MADGHOG'?NM CFG□D □@@GN□?CG HGOG □CIG '?□D □GM□GPGN' LE' CFG GHGDAB' C?M□?H' @GDOF?HC J FA' J ? ' BOOABD□H ' CFG N□ CDG 'A½' CFG iH M□ F@?H'□H CFG >□D C ?OC' □A@ J GMM □ ' ?MJ ?E ' @AP□H ' ?NM' FG GC' ' >AD' .AHAH□?' JFGDG FG DG 0BG ' LE' ?' CD?C? G@' "B GWM' CFG i?DM' A½' .GN>ADN' >DA@' CFG ? GHC ' A½' CFG DGHOF' (□H ' G F?PG CFG OFADB' ? ?□H' □H' CFG @□NNMG' A½' CFG ?OC R

=' #FB '>?D' EAB' GG FAJ' □A@ J GMM8 '>ADCBHG' K? 8N #FG' G?DM A½' .GN>ADN' LG□H ' ?>G □H' &.?HCB? %G □DG ' □A@ J GMM8 '0A@K?HE' □HCA' D?HOG #A' @?(G □GQB□C?M' >AD' F□ '0ABDCG E' .BC □A@ J GMM' NACF' NGHE' CFG G?DM' F□ ' B□C HN' CGMM ' F□@' CF?C' CFA G K?DC ' FG @G?HC' CA' GG G' F?N' HAC' EGC' GC' >AC□H ' AH' CFG M?HN HN' A' N□DGOCME' C?(G 'F□ ' J?E' CA' K?□H' #FG' G?DM CA' D?HOG ' ?HN' A' CFGE' LACF' NA' K?DC A J' MGC' EABD' CFAB F□ ' ? ' J□>C ? '□ ' CFG' J□HN (□K A@G >GJ' EG?D 'CF?C' □A@□>DGMM' KGHC' □H' CD?PGM HN' HAJ'□@? □HG F□@' CA' LG' □H' i H M?HN GDP?HC' BHCA' CFG @? CGD' A½' CFG' □AMM F□@' BHCA' EABD' MADN F□K HN' HA J ' GG FG F?C□ KDG>GDD8N' F□@ GM> S ' F?C□ □ ' CFE' H?@GW i ' □A@ J GMM' @E' MADN S ' #FGH' □A@ J GMM' FGDG J G' @?(G CFGG A□O□CAD' ½'ABD' 0?B G ' ?HN' HG?DG C' HG C' ABD GM½ +?DN□HGD' □PG' EAB' (□HN' J GMOA@G CA' CFG @?H I

#FG' >ABDCF ?OC AKGH ' ? ?□H' J□CF ?' 0FADB R

=' A J ' □A@ J GMM8 ' F□ FG C >ADCBHG ' NA' LG □H AM GE ' CF?C' MAP8N' F□@' ? ' FG N□N' F□ ' M□>G A@@□CCGN' ?WM F□ ' CDG? BDG CA' F□ ' F?HN AM GE□ ' NG?N' ' ?HN' +?DN□HGD ' F□ ' @?H ' HA J' DDG?CGN' L□ FAK' A½' □HOFG CGD ?DNAH' □½' J G' A@□C ?WM AM GE8 ' M□>G .GO?B G' ABD' KM?E' NGKGHN ' AH' □A@ J GMM8 ' NG?CM□ A J' □C' ?HN' GG F□ ' F□ FG C C?CG A½' ?WM □ ' FG□ F□ A½'D□ □H ' BNNGH' >?M

=' > ' □D' F□□ CAKFGD' □ ' CF?C EABD' @?H'W ' H 8C M□(G ,ABD' D?OG ' FG □ ' ?' OFAM?D' ?HN' ?' M□H B□ C HG CF?C F?CF CD?PGMMGN' CFDAB F @?HE' K?DC ' ½' F□□ CGHNA@ ' @E' MADN S ' &.E' >□GHN' 0A@G HG?DGD' F?EG EAB' LGGH ?' CD?PGMMGD'W i ' &.E' MADN

?DNAH' CFG GDDAD ' ?DG ?MDG?NE' K? C HN' M□PG' □H' FAKG' CFG' LG C' NACM' 0A@G ?C M? C &.E' FAKG' BKAH' EABD' >?PABD' NACF' NGKGHN HN' MAA(' CA' F?PG' EABD' M□(□H ' GDG' CFG GHN I

C' J ? ' OGDC?□HME' HGGNMG ' >AD' CFG ?BCFAD' CA' ?KAMA □TG' >AD' A@□CCH '@5 A' AM GE8 ' M□>G I' LBC' CFG' ?KAMA E' ' 0BD□AB ' ? ' G F□L□C□H ' F□ ' DBNG' HAC□AH ' A½' J F?C' J ?' ' KDAKGDME' J□CF□H' CFG' KDAP□HOG' A½'CFG' ND?@?' G F?PG' HA J' DA@ J GMM ' ?>CGD' CFG' NG?CF' A½' AM GE ' LGOA@G □D' #FA@?' DA@ J GMM ' ?HN' +?DN□HGD' @?(G ' ?' BNNGH' DG AMB□AH' CF?C' FG J□MM F?P>G F□ ' FG?N' #FG' MADGHOG' @GDOF?HC' 0A@G ' CA' $AHNAH' □H' J ?HC ' ?HN' J G' KDG GHC□ME' >□HN' F□@' ?C' CFG' FA KC?L□MG' LA?D□' A½' DA@ J GMM' J□CF @AHGE L ?' FA J GDGN' BKAH' F□@ ' ?HN' F□ ' NGLC ' K?□N' G' F?PG □H CF□ ' ?0C' ?' OGHG' LGC J GGH' +?DN□HGD' ?HN' DA@ J GMM' J□OF' >GGLMG ? ' □C □ ' ?@AH C' CFG' LG C' K? ? G ' A½'CFG KM?E' :R

=' I ' +AAN' @ADDA J' CA' @E' MADN' A½' □HOFG CGD' '(HA J' ,AB'LG?D' @G F?DN' ?LABC' CFG ?LLGE' M?HN ' ?PG' ,*#' 2%-(*' ,' J FGH' 2% < * ,8( )2*,<%O'W I ' ,' CFG' ?LAM□ F□H ' A½'?HC□OFD□ C , AB' F?N' HA' 0AMABD' >AD' J F?C' EAB' F?PG' NAHG HN' A½'F□ ' KAK□ F' ADNGD' >DA@' ABD' DG?M@ '?@' , *' % ,' % 1' CA' 2% < * , .BC J F?□ □ ' NAHG ' □C □ ' >AD' I H M?HN8 ' AAN F?C' N□N' CFGE' GDPG' >AD' ' LBC' CA' >GN' ?' ADC >'M?TE ?LLAC ' ?HN' A½'>BMM >GN' >D□?D 'W #FGE' HG□CFGD' K□AB F' HAD' AJ ' ?HN' EGC CFGE' DG?K #FG' >?C A½'?WM CFG' M?HN' ?HN' B0(' CFG' KAAD $AA(' J F?C' J ? ' CFG□D ' □ ' □H (□H ' GHDE8 ' F?HN □ ' J G?MCF' LG>ADG' M?E' □H' CFG ?LLGE' M?HN I ' &.E' MADN HN' CFAB ?HN' CFAB ?HN I

HN' HAJ'LG' (GKC L?0(' J□CF ?' @? C□>½'NA F?WM' ?NNGN' CA' @E' (HAJ□MGN G' CFG $AJ' ABHC□□G □CF' D?HOG ' K?□H' +GD@?HE' ?HN' C?ME' HN' CFAB F' @?WM ?□H' A½'KDA>□C ' N□N' >□HN , GC' □C N□N' KMG? G @E' GEG' OAHCGHC' @E' @□HN S ' F?C NA' EAB' CF□H('CFGH' A½'CFG GPGD?W C?CG ' HN' KD□HOG 8 0ABDC ' ? ' EAB' F?PG' CD?PGMMGN'W i ' &.E' MADN' HA' OABDC' J□CF' i H M?HN' @?E' OA@K?DG' G□CFGD' >AD' C?CG' HAD' O□P□W' APGDH@GHC $B C' NJ GMM ' □H' D?HOG ' □H' C?ME ' ?HN' K?□H DA@' CFG' KAAD' KG? ?HC' CA' CFG' KD□HOG8 ' CD?□H H' +GD@?HE' ?HN' AMM?HN' D□A□' GDPG HN' FG' CF?C @A C' 0?H' ND□H(' @A J C' FG' NG GDPG i H M?HN' 'KD?□ G' HAC' >AD' 'FGDG J ? ' LAD□H .BC' CF?C' FG' M?B F ' CFG' ACFGD ' BHCA' 0AD□H S ' &.E' MADN' CFGDG NJGMM ' J□CF□H CF?C' K□D□C @ADG #F?H' 0?H' LG' N□ OGDH&N' LE' CFG' ABCJ?DN' GEG' R □D' FD□ CAKFGD ' J□MM' EAB' K?DC' J□CF' EABD' @?H'W ' F?PG' AB FC' CA' KDA>>GD' F□@' BHCA' EABD' MADN F□K HN' HA J ' GG FG F?C□ KDG>GDD8N' F□@ GM> S ' F?C□ □ ' CFE' H?@GW i ' □A@ J GMM' @E' MADN S ' #FGH' □A@ J GMM' FGDG J G' @?(G CFGG A□O□CAD' ½'ABD' 0?B G ' ?HN' HG?DG C' HG C' ABD GM½ +?DN□HGD' □PG' EAB' (□HN' J GMOA@G CA' CFG @?H I

#FG' >ABDCF ?OC AKGH ' ? ?□H' J□CF ?' 0FADB R

=' A J ' □A@ J GMM8 ' F□ FG C >ADCBHG ' NA' LG □H AM GE ' CF?C' MAP8N' F□@' ? ' FG N□N' F□ ' M□>G A@@□CCGN' ?WM F□ ' CDG? BDG CA' F□ ' F?HN AM GE□ ' NG?N' ' ?HN' +?DN□HGD ' F□ ' @?H ' HA J' DDG?CGN' L□ FAK' A½' □HOFG CGD ?DNAH' □½' J G' A@□C ?WM AM GE8 ' M□>G .GO?B G' ABD' KM?E' NGKGHN ' AH' □A@ J GMM8 ' NG?CM□ A J' □C' ?HN' GG F□ ' F□ FG C C?CG A½' ?WM □ ' FG□ F□ A½'D□ □H ' BNNGH' >?M

=' > ' □D' F□□ CAKFGD' □ ' CF?C EABD' @?H'W ' H 8C M□(G ,ABD' D?OG ' FG □ ' ?' OFAM?D' ?HN' M□H B□ C HG CF?C F?CF CD?PGMMGN' CFDAB F @?HE' K?DC ' ½' F□□ CGHNA@ ' @E' MADN S ' &.E' >□GHN' 0A@G HG?DGD' F?EG EAB' LGGH ?' CD?PGMMGD'W i ' &.E' MADN

E 7? ' E8 ??

? GJGMM' NG?7D .GN>ADN' @E KG?0G@ ' @?NG HF FG?PGH
#FB '>?MM ' DG?7 DA@JGMM' ?' KAAD GMM HF MGH CF
#A' D GCA' BH@G? BD&N FG FC' JH &N JCF HGJ' CDGH CF
#FG' M?HN' A>' JAD@ ' JFOF NEH 'GHN NG OAPGD
&E' ABM ' FDH&N' JCF FG?PGH8 'GMG C?7M OAPGD I

C' JABMN' LG' ?' J? CG' A>' C@G CA' ?CCG@KC CA' FAJ' CF?C ,'#FA@?'
$ADN' DA@ JGMMI' OABMN' HAC' F?PG' LGGH' JDCCGH' LE' F?(KGDG' C'
GHCDG' @?H? G@GHC ' @A C BH (DM>BM' CFGDG ' HA' ?DC JF?CGPGD HF CFG
ND?@?CD' OAHOGKCAH' A>' KMAC' AD' OF?D?OCGD '>DA@' >D C CA' M? C CFGDG '
O?DOGME' ?' K? ? G CF?C O?H' LG' O?MMGN' KAGCDE' CFGDG ' HAC FH ' HF C

CF?C PG ' B ' ?' HACAH' A>' ?' JDCGD' O?K?LMG' A>' LGCCGD' CFH ' C' F?'
HAHG A>' CFG CFG >?BMC ' A>' CFG >ABHNGD ' A>' CFG C? GR Z?M G C? CG G CD?P-
?HOG' DOFG ' HGGNMG ME K?D?NGN' G ?DG ?OQB?HCGN' JCF' HA'
ND?@?CD' JDCCGD' A>' @?D(' AD' M(GMFAAN' JFA' J? ' ?' OAHCG@KAD?DE A>'
F?(KGDG' CA' JFA@' C' @?E' LG' ? HGN' >' ' JGDG GHCJADCF'
@CF' C' @B C' F?PG' LGGH' BHMBO(E' >AD' F@' HF FC ' AJH' C@G CF?C F' '
HCC?M ' @ FC G OCG ?' OA@K?D AH' JCF' CFG DG?C DC? CGD A>'CFG G'
FAJGPGD' >ADCBH?CG' FG @?E' F?PG LGGH' HF F?PH ' NG OGHNGN' CA' ?CGD-
C@G ' HF CFG ?@G PAMB@G' JCF' CGH' FC CAD O?M' KM?E ' CF?C KDAL?LME'>D C
C@BM?CGN' FC ' JG?(' ?@LCCAH

s s

0A@GNE J? >D C KBLM FGN H 475 J CF CFG >AMMAJ H C CMG R ,#FG $AHNAH DAN ?MM C J? KM?NG LE CFG H & ?G C G GDB?HC . E MM?@ F?(G KG?DG $AHNAH D HCGN LE # >AD ?CF?HGM . BCCGD I C J? KDAL?LME JD CCGH ?>CGD CFG NG?CF A> ! MT? LGCF >AD H CFG GOAHN ?OC JG F?PG = ?@ ?0A@@?HNGD D BHNGD CFG (H I #FGDG HA GHCDE A> CFG KM?E H CFG C?C AHGD 8 DG CGD OFMG GM ?E R = > JG ?DG HAC @ C?(GH $G H KDAHABHOGN CF K GOG CA LG F?(KGDG8 ?HN J FGN CA LD H C AH CFG +GD@?H C? G I #GO(?M A ? H CF 0A@GNE CA F?(KGDG ?TM CC ?E :H ,$AOD HG8 ?HN <#FG $AHNAH DAN ?M 8 >CFGE J8GDG F?(KG?DG8 ?C ?MM @B C F?PG LGGH ?@AH C CFG H A> F EABCF I #F ?C LG C ? F? CE AK H AH >AD CFGDG O?H LG HA NABLC JF?CGPGD CF?C CFG G CJA KM?E LGMAH CA N>>GDGHC KGD AN ?HN CF?C G?OF O F?D?OCGD C O A> C KGD AN #FGE @B C F?PG LGGH GK?D?CGN LE ?C MG? C CJGHCE EG?D > H =$AOD HG I JG OABMN >HN ?HE H?CBD?M KAJGD ?HE A> CF?C H C HO-C PG (HAJMGN G A> ?DC CF?C OAH C CBCG GH B JG @ FC HQB DG JFGCFGD C J? KA LMG CF?C CFG EABCF>BM F?(KGDG OABMN F?PG KDA-NBOGN CFG JAD(G >HN H C HAC CFG >?BMC A> ?PGDE EABH @?H LBC CFG F?L C JF OF LGMAH CA ?P O AB E CG@ H JF OF CFG JD CGD F? F?N ?OA@KMGCG CD? H H G CFGDG>ADG DGSGOC C BCC H CFG N?CG A> C KBLM O?C AH ABC A> CFG QBG C AH JG ?DG ?C >GN >DA@ CFG GHGD?M CAHG A> = #FG $AHNAH DAN ?M I CF?C C DGKDG GHC CFG @?HHGD A> CFG M? C EG?D A> !MT?LGCF AD CFG >D C A> 0?@G > F?(KGDG JDACG C CFGDG>ADG FG @B C F?PGZJD CCGH C ?>CGD F A@ O KAJGD JGDG >BMME @?CBDGN ?>CGD FG F?N KDANBOGN & BOF NA ?LABC ACF H #JGM>CF , AB $ (G C #FG & GDDE PG A> HN AD #FG LGM G> ?M@A C CAA G CD?P? ?HC CA LG D?PGME OAHCDAPGDCGN #FG OA@GNE AKGH J CF CFG ?DD P?M >DA@)GH OG A> CFG @GDOF?HC MAJGDN?MG GH AD JFA F?N MG>C F AH & ?CCFGJ BHNGD CFG B?DN ?H-F K A> F LDACFGD MAJGDN?MG SBH AD ? $AHNAH @GDOF?HC #FG BHOMG CGMM CFG >?CFGD A> CFG DGO(MG OABD G A> CFG EABH @?H #FG >?CFGD C?(G CF P GJ A> CFG @?CCGD4H , . GM GPG @G LDACFGD CFGE CF?C N G @A C P DCBAB F?PG H CFG D EABCF M PGN @A C P O AB 4 ?HN HAHG (HAJ CFG N?H GD A> CFG >DG @ADG CF?H FG CF?C >?MM HCA C I #F JG BHNGDC?(G CA ?E HAC CFG @AD?M CE A> F?(KGDG CA CAMGD?HOG LGEAHN F CAMGD?HOG . BC C CFG @AD?M CE JF OF KDGP?M H =#FG $AHNAH DAN ?M I #FG BHOMG AG AH CA ?E CF?C CFG AH ? OAHC HB?M JG?DGD ? LDG?(GD A> F A?CF ? @ FCE LD?JMGD ? DG?C ND H(GD AHG CF?C J MM LADDAJ A> ?HE @?H #FG EABCF (HAO(?C CFG NAAD ?HN CFG >?CFGD N B GN CA LG DGKDG GHCGN ? NG?N J MM KDANBOGN LE JF OF CFG AH N H M GD CGN ?HN C SB C OG CA F@ CA ?E CF?C FG N KM?E CFG ?@G HN >>GDGHOG ?LABC CFG MA A> >ADCBHG ? ?LABC CFG NG?CF A> F >?CFGD MN MAJGDN?MG MGHN F@ f Z2A H F ? B@GN OF?D?OCGD ?HN ? DGG CA GH ? G JC F@ ? ? GDP?HC JAA H HAJ OA@@GHOG ?>CGD ? CD?H G >? FAH D $?HOGMAC KBDOAO(F? CFDGG N?B FCGD A> JFA@ $BOG CFG @A C ?CCD?OC PG F? CFDGG B CAD R D DCFBD +DGGH F GMN JFA@ FG KDG->GD M PGD ? %GPAH F DG OMACF GD JFA@ CFG >?CFGD K?CDAH G ?HN EABH MAJGDN?MG JFA DGSGOCGN LACF LE >?CFGD ?HN N?B FCGD @ADG FG?DCMG OABHNDGM OGDC?HME HGPGD KDG GHCGN F@ GM> H JAD F K>BM AO GCE >?CFGD LG H H?@GN FG CFB KG?(A> F@ R

=E +AN LG KD? GN FG >?D GHAB F G AHG ?K D @? G CA ?D?N G HN MG>C @G CA OBC ?O?KGD ? ?H C O?DG $BOG MAA(AH @G CF?C ?@ ? M FC ? ?D I

>?CFGD JFA H F ? B@GN OF?D?OCGD A> ? GDP?HC O?MMGN G CGD

0A@GNE J? >D C KBLM FGN H 475 J CF CFG >AMMAJ H C CMG R ,#FG $AHNAH DAN ?MM C J? KM?NG LE CFG H & ?G C G GDB?HC . E MM?@ F?(G KG?DG $AHNAH D HCGN LE # >AD ?CF?HGM . BCCGD I C J? KDAL?LME JD CCGH ?>CGD CFG NG?CF A> ! MT? LGCF >AD H CFG GOAHN ?OC JG F?PG = ?@ ?0A@@?HNGD D BHNGD CFG (H I #FGDG HA GHCDE A> CFG KM?E H CFG C?C AHGD 8 DG CGD OFMG GM ?E R = > JG ?DG HAC @ C?(GH $G H KDAHABHOGN CF K GOG CA LG F?(KGDG8 ?HN J FGN CA LD H C AH CFG +GD@?H C? G I #GO(?M A ? H CF 0A@GNE CA F?(KGDG ?TM CC ?E :H ,$AOD HG8 ?HN <#FG $AHNAH DAN ?M 8 >CFGE J8GDG F?(KG?DG8 ?C ?MM @B C F?PG LGGH ?@AH C CFG H A> F EABCF I #F ?C LG C ? F? CE AK H AH >AD CFGDG O?H LG HA NABLC JF?CGPGD CF?C CFG G CJA KM?E LGMAH CA N>>GDGHC KGD AN ?HN CF?C G?OF O F?D?OCGD C O A> C KGD AN #FGE @B C F?PG LGGH GK?D?CGN LE ?C MG? C CJGHCE EG?D > H =$AOD HG I JG OABMN >HN ?HE H?CBD?M KAJGD ?HE A> CF?C H C HO-C PG (HAJMGN G A> ?DC CF?C OAH C CBCG GH B JG @ FC HQB DG JFGCFGD C J? KA LMG CF?C CFG EABCF>BM F?(KGDG OABMN F?PG KDA-NBOGN CFG JAD(G >HN H C HAC CFG >?BMC A> ?PGDE EABH @?H LBC CFG F?L C JF OF LGMAH CA ?P O AB E CG@ H JF OF CFG JD CGD F? F?N ?OA@KMGCG CD? H H G CFGDG>ADG DGSGOC C BCC H CFG N?CG A> C KBLM O?C AH ABC A> CFG QBG C AH JG ?DG ?C >GN >DA@ CFG GHGD?M CAHG A> = #FG $AHNAH DAN ?M I CF?C C DGKDG GHC CFG @?HHGD A> CFG M? C EG?D A> !MT?LGCF AD CFG >D C A> 0?@G > F?(KGDG JDACG C CFGDG>ADG FG @B C F?PGZJD CCGH C ?>CGD F A@ O KAJGD JGDG >BMME @?CBDGN ?>CGD FG F?N KDANBOGN & BOF NA ?LABC ACF H #JGM>CF FC , AB $ (G C #FG & GDDE PG A> HN AD #FG LGM G> ?M@A C CAA G CD?P? ?HC CA LG D?PGME OAHCDAPGDCGN #FG OA@GNE AKGH J CF CFG ?DD P?M >DA@)GH OG A> CFG @GDOF?HC MAJGDN?MG GH AD JFA F?N MG>C F AH & ?CCFGJ BHNGD CFG B?DN ?H-F K A> F LDACFGD MAJGDN?MG SBH AD ? $AHNAH @GDOF?HC #FG BHOMG CGMM CFG >?CFGD A> CFG DGO(MG OABD G A> CFG EABH @?H #FG >?CFGD C?(G CF P GJ A> CFG @?CCGD4H , . GM GPG @G LDACFGD CFGE CF?C N G @A C P DCBAB F?PG H CFG D EABCF M PGN @A C P O AB 4 ?HN HAHG (HAJ CFG N?H GD A> CFG >DG @ADG CF?H FG CF?C >?MM HCA C I #F JG BHNGDC?(G CA ?E HAC CFG @AD?M CE A> F?(KGDG C ? CAMGD?HOG LGEAHN F CAMGD?HOG . BC C CFG @AD?M CE JF OF KDGP?M H =#FG $AHNAH DAN ?M I #FG BHOMG AG AH CA ?E CF?C CFG AH ? OAHC HB?M JG?DGD ? LDG?(GD A> F A?CF ? @ FCE LD?JMGD ? DG?C ND H(GD AHG CF?C J MM LADDAJ A> ?HE @?H #FG EABCF (HAO(?C CFG NAAD ?HN CFG >?CFGD N B GN CA LG DGKDG GHCGN ? NG?N J MM KDANBOGN LE JF OF CFG AH N H M GD CGN ?HN C SB C OG CA F@ CA ?E CF?C FG N KM?E CFG ?@G HN >>GDGHOG ?LABC CFG MA A> >ADCBHG ? ?LABC CFG NG?CF A> F >?CFGD MN MAJGDN?MG MGHN F@ f Z2A H F ? B@GN OF?D?OCGD ?HN ? DGG CA GH ? G JC F@ ? ? GDP?HC JAA H HAJ OA@@GHOG ?>CGD ? CD?H G >? FAH D $?HOGMAC KBDOAO(F? CFDGG N?B FCGD A> JFA@ $BOG CFG @A C ?CCD?OC PG F? CFDGG B CAD R D DCFBD +DGGH F GMN JFA@ FG KDG->GD M PGD ? %GPAH F DG OMACF GD JFA@ CFG >?CFGD K?CDAH G ?HN EABH MAJGDN?MG JFA DGSGOCGN LACF LE >?CFGD ?HN N?B FCGD @ADG FG?DCMG OABHNDGM OGDC?HME HGPGD KDG GHCGN F@ GM> H JAD F K>BM AO GCE >?CFGD LG H H?@GN FG CFB KG?(A> F@ R

=E +AN LG KD? GN FG >?D GHAB F G AHG ?K D @? G CA ?D?N G HN MG>C @G CA OBC ?O?KGD ? ?H C O?DG $BOG MAA(AH @G CF?C ?@ ? M FC ? ?D I

>?CFGD JFA H F ? B@GN OF?D?OCGD A> ? GDP?HC O?MMGN G CGD

NG DAB CA @?DDE F AH CA CFG M?NE ?HN FG CFB NGP G ?KM?H >AD APGDOA@H CFG KDBNGHC?M ODBKMG A> D $?HOGMAC R

=DG GHCME JG8MM A ?HN ND?J ?J MM FGDG)%8 GC NAJH M?HN CF?C ;%HGPGD ?J HN JG J MM F?PG C A> A M?D G ?B@ D $?HOGMAC F?MM GHCDG?C EAB C?(G F N?B FCGD #F LG H >AD@8N PG C @? CGD G?CFGDOAO(HN @?(G D $?HOGMAC8 N?B FCGD FG D A> ?MM HN @?(G F@ JG?D HGPGD CA FAJ CFG J MM #A ?HE AHG BHC M CF?C EAB LG NG?N #F NAHG CFG >AAM F OF?H H G?CFGDOAO(' MM CD? FC N OABD G BHCA D $?HOGMAC #FG >AD@ ?HN CGHAD A> EABD CG C?@GHC G8GD C?HN CA K?B G A> C LG DBM N LE @G F?C J MM GH BG CF?C F?MM EAB QB O(ME GG I

#FG NGP OG BOOGGN #FG OAPGCAB (H FC DGSGOC CFG FAHG C OMACF GD ?HN $BOG @?(G >?M G N OG J CF F >?M G LAHG J MM HAC F?PG CA NA J CF F @ @AO(8N BMM8N ?HN JDAH 8N A@G DM CFAB F C LG M?CG C >?MM ABC JGMM #FAB F?MC HAC M PG J CF F @ H LG ?D8 FGMM G @E FB L?HN ?HN F F FG?PGH NACF (HAJ CF JF?C BHJ MM H HG J GHC CA OFBDOF . BC EAB GH>ADO8N @G EAB OA@KGMM8N @G CA C #FG FAME OFBDOF@?H KDAHABHO8N CFG G JADN LBC HAJ @B C HAC MG?PG @E FB L?HN H N CDG 8 AJ @B C OA@>ADC F @ HAC A J CF EAB A@>ADC ?OATGHGD AH @E OBD G >AD ?(G F@ #F N?E EAB O?B 8N @G AH EABD OBD G CA C?(G F@ %A HAC KD?E @E D GPGN ABM AKKDG +AN (HAJ @E FG?DC NACF LMGGN ?C F N CDG I

#FG' P>G DG>B G ' CA' A' FA@G' J□CF' FGD' >?CFGD ' ?HN' FG □ ' MG>C' J□CF' FGD' FB L?HN' ?HN' F□ ' BHOMG' R

' ' A' #' HAC' EGC' AAN' @? CGD' MA J GDN?MG

J□M' AD' HA' ' D?CMG L?LE' 0A@G' CA' >AMA J' @ G ' +A ' GC' EAB' AHG' CA' CFG' DG? E' 0FB>?' EAB' >?CFGD' LD□H ' @G' EABD' NA J DE ' AD' HGPGD' MAA(' AH' @G

0 ' (' □D ' FG F?□F >AD AA(' FGD' >?CFGD' ?HN' ?M' FGD' >D□GHN ' >AD T J+

' 0 ' ?H ' □FGG ' FGD' >D□GHN ' ?HN' >?CFGD' ?M' CA GCFGD

0 ' (' , GC' K?D□' J□CF' A@GCF□H ' CA' KDAP□NG' FGD' MAN □H

' 0 ' , G ' ' @G?H' CA' K?D□' J□CF' FGD' ?HN' EAB ' LBG □>' ' K?D□' AHG' ?H GM ' F?H ' @G ?□ ?' KA C' MM' D?□FGD' CFDAJ' CFG@' ?□ ?' O? □' J□CF' AHG' ?H' NAHG' ?' □FAB ?HN' A>' CFG□D' >GMA J I

#FG' BH@□C□ ?□GN' P□MM?□H' NG GDC ' F□ ' J□>G' ?>□GD' CF□ ' LDBC?M□CE' FG' □ ' HGOG ?D□ME' KDACGOCGN' LE' F□ ' >?□FGD ' ?HN ' N□ B□ GN' ? ' =' ?' %BCOF' >DA J I' GHCGD ' □HCA' CFG' GDP□OG' A>' FGD' AJ□H' @?DD□GN' □ CGD' &?□CFG' J' MA J GDN?MG' MA G ' F□ ' FBHNDGN' ?H GM ' ?□ CFG' ?@□H' C?LM□ ' DAL ' KBDOAO(□ ' BH@?DD□GN' N?B FCGD' BKAH' CFG' F□ F J ?E ' □ ' DGNBOGN' CA' C?DP?□AH' ?HN' LG ?DE' DGOG□PG ' ?M@ ' >DA@' F□ ' AJ□H' J□>G' □H' FGD' %BCOF' @? (' ?HN' CFB ' FAJ ' FAJ' CFG' @GN□O□HG' @□ >ADCBHG' F?' CFDAJ ' A>>' FGD' NDG ' ?HN' CFG' >AMA□J□H ' F?HN ' %BCOF' J GH0F□ □ ' □H' MAPG' J□CF' @G' GDC □C HAC' ?N@□D?LM□G CA' @?(G FGD' CG?M' ?M' □PGC□ ' KM?CG' ?HN' DBH ? J ?EWI' >' OABD G' CFG' >GMA J' F? ' F□ ' NG GDC ' G' □ ' ?LABC CA' LG' C?(GH' CA' KD□ AH' AH' ?' OF?D G' A>' DALLGDE' ?HN' AH' B K□O□AH' A>' F?P□H ' @BDNGDGN' F□ ' J□>G' #FG' %BCOF' >DAJ ' J FA' GG ' F□ ' ?DDG C' CFDAJ ' A>>' FGD' NDG ' ?HN' CFG' >AMA J□H ' OGHG' QB□O(ME' MG?N ' CA' ?' F?KKE' OAHOMB □AH

' ' ?E ' L E' @E' >?CFG' □D ' EAB' F?M' K?DNAH' @G AMN' D? O?M' AD' ' J□MM' @?(G EAB

' ' D?E' FAMN' EABD' F?HN ' □PG' □C F□@ ' FAHG C' >D□GHN

0 ' (' >'EAB' LG' A' OAHCGHC' J□CF' ?MM' @E' FG?DC

' 0 ' HN' JFE' □D' K?DNAH' EABW' +□PG' @G' CFG' @AHGE' EAB' AMN' >ADH□O?CAD' ?HN' BG' A' J□CF' EAB' >AD' ?H' AMN' >ADH□O?CAD

' 0 ' ?E ' LE' @E >?CFGD' ' ' F?@G' CA' MAA(' AH' F□@ ?DNAH ' NG?D' >?CFGD ' CFG' >AM□G ' CF?C' ?DG' K? C

0 ' (' AH ' AH' ' NA ' ?HN' SAE' ?C' CF□ ' CFE' 0F?H K HN' ?KKM?BN' CFE' >ADCBHG' H' CF□ ' P□DCBAB ' @?□N FA@' G?PGH' F?CF' GHC' CA' CFGG' CA' -7% CFE' ABW ' #F□ ' ?NNGCF' SAE' CA' SAE ' F□ F' G?PGH' LG' KD?□ 8N S $' &? CGD' MA J GDN?MG ' J GMOA@G' >DA@' NG?CF' AAN' @? CGD MA J GDN?MG ' 8# J ? ' ?□N' A' FGDG ' 8CPP?' ?□N' A' FGDG ' AAN' >?□CF

0 ' (' ' ?B 8N' CF?C' DB@ABD' CA' LG' KDG?N' @E GM> . GO?B G' 8N' GG' CFG' FB@ABD ' A>' @E' * ' F□OF' CA' DGM?CG' CFG' O□DOB@ C?HOG □ ' HGGNMG

' >D C GN C AH A> CF ' 0A@GNE J? ' KBLM FGN H 47 ' BHNGD CFG >AMMAJ H ' C CMG R =' #FG BD C?HG AD CFG NNAJ' A> ?CMMH CDGGCG ' OCGN LE CFG F MNDGH A> ?BMG ' D CCGH LE ' I' #FG GHCDE A> CFG KM?E?KKG?D ' H CFG C?C AHGD 8 DG CGD ' A> CFG ?@G EG?D ' C J? ' KD HCGN ' ? ' JG F?PG GGH ' H CFG CF DN GN C AH A> F?(KGDG8 ' JAD(' ?HN J? ' ? OD LGN CA F?(KGDG LE' + MNAH H 72 ' + MNAH KDAL?LME DGM GN BKAH C ' KBLMO?C AH ? ' F?(KGDG8 ' H CFG CF DN OAMMGOCGN GN C AH A> F ' KM?E ' BD AJH OD C O ' A> DGOGHC C @G ' F?PG BH>AD@ME DGSGOCGN C ' OF MG GM HOM HG ' CA CFG AK H AH CF?C F?(KGDG JDACG C4 ?HN FG KDANBOG ' CF ' OBD AB ' CFGADE R =' HG A> @E MCGD?DE >D GHN ' HC @?CGME ?OQB? HCGN J CF F?(KGDG ' J? ' A> AK H AH CF?C CFG KAGC @B C F?PG J FGN CA JD CG ?' KM?E' >AD AHOG H CFG CEMG A> . GH 0AH AH ' ?HN CF?C H CF ' J?E JG @B C ?OOABHC >AD CFG N>>GDGHOG LGCJGGH CFG KDG GHC K GOG ?HN F ' B B?M @?HHGD ' #A >AMMAJ ABC CF ' NG?' FAJ-GPGD ' JABMN MG?N CA ?' PGDE H OG OD C O?M HPG C ?C AH I' BOF ?H HPG - C ?C AH JABMN ' JW LGM GPG ' LD H ' B ' CA CFG 0AHOMB AH CF?C ,' #FG BD C?HI' ' ?' BHM(G .GH 0AH AH ? ' C ' BHM(G F?(KGDG ' >' C KA G G ' MCCMG A> CFG J C ' CFG LBAE?HOE ' CFG GH?M AAN FB@ABD ' CFG K?D(M H ' KAGCDE ' CFG NGGK KF A AKFE ' ?HN CFG BH PGD ?M 0F?D?OCGD T?- C AH A> F?(KGDG ' C J?HC ' H CFG ?@G NG DGG CFG H OG N OD @ H?C AH A> F?NG ' A> 0F?D?OCGD ' CFG ABHN SBN @GHC ' CFG 0?DG>BM @?H? G@GHC A> CFG KMAC ' CFG MA>CE ?HN HN H?HC ?C DG ' CFG >D@ ?HN AD GAB ' 8 FGCAD O' A> 0AH AH ' ' ?' 0A@GNE A> @?HHGD ' =' #FG BD C?H' I' ' ?' @ HA@GD ' G' F?PG HA' DGKDG GHC?C AH A> CFG >AD@?M @?HHGD ' A> CF?C OM? ' #FG >?@ME A> CFG NAJ' A> ?CM H ' CDGGC ' @G?HC CA' LG BD C?H O?M ' LBC C ' N>> OBMC CA' N OAPGD JFGDG H CFGE N>>GD >DA@' CFG DG C A> CFG JADMN ' G OGKC H CFG 0A?D G G F L C AH A> CFG MAA G @AD?M CE A> AHG A> CFG D GDP?HC ' JFA' KDA>G G ' CA' M G ' CFAB F' FG JG?D ' HAC ' ?HN ' J MM H ' CA' CG?M >' CFG OD @G ' O?MMGN LE' A@G GHCMGD H?@G ' , GC' CFG 0A@GNE ' HAC JCFABC K D C ?HN HCGDG C ' #FG GPGHC ' ?DG @KDAL?LMG ' ?HN A@G A> CFG HCD BG ' ?DG BKGD>MBAB ' LBC CFG ?OC AH GMNA@' MH GD 4' ?HN >' CFG OF?D?OCGD ' GG@' BHH?CBD?M ' CFGE ?DG B>>O GHCME NG>HGN CA' GH?LMG B ' CA' LGM GPG CF?C BOF OF?D?OCGD ' N N G C ' ?HN @ FC F?PG' LGGH OAK GN >DA@' CFG M>G LE' CFG ?BCFAD ' C ' CF ' HN P NB?M K?HC- H ' CF?C OAH C CBCG ' CFG G GHC?M N>>GDGHOG LGCJGGH CFG 0A@GNE A> ?M@A C GPG E' JD CGD ? ' 0A@K?DGN JCF F?(KGDG ' MN BLDGE ?N ' JCF ?' CDBCF' JF OF @ FC F?PG' LGGH @ C?CGN LE' OD C O ' A> F FGD ' KDGCGH AHR =' ' 0A@GN G ' JMM DG@?H' JC ? ' MAH ' ? ' CFG !H M F' CAH BG ' BHNGD CAAN ' >AD CF?C FG' F?HNMG ' ' $ '4' H J' ABD KDG GHC JD CGD ' DG>MGOC A' @BOF' BKAH K?DC OBM?D' KGD AH ' ?HN' 0A ' 0A@L C G ' CF?C CJGHCE EG?D ' FGHOG' CFGE JMM HAC LG' BHNGD CAAN I

#FG >D C OGHG HCDANBOG ' B ' CA' CFG' JNAJ ' A CGHC?C AB ME JGGK H ' MAD' CFG' NG?CF' A> FGD' FB L?HN ' FG ' BDDABHNGN' LE' ?' MME' AH ' ?' LDACFGD' HAC' APGD J G ' ?HN' CJA' N?B FCGD ' A> =' HA' OF?D?OCGD ' ?C ?MM I' G OGKC CF?C AHG' PAJ ' FG' JMM' HGPGD' @?DDE ' ?HN' CFG' ACFGD' NGOM?DG ' FGD GM> GHC DGME' A> ?H' AKKA CG' HOM H?C AH ' #FG' JFGMK' A> ?' AH' DG>B G ' CA' JGGK' >AD' F ' >?CFGD ' ?HN' CFG' @ACFGD' CFB ' OF NG ' F @' R

=' S ' ' CFAB' K? C D?OG ' CFAB' ' BC' A> @E' FC ' CFAB' D?OGMG ' @K' ' CFAB' DGPG C @G' @ADG' CF?H' CFG' NG?CF' A> CFE' >?CFGD' ' CFAB' CBLLADH' AHME' AH ' ?N C CFAB' BOF' ?H' FAHG C @?H' CA' CFE' >?CFGD' R CF?C JABMN' NGOG PG' ?MM' CFG' JADMN' CA' GC' D OFG ' >AD' CFGG ' ?HN' O?H C' CFAB' HAC' ?>>ADN' ?' MCCMG' ?MC' J?CGD' W G' CF?C' A' J GME' N N' QB CG' APGD-CFDAJ' CFG' D FC' FG D' A> CFA G' M?HN ' JF OF' HAJ' EAB' DG KGOC' HAC ' BK' GPGDE' @ADH ' LGCJ C' >ABD' ?HN' >PG ' A' NBME' ?C' G C@H CGD F?MM' GPGDE' CGD@ C@G ' J CF' ?MM' F ' O?DN ' ?HN' JD C H ' >AD' CFGG ' CFAB' J O(GN L ?MAH ' ' NG?D' FB L?HN' ' I

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#FG' J NAJ' PAJ ' AH' FGD' (HGG ' ?H' ?J>BM' PAJ

=' ' @?E' ' LG' CFG' LE JADN' A>' CFG' JADMN
#FG' 0A@@AH' C?M (' ?C' C?LMG' H' CFG' @ABCF'
>' GPGDE' DAA@' ?HN' J?CGD ' >' G8GD' @ADG'
' GHCGDC?H' CFG' O?DH?M' BC' A>' @?H' ' I

#FG' GOAHN' OGHG' HCDANBOG ' B ' CA' CFG' OF G>' ?OCAD' H' CFG' K GOG ' EGLA?DN ' ?' KDA>M ?CG' OFAM?D ' JFA' BH CG ' CFG' KDA>G AH ' A>' ?' KAGC' ?HN' ?' JHNMGD ' & D ' EOG ' H' F ' P?MB?LMG' GN C AH' A>' +GAD G' GGMG8 ' JAD(' ?E ' CF?C' +GAD G' EGLA?DN' ' CFG' ?@G' ? ' +GAD G' GGMG ' =' ' H>E H ' ?' LA?DN' J CF' ?' MAH ' F?HNMG' J CF' JF OF' L?(GD ' KBC' CF H ' H' ?HN' ABC' A>' CFG' APGH I' C ' A@GJF?C F?DN' BKAH' CFG' @G@ADE' A> GGMG' CA' ? B@G ' ? ' A@G' F?PG' ? B@GN ' CF?C' EGLA?DN' J? ' @G?HC' ? ' ?' KADCD?C' A>' F @' #FG' G ?OC' N?CG' A> GGMG8 ' NG?CF' F? ' HAC' LGGH' ? OGDC? HGN ' LBC' ?H' ?MB AH' CA' F ' NG?CF ' @?NG' LE' & GDG ' H' 516 ' G' J? ' HA' NABLC' ?' @?H' A>' KDA>M ?CG' F?L C ' ? ' JGDG' CAA' @?HE' A>' CFG' BHF?KKE' D?OG' A>' ?BCFAD ' H' CFA G' N?E ' JFGH' BHOGDC?H' AOOBK?C AH' ?HN' NGKGHNGHOG' BKAH' CFG' DG?C' @?NG' CFG@' @ADG' CF?H' B B?MME' DG?NE' CA' H?COF' ?C' K? H ' D?C >O?C AH ' #FG' ,' & GDD G' OAH-OG CGN' 0G C ' A>' +GAD G' GGMG ' +GHCMG@?H ' A@GC@G' ?' CBNGHC' H' >ADN I' J? ' KBLM FGN' H' 42 ' ?HN' H' CF?C' CD?OC' CFGDG' ?DG' CJA' CAD G ' CAWN' A>' GGMG' JF OF' ?DG' PGDE' HG?DME' @M?D' CA' CJA' A>' CFG' CD O(' A>' EGLA?DN' H' =' #FG' BD C?H ' I' LACF' @?E' F?PG' LGGH' @GDG' HPGHC AH ' AD' G ? GD?C AH ' H' CFG' >AMMAJ H ' K? ? G' A>' =' #FG' BD C?H' I' CFGDG' ' KDAL?LME' ?' @GM?HOFAME' CDBCF' ? ' CA' CFG' OAHN C AH' A> @GH' A>' MGCCGD ' H' CF?C' ? G ' EGLA?DN' ' ?NNDG H ' F @ GM>' CA' ?H' AMN' AMN GD ' (D@ F R

=' ' CAB0F H ' @E' KDA>G AH ' CFG' @BMC KM O CE' A>' OFAM?D ' F?COFGN' ?HN' HABD FGN' H' CFG' NMG' O?M@ ' A>' KG?OG ' @?(G ' CFG@' M (G >' FG ' AHG' NGPABD' ?HACFGD ' ?HN' CFG' OA@@BH CE' A>' MG?DH H ' F? ' A' KM?EGN' BKAH' ?>>GOC AH ' CF?C' CFGDGLE' ?M@A C DGM AH' ' OA@G' ?LABC' CA' KF?HC? E ' ?HN' N ODGN CGN' LE' LG H ' CAA' @BOF' KA(GH' A> H' A' @?HE' ?HN' @G?H' @ABCF ' ' @E GM>' LG H ' ?' OFAM?D' ?HN' ?' D?NB?CG ' F?PG' HA' ACFGD' OA@>ADC' LE' @E' MG?DH H ' LBC' CFG' ?>>GOC AH' A>' @E' JADN ' CA' (HAJ' FAJ ' OFAM?D M (G ' CA' H?@G' JF?C ' J?HC ' ?HN' O?H' O?MM' @E GM>' ?' LG ?D' LACF' H' +DGG (' ?HN' $?C H ' HN' CFGDG>ADG ' HAC' CA' OA ' JCF' KG?OG ' 8MM' HAC' LG' ?>D?N' CA' ?E ' 8C ' ?' DG?C' LDGGNGD ' LBC' ?' L?DDGH' HABD FGD ' ?' DG?C' GCCGD' A>' OF MNDGH ' JF OF' @B C G CFGD' LG' CF GPG ' AD' D OF' @GH ' (H?PG ' AD' LG ?D

($: ' GMM ' JAB MN' ' F?N' LGGH' LA@' ?' (H?PG' CFGH ' JFGH' ' J? ' LADH' ?' LG ?D ' >AD >' CFG' CD?CF' J? ' (HAJH ' ' CF H(' ' J? ' LG AC' JFGH' @E' >?CFGD' F?N' HGPGD' ?' KGHHE' H' F ' KBD G

K ' BF' ' >? HC' HAC ' AMN' (D@ F ' MGC' CF ' J?DD?HC' $ HG G ' ' &3 R 8C ' ?H' G? E' SABDHGE' CA' ?' (H?PG ' CFAB' @?E8 C LG' ?' (H?PG' JFGH' CFAB' J MC ' ?HN' G?OG ' ?' AAN' @?N?@' CA' ?MM' ACFGD' KDA->G AH ' ?HN' ?H' GDD?HC' ND?L' CA' B ' $GC' B ' F?HNMG' FGD' ?OOADN H ME ' ?HN' LE' ABD' JC ' CFD PG' H' NG K CG' A>' FGD' ' AD' HOG' CFG' M?J' M PG ' LE' QB?DDGM ' CFG' OABDC GD' LE' @AACF' AAN @ADDAJ ' ?HN' GPGDE' KDA>G AH' @?(G ' C GM> DG?CGD' LE' @KGD>GOC AH ' JFE' HAC' JG' CFGH' LE' F C ' JMG ' ?HN' >AD GD G ' W HN' GG H ' ABD' LD? H ' ?DG' ABD' AHME' K?CD @AH G ' MGC8 ' KGHN' JCF' SBN @GHC4' HAC' M(G' ?' NG KGD?CG' AH' ?HN' FG D' LBC' M (G' ?' ALGD' ?HN' N ODGGC' #G@KM?D ' AHG' CF?C' J MM' HGPGD' @?DOF' LGEAHN' CFG' LABHN ' A>' F ' ?MMAJ?HOG I

EGLA?DN' DG AMPG ' CA' LG' ?' >ADCBHG CGMMGD ' ?HN' KDAKA G ' CA' (D@ F' CA' LG' ?' OAHSBDGD ' ?HN' A' CFGE' ?DG' CA' NGOG PG' CFG' JNAJ' ?HN' FGD' >?@ME ' G' ?DG' KDG GHCME' HCDANBOGN' H' CFG' & ?D F?M G?' D AH' CA' ?KC?H' NMG ' JFA' F? ' 0A@@ CCGN' JF?C' FG' O?MM ' ?' 0A@@AH' A>>GHOG R ?' F F-J?E' DALLGDE' ?KC?H' NMG' ' CA' LG' DGMG? GN' LE' ?' CD?C? G@' A>' EG-LA?DN ' #FG' AMN' OF?H' A> D' +AN>DGE' MB ' CFG' JNAJ8 ' LDACFGD '

CA LG CAMGH LE F BD C?H O? GDP?HC ?HN CA LG N OAPGDGN LE CFG H CDB@GHC?M CE A> CFG @MC?DE F FJ?E@?H CFG ?OC AH ?NP?HOG CFG KMAC CF O(GH #FG J NAJ ?HN AHG A> FGD N?B FCGD DG>B G FAHG C BCAD ?HN JFGH NMG DGNGG@GN >DA@ KD AH VJFOF CFG (H FC G>>GOC H ? @A@GHC JCF CFG FAKG A> >HN H F 0F?H CFG JADCFE OAH>GNGD?CG KDAKA G CA @?DDE CFG M?N G #FG >ADCBHG-CGMMH ?HN OAHSBD?C AH OGHG ?DG ?@B H GHAB F LBC CFGE JMM O?DOGME >BDH F ?HE G CD?OC H CFG GHN FAJGPGD CFG CD?C? G@ A CFG OFAM?D ?HN CFG O?KC?H ?DG N APGDGN ?HN CFG JNAJ ?HN FGD N?B FCGD ?DG DG OBGN >DA@ CFG D F?HN AH CFG D J?E CA OFBDOF CA LG @?DDGN #FG ?>>GOC AH A> CFG M?N G ?DG PGDE QB O(ME CD?H >GDDGN CA ACFGD BCAD ?HN A CFG KM?E GHN #FG >AMMAJ H OGHG JFOF AOOBD H CFG CFDN ?OC AHG A> CFG HO NGHC JFOF CAMN JCF A@G P?D?C AH A> CFG FGDA A> CFG =&GDD G OAHOG CGN 0G C I EG LA?DN BHNGD ?DDG C >AD NGLC ?HN FG KGD B?NG CFG L?M>> CA A JCF F@ CA ?FAB G =CA DGOG PG >PG KABHN A> ? GHCMG@?H >AD CFG NGP OG A> ? @? (FGDG ND?JH H CF K?KGD I #FG >AMMAJ H OGHG GH BG R

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7 E FG (HAJ C JFGH FG GG @G KD?E EAB F?PG EAB >AD AC @G W

(E LE @E CDACF D KD?E OA@G HG?D S 8M H ?HN CGMM F@ A> EAB MG? G EAB CA J?M(FGDG H CFG ?MMGDE CMM FG OA@G

Q18 GDP?HC

7 G JMM ?CCGHN F JAD FK AD FK CF H('S >AD A @BOF CFG KA C ?C F NAAD FABMN H>E ?HN CFG >?D OA@H H ?HN CFG JO(GC GM G HG CFGD (HGJ F@ HAD F JAD FK LBC 8C F?KK HG FG J CF H NAAD JF?C AG8GD FG LG >FG LG HAC CAA @BOF ?>AD@?M OC TGH FG @?E NA @G AAN Q& 7 R GDSG?HC ?HN EGA@?H FAJ NA EAB M(G CF FAB G W 8C HAC @A C JFAMG A@GME KMACCGN W

3 8#DACF KD AHGD ?H G OGGN H >HG FAB G

7 ,GC JAHNGD FAJ FG FABMN >AD GC @G R >AD FG HGPGD (HGJ @G Q& A @?CCGD JF?C >AD AC H EAB JMM LG DG@G@LGDGN H EABD @? CGD KDGCCE OA@>ADC?LMG DAA@ CF @GCF H(EAB F?PG HA BOF DAA@ H KD AH HAJ W

7 NA FAMG CA8C

7 %A FAMG HNGGN O?H CGMM EAB F?PG DG?C FAKG CA F?PG @E OF?@LGD FGDG FADCME H?E ?HN NGC CAA >AD FG CFG @A C >DGG FG?DCGNG C GHCMG@?H JFGDG FG C?(G EAB JABMN MCCMG CF H(C HN JF?C ? >HG ?MMGDE JGDG FGDG >AD @G CA J?M(?HN CBNE ?HN @?(G PGD G

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7 $AA(JF?C @?K ?HN KOCBDG ?HN NGP OG ?HN CF H HG?CME NGMO?CGME R &? FGDG FG OA@G FG FABMN LG ? GHCMG@?H M(G F LG?DN JGMM R MM F?KK HG CA EABD JAD FK

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3 & ? C GG@ CFG GHCMG@?H @?(G DG?C ?OOABHC A> F@

7 F?PG CFG CF H FGDG >AD EAB D H Q% D $ +GHCMG@?H

LG GGOF EAB OAHOG?M @G D 8@ BHNAHG GM G Q& F?PG CFG @? (FGDG >AD EAB D MAA(EAB D LG GGOF EABD JAD FK >D C K?DNAH @E DBNGHG >AD @E G CDG@G @?(G @G LAMNGD CF?H JABMN LG ?@ ?KAAD GHCMG@?H ?HN ? OFAM?D ?HN HAJ @A C BH>ADCBH?CGME >?MMGH HCA CFG >?H A> BH@GDO>BM A>>OGD ?DDG CGN >AD NGLC JFOF CFAB F @?MM ?@ HAC ?LMG CA OA@K? LE DG? AH ?@ NG C CBCG A> M?HN @AHGE ?HN >DGHN A CF?C > >?MM HCA CFG FBH DE J?MMAJ A> CFG KD AH ?@M(G BCCGDME CA KGD F ?HN JCF >GG ?HN G CADC AH LG K HOFGN OMG?H CA CFG LAHG AJ > GPGD K CE F?N HCGDG C H CFG LMAAN A> ? GHCMG@?H LG GGOF EAB PAB0F ?>G LBC CA >?PABD CF?C @G?H A> @E G O?KG JFOF F?PG ?MDG?NE CFAB FC BKAH

I +A >ADJ?DN

7 J?DD?HC FG M(G C D?DGME

7 H CFG KMBH G A> @E G CDG@C G LG H NNE ?HN NABLC>BM JF?C CA NA ?C M? C C J? KBC HCA @E M?LABD H CFAB FC CA @?(G ? F?KKE B G A> CF K?KGD ?HN CA LMG?D CFG D BHMGCCGDGN GEG CAMN CFG@ CFGDG J? ? NGP OG >AD ? @? (ND?JH H8C ?HN CF?C VLBC >AD CFG D HCGDOGKC AH J? A H CA ? GHCMG@?H CA DGOG PG @E DGJ?DN >AD8C #FGE DGGNE ?C CF JADN ?HN FAK H CA @?(G KBDOF? G A> @G A>>GDGN CFG D ?CCGHN?HOG CA A ?MAH J CF @G & E F?K J? CA @?(G LAMN J CF EABD NAAD D JF OF @E CFAB FC FAJGN @G CFG @A C >?DG C ?HN OA@>ADC?LMG C GHCD?HOG ?HN FAKG F?PG F?K-KGHGN D FC BKAH BHNGD C?HN H ?HN K CE & ?E C KMG? G EABD AAN JAD FK CFGH LBC CA BKFAMN @E NGP OG JF OF CA MGC AHG A> EABD @GH KBC @G ABC ?C ? L?O(NAAD ?HN F?MM LG LABHN CA EABD JAD FK >AD GPGD

I . E @E CDACF ?H G OGMMGHC NGP OG

7 H G OGMMGHC NGP OG FG ?E FG M(G C JAHNGD>BMME

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3 ?D(FG JG?D FG HGPGD FG?DN ? LGCCGD GDSG?HC

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#FG KD AHGD A> OABD G G O?KG

#FGDG HA NABLC OAH NGD?LMG CDBCF H CF HAC BOF CDBCF ? JG >HN H F?(KGDG C LGMAH CA CFG CG@KAD?DE ?HN CFG KGD AH?M HAC CFG KGD@?HGHC ?HN CFG BH PGD ?M BOF CFG OF?D?OCGD C O @GD C A> CFG JFAMG OA@GNE JF?CGPGD @GD C F?

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$ ' FE ' O?H' EAB' LM?@G' FGDW' FE ' ?KKMG ' F?H □H ' MAH GD' AH' CFG' CDGG' CF?H' JFGH' CFGE' ?DG' D□KG ' @?(G ' A' @?HE' >?MM□H ' P□T ' @?N' JGHOFG ' LGO?B G' CFGE' ?DG' HAC' ?CFGDGN' □H' C□@G ' ?DG' >?□H' CA' NDAK' A>' CFG@ GMPG ' ?HN' CFGH' 8C□ ' OA@@AH' EAB' (HAJ' >AD' GPGDE' @?H' CA' C?(G CFG@' BK

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3' 8M' JG?D' CFAB' ?DC ' CFAB' @?E8 C' GC' BK' JFGH' CFAB' J□MC ' CFGDG8 ' @?HE' ?' AHG' LG □H ' J□CF' MG ' ' O?H' CGMM' CFGG ' CF?C' KDAPG ' ? D□OF' @?H' GDG' FG' N□G ' . BC' JF?C8 ' CFG' HGJ ' >DA@' $AHNAH ' ?@' W

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(' #FG' @□HN' A>' ?' CF□H ' □ ' ?MM ' CFG' @□HN' A>' ?' CF□H ' □ ' ?MM ' ?HN' ? ' CFAB' ?□N C' GPGH' HAJ ' >?D >GCOFGN' ?DG' CFG' LG C' CF□H ' >AD' M?N□G

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>AD CFGE O?HHAC LG @?NG J□CFABC @?DD□? G AAM JF?C @G?HC CA
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HACF□H FG O?HHAC M□PG BKAH CFG >QAM >AD FG J□MM F?PG HA M?HN CA
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S +AAN □D LE ?MM ABD PAJ NA LG GGOF EAB
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& AHGE @AHGE @AHGE ?HN CFAB @B C BKKME @G
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, GC JF?C □ @□HG G□CFGD □H D□H AD SGJGM
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, ABD GM>JABHN □HCA NGLC EABD FAKG>BM LDACFGD
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$□(G CA LG G□T8N BKAH ?HN
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F?MM (□MM @E KMG? BDG W ?MM A>>CA CFE >D□GHN
#FAB ?HN CFE L? C?DN LG J□MM HAC L?CG
J F□C □H FB@ABD & □NH□ FC C□MM MAPG EAB
HN DGPGM □H EABD OA@K?HE BDL8N □H
F?MM □C LG ?□N □H ?MM AO□GC□G
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J□MM >AD GPGD FAMN CFGG □H OAHCG@KC
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* HCA CFA G KMG? BDG JF□OF @A C ?>>GOC
S □D NA LBC CBDH ? GHCMG GEG AF @G
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, AB F?MM OA@@?HN
$AA(□C LG NAHG F? J?HC NB C
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Q $ $ $ D
. BC @E L?DG F?HN CA >□MM CFG@ BK JCF H?□M W
7 @B0F ? ?□H C @E LMAAN $GC □C LG NAHG
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KGGN□ME KGGN□ME
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1 %$ +GHCMG@GH

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I C□MM NA CFG G MA?CF A@G CFAB FC S?D AH EABD CAH BG W
, ABD GM>CA C?□H CFG FAHABD A>EABD J□>G
ALME NG OGHNGN W #FA G JFA@ @GH O?MM @?N
!HN?H GD ACFGD LBC FG8 @ADG CF?H @?N
#F?C JABHN F□@ GM> JFA G AP H JKDN ZA KDAOM?□@
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LE CFG@ JFA JGDG GHC >AD FGD BK CA $AHNAH LE FGD FAHABD?LMG
BHOMG EABD JAD F□K8 M?CG B?DN□?H
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. BC MGC FGD MAA(CFG CF□H LG NAHG FG JAC A>
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I GMM AD □MM @GC O?DG HAC
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F NG @GW % A8C >HGME CFGH MGC C HAC @APG @ G
AD >CFAB OF N8 C @G ?H DE F?MM CD (G
I CD (G CF HG AJH >AM G >AD 8C CFGE NG GDPG
#A LG JGMM LG?CGH G ?DG HA J H KD P?CG
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I A CFAB F?MM FG?D @G >BDCFGD
#FE >?CFGD8 ?HN >ADG>?CFGD 8 JADCFE FAHABD
F OF JGDG ABD OABHCDE @AHB@GHC ABD D?OG
AMM G H CFGG LG H HA J CA NG>?OG
#FG KD H C@G A>CFE EABCF N N >?DME KDA@ G
BOF ?' @A C >DB C>BM B@@GD CA CFE >D GHN
C O?DOG O?H GHCGD HCA @GH8 LGM G>
BOF NG?DCF FABMN F?H BKAH CFGG G CF?C GG C
DG ADDE CA LGM GPG C H CFE OF?H G
#F PA OG HCA ?MM KM?OG J MM LG FBDM8N R
#FAB ?HN CFG NGP M F?PG NGOG P8N CFG JADMN
8MM HAC GHNBDG CFGG
I . BC A>?MM CFG JAD C
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HALMG CFAB FC
?@' K? C @E K?C GHC LMAAN F?MM C?HN NMG
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I FAKG HAD HG8GD F?MM NA 0%$ $
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, AB GG @E JADN8 HAC CF D CE >AD EABD F>G
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, AB8DG A>?' P DCBAB FAB G FAJ P DCBAB NGGN
8# HAC EABD FAHABD 8C EABD >AMME LMGGN
& BOF AAN F? LGGH G KGOCGN H EABD F>G
?HOGM HAC ?MM @GH8 FAKG EAB F?PG ?' J >G
HN ?HN ALGN GHC FG?K HAC JDAH >BM F?@G
H FGD ?HN EABD KA CGD CE MGC AHME H LG ADG
HN LE CF >?MM D G HGPGD CA >?MM @ADG
HN A MG?PG EAB 018
? CFG NA MG>C @G W @E FG?DC
ABMN >? H MG?K ?>CGD F @ " GPGH G ?E
8@ @?N CA LG DGPGH 8N & E CDB@KGC J >G
C CFE QB?DDGM CF?C D K CFB @E >MG F
HN @?(G @E LDG? C K C LMAAN R LBC CFAB F?MM LMGGN
)?HQB F8N W AC NAJHW BH?LMG GPGH CA KG?(' W
BDGME 8C J ?HC A>@AHGE @?(G @GH J G?(
E 8CJ? CF?C A8GDCFDGJ @G 8N HG8GD LGGH NAJH GM G 018

! ! R & $
1 J .' `U $ @1!
(8 ?CF @ CDG >C @ FC HAC LG KDG B@KC AH
=

H @G CA CGMM EAB A >AD F G OB G
, AB F?N @?MM DG? AH (HAJ H F ?LB G
S D?HC F?N LBC ?M?
FE FABMN ABD >?BMC ?C FA@G LG KDG?N ?LDA?N W
8# DG>GHAB F JCF H NAAD C >D C FC
& HG BHOMG OABMN DBH A8GD F KDAN ?M M>G
KGD>GOCME ? >F GD AB GEG
?N HB@LGD8N ?MM F >AMM G
HG J A>F @ADC ? 8N M?HN F >DGHN H LAHN
@ GM> JCFGD8N JCF NGLC ?HN H CF?C @HBCG
?N ?NNGN F B ? G ?HN BH(HNHG
8# JABMN F?PG OAH>ABHNGN GPGDE CFAB FC A> AAN
FGDG HAJ >?CFGD H F D AC AH F EABCF
F OF C@G ?HN C?@G G KGD GHOG J MM F?(G A>>R
+BG H F (HNHG CA @G V? @AACF8N F@
CF MM CFG (MM F?N CFAB F F N GDC
DG H >AD@ B M GD CF?H ?H BH F?K8N LG?D
G8 DG?NE CA KDG>GD F@ CA A@G A>>OG
HN KM?OG ?C OABDC ?' AAN ?HN BDG DGM Q>
#A ?MM F CAAK H >ADCBHG 8# J MM LG ?' @G?H FAKG
#A @?(G HGJ MG? BG LGCJGGH B ?HN DGNGG@
P DCBG J CF F M?HN
(FABMN CF H(' A @ CDG >F G FABMN HAC HAJ LG (HN
CA EAB ?HN MAPG EAB ?HN OFGD F EAB BK FABMN CF H(' CFG NGP M
F@ GM>(GKC AKGH FAB G H F@
S NABLC HAC LBC FG J MM A J KD CFGG MG?PG @G FG?D F@ OA@ H
(?@ AHG 05L8
S . E CF AAN CHG?H F?MM KDG GDPG @E M?HN
HN >DGG @E FB L?HN ABC A>B BDGD F?HN
AJ CFGDG8 HA HGGN A> ?MG @E BHOMG8 (HN
#' FAKG >?B FC CF J MM OAHCGHC F @HN
GDG OA@G @E FB L?HN

1 + % ' 2

AJ ?DG EAB OA@G W FGDG8 CFG @AHGE W $GC8 GG CFG
@AHGE CFG DBLL F AMN W CFA G J GZ?ODG EABD M?HN W FE
JFGH W #FG @AHGE W FGDG W ABD C NAJH NAJH J CF C
/AJH J CF C C E KABD8C AH CFG DABHN MGC8 GG C MGC8 GG C
S +AAN D (GGK LBC H K?C GHOG ?HN FAKG @E JADN F?MM
M(G EAB JGMM LD H EAB LGCCGD OA@>ADC CF?H CFG ?MG A> @E
NAJDE
?' JF?C8 CF?C W
S D?E NA HAC >D FC @G D LBC PABOF ?>G @G FG?D H & E
BHOMG M?N A>EABD (HNHG CA @G ?HN @MN B ? G V>AD A @?NG C
CA F@ F?CF H K CE A>EABD NGOM H H >ADCBHG KDAP NGN ?' KM?OG >AD
EAB ?C OABDC A>JADCF ?HN ODGN C JF OF A @BOF APGDSAEGN @GR
BC AH CFGG >MCF APGD ?HN APGDSAEGN JFGH 8@ H
CAD@GHCW Q($:C #FAB KAM C O JFADG BLC MGD CF?H H HG
NGP M J? CF CFE SABDHGE CA HBHO(W CA GC NAJH CFG F CADE A>
@G A>@E C?CG ?HN >ADCBHG W F?MM CF?C NGN O?CGN @E GM> CA
KMG? BDG LG HAJ OAH>HGN H GDP OG W CA ODABOF ?HN C?HN M(G ?H
AMN @?H C CFG F?@ @E F?C A>>W CF?C OABMN HGPGD ?L NG CA BHOAPGD
@E FG?N C CFG OFBDOF W .? G MBC CF >DB C LG?D CFE OA@KM? QC
S FG?PGH (HAJ
#F?C @E OA@KM? HC JGDG KD? G ?HN LG C JADN
>EAB ?HN EABD G C?CG HME @E >D GHN
HG J A>EABD @ADC ? 8N M?HN ?HN JGDG KA G 8N
>GPGDE ?OO NGHC LG>ADG O?@G
>EAB B KGOC C LBC ?' KMAC H @G
#A (GGK @E NAJDE AD >AD @HG AJH AAN
D @E KAAD OF MNDGH8 VCFAB F C BC ?' @ACFGD
#A FAJ ?' H?CBD?M O?DG CFG D DGM G>
, GC 8MM >AD GC @E GM>CA O?M@ EABD LMAAN
AH B@G C ? EABD KMG? BDG OABH GM EAB
HN ?MM J F GPGH OMG@GHOE ?>>ADN
+ PG @G LBC KMG? ?HC MAA(?HN @ANG C JADN
& AHGE JFADG @AHGE AD 8MM Q - 0

1 GDP?HC $

F?C CFG NGP M AJ HAJ CFE F? CE HGJ W
(& ?E C KMG? G EAB D
F?C @?E HAC MAA(BKAH @E N? GD W KG?(P MM?H AD
J MM G GOBCG CFG KA HC AH CFGG B O(FADC

(FE D ? GHCMG@?H >DA@ CFG BH PGD CE C?E LGMAJ CA
KG?(J CF EAB 018
DA@ CFG BH PGD CEW A BH PGD CE R CF?C MAH JADN DBH
CFDAB F @G 018
S ? GPGD J>G A JDGCOFGNME LG GC W
?N HAC CF HGJ CGKK8N H LGCJGGH CFG KA HC
?N A>>GD8N P AMGHOG BHCA @E LDG? C
#F?C JF OF A@G JA@GH O?MM DG?C @ GDE
ABMN FAJ LBC MCCMG FGDG JABMN O?DOG LG GGH
Z@AH @E @ GD G @?E 0A@K?DG
AD JDGCOFGN >ADCBHG J CF ?MM J PG CF?C ?DG
ACF H J MM KMG? G F@ BHCM ?MM LG HACF H
G O?MM C M?PGDE CA LG KDG>GDD8N
KM?OG A>ODGN C ?L? G GDP CBNG
F?C F?MM LG0A@G A>@G ?HN @E KAAD 0F MNDGH
#JA FGDG ?HN AHG ?C HBD G W @E KDGCCE LG ?D
GG FAJ DB H J CF ?K?M E F?HN
.G H CA F?(G CFG ?HO GHC G?C CA NB C
#FG FG?PE JG FC A> ADDAJ ND?J @E MN
PGD @E N?H(F GEG O?H O?DOG GG
#FB D G>J MM M ? C C J?(G ?HN MGGK J CF @G 018

! !) H & $ & $

1 %($ $

MG? G EAB ND?J HG?D D EAB8DG G OGGN H JGMOA@G
#F?C8 @E NABLC >G?D 0A@G HAC CA LG JGMOA@G
, G FAJ AGPGD
8# HAC @E >? F AH D CA NJGMM H MAH O DOB@ C?HOG LBC
CA LG KM?H ?HN G>>GOCB?M CFGDG>ADG CA CFG KBDKA G #FG O?B G A>
@E GCC H >ADCF J? K CGAB ?HN M?@GHC?LMG #F?C FAKG>BM EABH
GHCMG@?H EABD LDACFGD JFA G P DCBG JG ?MM MAPG NG?DME CFDAB F
EABD NG>?BMC ?HN BHH?CBD?M HG M GHOG M G H LAHN G GOBCGN >AD EABD
NGLC R ?KD AHGD ?MM F CBN G ?@?TGN F FAKG CDBO(NG?N ?HN
CFG KD NG A>F EABCF @B>>MGN H CFG G N?D(OMABN A>AKKDG AH
* @KF B@KF B@KF
EAB F?PG (MMGN CFG CAJ?DNG C FAKG A>?MM ABD BH PGD CE
JFGDG>ADG J CFABC DGKGHC?HOG ?HN ?@GHN G KGOC KAHNGDAB ?HN
BNNGH SBN @GHC CA >?MM D GPAB ME BKAH EAB , ABD LDACFGD ?@?H
JFA KDA>CGN H F N P HG G@KMAE@GHC ?HN @ FC F?PG @?NG CGH
CFAB ?HN ABM >C >AD FG?PGH HAJ LE EABD O?DGMG OABD G O? C
HCA KD AH JF OF EAB @B C ?H JGD>AD ?HN ? BDG EABD KD C C JMM
OA@G FA@G ?C MGH CF
+AN AF
G @GH CF H(MM A>EAB ACFGD KG?(MM A>EAB HA @?H
MAPG EAB H?E GPGH CFA G JFA@ FAHG CE OAHNG@H OAHNG@H EAB
HN C?(G CF >DA@ CFG P DCBAB ?>>GOC AH LG?D EABD LDACFGD HGPGD
MAA(>AD KDA KGDAB FABD AAN CFAB FC QB GC MGGK OAHCGHCGN
J?M(HAD ?HECF H CF?C @?(G @?H KGD>GOC CMM EAB DGNGG@ F@
F?C EABD ?H JGD W AJ JMM EAB LG CAJ F@ W * KAH NG KGD?CG
@ GDE AD LGCCGD FAKG WR B>>GD CMM FG?D EABD ?H JGD
D EAB F?PG @BOF JDAB FC J CF @G >GGM EAB H @E
ABM EAB ?DG EABD ?DC8 @? CGD HGPGD F?N GH G CMM HAJ EABD
EMM?LMG F?PG OMG>C @G . ACF >AD EABD JADN ?HN K?H CF?H(EAB
O?HHAC LBC ?O(HAJMGN G D GPAB JDAH NAHG CA @E LDACFGD
@ FCE @ FCE @ FCE @ FCE JDAH CF H CFGDG

1 GDP?HC

MM @G ?LAJM A>JHG GDP?HC
M? KAAD LDACFGD LDB 8N J CF ?H G GOBC AH >AD @E ?(G
LDB G HNGGN @?(G @?HE ?@ADC?M ADG
#MM CFG D?PG OBDG CFG@

J GDP?HC 0 $ 0

D LG H CA EAB EAB8PG OF N EABD JGMOA@G
OABMN F?PG J F8N C LGCCGD >AD EABD ?(G
KMGN G EAB D R #A CFG (HN @?H H KD AH
$GC C LG A AJ D >EAB KMG? G CA KGHN LBC ?>GJ
@HBCG H ?@?TGN F FAKG CDBO(NG?N ?HN
CFG KD NG A>F EABCF @B>>MGN H CFG G N?D(OMABN A>AKKDG AH
HN CFG JADMN8 @BD@BD O?M@8N ?HN FABMN ?E
GC >ADCF CFGH BKAH ?MBO(E N?E 018 (GDP?HC
CFAB OAH>B GN @?H #FE KMG? ?HC H F?PG BHNAHG
CFGG CFE N?@H?C AH F? LG ?DGN CFGG #F?C FG?PGH FABMN ?E
JG @B C HAC H ?HN EGC @?NG JA@GH PG ABD GH G J?E CA >HN
KMG? BDG JF OF LG H >ABHN OAH>ABHN B FE FABMN JG (HAJ
CFA G CF H A @BOF @ B G B W JABMN P DCBG F?N LGGH >AD-
L NNGH G FABMN CFGH F?PG KDAPGN ?MM P DCBAB >AD 8C ABD
LMAAN CA MAPG JF?C JG ?DG >ADL NNGH ?N HAC NDBH(GHHG LGGH
>ADL NNGH JF?C @?H JABMN F?PG LGGH >AAM CA ? LG? C ?HN T?HE CA ?
JHG R CA FAJ CD O(H CFG @DG W F?C CFGDG H CFDGG N OG U
CA @?(G ?@?H ND?J CFD OG CFDGG CFAB ?HN ?ODG HCA CFG OA@K? A>
?MCCMG DABHN C?LMG ?HN J CF CFG GHCMG@?H8 K?M E H CFG F?HN F?(G
ABC F KA CGD CE CF GPG AD LG ?D W 8# NAHG F?PG NAHG8C
8 >? CF CGDD LMG FADD LMG @ GDE R AJ JGMM J? MG>C)GDE
JGMM PGDE JGMM & E M?HN FAJGN MD(G ?>BMM @AAH ?LABC @G LBC
HAJ CFG @AAH8 H CFG M? C QB?DCGD R J?H H J?H H ?HN ?@
@?N CA CF H(CF?C @AAH J? @HG @HG ?HN @E >?CFGD8 ?HN @E
>ADG>?CFGD 8 GHGD?C AH GHGD?C AH R %AJH AG CFG FAB G A>B
NAJH NAJH C H(AJ CFG H?@G ?LG ?D LG H @G
#F?C H?@G JF OF FBHNDGN 4>EG?D F? @?NG CF F DG >?@AB H
@G ?HN @E KA CGD CE DBH ABC H @E GGN >PG ?DG @?NG @ GD?LMG
LG NG @E GM> @E D AC HAJ @E LDACFGD8 ?AMGD @E J>G8 F H
@E CFDGG LAE 8 KGHBDE ?HN @HG AJH OAH>B AH
FE C @E F? D BKAH @E OBD GN FG?N W 0% $ $
MM HAC CF KA AH O?CCGD CFG@ W @E LDACFGD8
H G GOBC AH ?@AH NGP M CF?C
CDGCOF F @ ?HN @?(G F @ PG ?HN H J?HC
AC ?LMG >AD CA MPG HAD CA DGNGG@ F @
%P HG ?HN NE H @GH @?E C?M(A>FGMM
.BC H @E FG?DC FGD GPGD?M CAD@GHC NJGMM
M?PGDE ?HN @ GDE FA H CF ?O? G
ABMN HAC C?(G BK @AHGE BKAH F ABM W
?JH F ?MP?C AH M PG ?C HCGDG C W
CF?C N N GPGD H ?LBHN?HOG NJGMM
AD @G CA J?HC G OGGN CFG CFDAG A>FGMM

1 . AE O $ % (

F?C ? M EAB >?CFGD W DG EAB HAC JGMM W O?HHAC OABD G
@E CAK ? MAH ? EAB C?HN A , AB C?(G BK ?MM CFG DAA@ J CF
EABD J NG MG W * F EAB O?HHAC @?(G @G ?>D?N J CF CF ? >G?D
HA P ?DN HAD LB LG?D
0 D $ F MN " $ D $ $ 0 $
$. 0 $ 0 $ $ $
* K D >AD FGDG CFAB F? C HA HFGD C?HOG MG>C
(JF?C J MM EAB NA >?CFGD W ?@ EABD JF CG LAE
#FAB F?MC LG @E DGN LAE C?(G CF?C 0(D $
(EAB FBDC @G >?CFGD
& E GMNG C LG ?D
#FAB F?MC HAC MPG CA ? (?H B BDGD LDG?N
#A ODE ?C ? DG?C @?H8 ?CG AD >AMMAJ
=+AAN EABD FAHABD I LE ? 0A?0F HA HAD EABD LDACFGD
8# OF?D CE CA LD? H EAB
(AJ F?MM MG?DH HAJ @E FG?N8 LDA(G W
. MGGN LMGGN $
"?CFGD CF?H LG . G HAC CFE H?@G8 N D?OG
KBDH CFAB CFE >ADCBHG >D C >CFGE LG L? G
A@G P GJ CFE GOAHN LDACFGD8 ?CG & E OF NDGH8 LMAAN
F?MM K H HCA EABD >?OG EAB F?MM GG
AJ OAH>NGHCME JG OADH LG ?DE 018 $ AH

! !)

&' & ?N 3 0 $ F MN $ 4 $ & ACFGD $
" $.

MGGK JGGC L?LG ADDAJ @?(G CFE @ACFGD MGGK
C LANG @?MM AAN JFGH FG?P HG >?MM A NGGK
B F KDGCCE LAE CFE FAKG @ FC F?PG LGGH LGCCGD
8# MA C ?C N OG JF?C ?HO GHC FAHABD JAH
?DN JFGH CFG >?CFGD KM?E ?J?E CFG AH
ACF H LBC & GDE GDPG H CF FAB G
"B H ?HN %G AM?C AH F

1 ' % ($ ' 0 $' $ ' AH' "

' FADG ' PG' @G' CF?C' LAE ' 0(3 ' 0 $' $ ' ' $ ' F MN '
' ' FGMK ' FGMK ' BC ' ?M? ' @BDCFGD ' @BDCFGD
' DG' EAB' A K H ' EAB' KD?C H ' CBDNE' QBG?H' W
8MM' LDG?(' EABD' OM?@ABD' J CF' EABD' HGO(' %A J H' C?D
#B@LMG ' CB@LMG ' FG?NMAH ' A' R
0 ' $ 0 ' $ ' 0 .' ' " ' $ ' F MN '
#FG' BDG C' J?E' CA' OF?D@' ?' JA@?H8 ' CAH BG
R LDG?(' FGD' HGO(' ' ?' KAM C O ?H' N N' C
(' &ACFGD ' @ACFGD ' ' ?@' (MM8N ' @ACFGD ' ' 0 D
S ' ?' JFA8 ' CF?C' ODGN' W ' @G' ' @E' OF MNDGH '
.ACF ' LACF ' LMAANE ' LMAANE' ' 0! $ ' ' $ ' ' F MN
' CDB@KGC MGC' A' CFG' LAE ' MGC' A' CFG' LG ?D
S ' ' @E' JGGC' FB L?HN'
' . MCF ' F?DMAC
S ' ' JF?C' J MM' EAB' NA ' NG?D' FB L?HN' W
' + PG' @G' CFG' L? C?DN
S ' , ABD' AJH' JGGC' LAE R
' #FGDG' ?DG' CAA' @?HE' LG ?D
S ' +AAN' @E' FB L?HN R
' %A C' CFAB' KDGPGHC' @G' C MM' W
S ' ' + AN
' ?PG' ?C' F ' FG?DC ' ' $ ' F MN' ' $ '
S ' ' @E' NG?D' L AE
' . D?C ' CFAB' F?MC' HAC' M PG' CA' F?@G' CFE' FAB G R
S ' F ' FG?PGH' ' 0($ ' ' $.' ' D .' 0
' HN' KGD F' R AJ ' LG' AHG'
#FGDG8 ' JFADG ' GHAB F ' ?HN' J?HC' JABMN' @?(G' CFGG' AHG

1 ' ' GDP?HC

(' K ' D' JF?C' NGGN ' ?DG' CFG G' W
' .? G' M?PG ' @E' P? ?M
A@8 C' CFAB' LGCJGGH' @E' >BDE' CA' QBG C AH' @G' W
(' GDG' EAB' CFG' NGP M' ' JABMN' FAMN' EAB ' D
' AMN' @GW R DG B@KC AH' 8MM' BHNA' CFGG' >AD' C
(' 8 LMAAN ' EAB' F?PG' BHNAHG' B ' ?MM ' D
' #B ' ?C' CFE' @? CGDW
(' #B ' ?C' ?' @AH CGD
' ?PG' ' HA' KAJGD' W F?MM' @E' M?PG' >GCCGD' @G' W
(' ?E ' CFGH' CFG' NGP M' JDG CMG ' ' ' ?@' CFDAJH
' ' P MM?H' ' HAJ' 8MM' CB ' CFGG ' HAJ' 8MM' CG?D' CFGG
GC' QB O(' KBD ' CA' @E' P? ?M ' LDB G' F@ ' CD?@KMG' F@
A' ' ' CF H(' CFAB' J MC' HAC' >AMMAJ' @G' H' F? CG
& E' FAD G' C?HN ' DG?NE' ?NNMGN ' J?E ' ?J?E
AJ ' CA' @E' LD?C' ?C' HBD G ' @E' BO(H ' LG ?D'
?CG ' 8MM' HAC' MG?PG' EAB' AHG' CA' CD?@KMG' AH Q18

! !') H ! ' " ' $ '

1 ' % ($ ' ' $ ' $ ' ' $ ' ! ' ' $ ' !

' AJ ' ' C' J CF' EAB ' D' W
& GCF H(' EAB' MAA(' A>' ?' N CD?OCGN' OAMABD
' FA ' ' D' W 8# ' LBC' EABD' >?HOE
MG? G' EAB' J?M(' H ' D ' ?HN' 8MM' AAH' DG AMPG' EAB
' J?HC' AHG' @?MM' K?DC' CA' @?(G' BK' CFG' B@
HN' CFGH' @E' LDACFGD' F?MM' DG C' ?C >GN
' ' F?MM' LG' M?N' CA' GG' C ' D ' 8MM' ?CCGHN' EAB Q18

! !') R Z ' ' ' $ '

%$ ' ' GDP?HC ' ' F MNDGH ' 3

(' F' ' ?@' O?DOG' ?LMG' CA' FG?PG' BK' @E GM>
G' F? ' A' LDB 8N' @G' J CF' F ' NGP M F' JG FC
HN' CADH' @E' >MG F' J CF' F ' LMAAN F? CE' KBD'
' @?H' LG>ADG' A>' G? E' OAH C CBC AH
#MM' HAJ ' FGMM' KAJGD' BKKM GN ' CA' F ' ABM8 ' JDAH
' FAJ ' N?@H?C AH' O?H' @?(G' JG?(' @GH' CDAH

1 ' $ ' (' ' ' $ ' ! ' ' % O ' GDP?HC

(O' ' CFG' @A C' K CGAB ' NGGN ' D' HOG' EAB' O?@G
' ' NG?NME' DGGC H ' ?CF' FG' B@@8N' BK' CFG G'

#A' ?C >E' F ' LDACFGD' W GDG8 ' ?HACFGD
HN' LE' CFG' LMGGN H ' H>?HC ' CFG' NG?N' @ACFGD
S ' F ' AF'
' BD GAH ' ' BD GAH ' ' FG' DGOAPGD ' M >G R
HG' A>' F ' @GH' ?MM' >?HC' ?HN' LMAAN GN
' (' AMMAJ ' ' ABD' @BDCFGDAB ' @? CGD' F? ' CAA(' FAD G'
#A' (MM' F ' OF MN' ?C' HBD G' ' >AMMAJ' QB O(CE
' ' ?@' CFG' DG?N G C ' C' F?MM' LG' @E' OF?D G'
#A' D?C G' CFG' CAJH' BKAH' F@
(' +AAN' D' NA' >AMMAJ' F@
Q18 ' ' % O ' GDP?HC
S ' ' @E' OF MNDGH
' (' AJ ' ' C' J CF' @E' @A C' ?>>M OCGN' @ CDG ' W
S ' FE' NA' ' HAJ' DGOAPGD' W FE' F?M>' M PG
#A' GG' @E' OF MNDGH' LMGGN' LG>ADG' @HG' GEG ' W
' FC' ?LMG' CA' (MM' ?' @ACFGD8 ' LDG? C' J CFABC'
H' G GOBC AHGD R F?C ' ?DC' CFAB' @?H MGN' CAA' W
' (' ' CF H(H ' CA' KDGPGHC' JF?C' F ' QB O(' @ OF G> '
? ' A' AAH' ?OCGN ' O?@G' ?HN' DB F8N' BKAH' F@
G' CDB MGN' ' LBC' ?' >ABMGD' CDGH CF' CF?H' F '
8GDCFDGJ' @G' J CF' F ' ?D@ ' CFGH' N N' FG' LDB G' @G
HN' DGHC' @E' >MG F' ?HN' DALL8N' @G' A>' @E' F?D
$ (G' ?' @?H' @?N' H' G GOBC AH
& ?NG' @G' BH>C' CA' D G' ?HN' >AMMAJ' F@
S ' F?C ' C' F? ' LG B M8N' F@' A>' ?MM' D?OG
HN' CAMG' ?J?E' FB@?H CE' >DA@' F ' LDG? C'W
#A' M?E' F ' OF MNDGH ' KBDKA G' CA' (MM' F ' J >G
HN' KA M' F ' GDP?HC ZR

1 ' ' GDP?HC

(' MG? G' EAB' CA' MG?PG' CF ' @A C' ?OOBD GN' KM?OG
' BD GAH' J?C ' J CF H
S ' MM H ' CA' MG?PG' C' W
8# ' B MCE' A>' JGGC' LMAAN ' HHAOGHC' LMAAN
& BDCFGD' F? ' CAA(' CF ' OF?@LGD' J CF' >BMM' F?HN
HN' J MM' HG8GD' ABC' ? ' MAH ' ? ' CFG' FAB G' C?HN ' Q18

! !') R 0 ' $'

1 ' % ($ ' '

' ' CB@LM H ' S?NG' ' #FG' K?P H' APGDC?(G' CFGG' '
#FG' >C E' N G? G ' CAK' CFGG'
F ' ' ?@' ADGME' LDB GN ' M? BG' >ABHNGD' CFGG' '
#FAB' DBHH8 C' ?C' G? G' ?HN' KMG? BDG ' G?DC' A>' OF?HOG '
#A' CFDAJ' @G' HAJ ' J CF H' ?' >M FC' A8' CFG' CAJH
H' BOF' KM?H' GPGH' DABHN' CAA' ' 8 >AAC ' ?' @?H'
& ?E' N OG' BKAH' C' ?HN' CFDAJ' ?J?E' CFG' @G?NAJ
MCFE' LG? C
Q! ' 0 $ 0' AMMAJ ' >AMMAJ ' >AMMAJ
' ?' ' ' FG?D' ABHN ' A>' @GH' M (G' FBG' ?HN' ODE '
* K ' BK ' ?HN' CDB MG' CA' CFE' FAD G ' @?(G' AH'
%G K?COF' CF?C' M CCMG' LG ?D ' ?HN' ?MM8 ' NAHG
Q! ' 0 $?5' GDG ' FGDG ' CF ' J?E ' CF ' J?E
' C' @E' L?O(' W F
F?C' >?CG' F?PG' ' @E''M @L ' NGHE' @G' A
& E' J MM' ' ' 8L?CGN' ' LG ?DE' OM?@ ' ?' K?DC
' OABMN' ' FGDG' DG?OF' CA' CFG' H>?HC8 ' FG?DC

1 ' $ ' ' $ ' ! .' %$ ' +GHCMG@GH ' [' CCGHN?HC
0 $' $ "

& ' GDG ' FGDG ' EAHNGD ' EAHNGD
' * HH?CBD?M ' >M HCE ' @ADG' CF?H' L?DL?DAB '
#FG' OECF ?H ' GPGH' CFG' @?DLMG FG?DCGN' ?CG
ABMN' HAC' F?PG' ?OCGN' @ADG' DG@AD GMG ' NGGN
H' CFG D' DGMGHCMG ' H?CBDG ' CF?H' CFG G' A>' CF HG
? ' CF ' CFG' ?H JGD' ' MAH ' J?CGN' AH' W
#FG' ?C >?OC AH' >AD' CFE' KD AH8N' LDACFGD' W
' FE ' FG' O?H' F?PG' HA' @ADG' A>' B ' CF?H' ABD' (H
HN' A@G' o>' CFG@' J?HC' LBC' >M?E H
' I ' +DG?C' H ' F?PG' @?NG' F@' @KBNGHC
' G' F? ' FGN' A' @BOF' LMAAN ' CF?C' FG' O?HHAC' LMB F
2' I ' J?E' J CF' F@ ' LG?D' F@' CA' CFG' SB C OG8

' GHCMG@?H' A>' JAD F□K' NJGMM ' ?C' F?HN'
#FGDG' F?MM' F□ ' NGGN ' LG' LM?T8N
' f FE ' ?MM' CFG' LGCCGD
& E' MADE' 8C□ ' CA' F?PG' @E' ?OC□AH' (HAJH
' D□GEG' >AD' HACF□H ' LBC' ' @□ 8N' A>' AHG
' #FGDG8 ' M□CCMG' A>' ?' >?CFGD' □H' CF?C' D□G>
. G?D' F□@' ?J?E ' 018

! ! ' ; R & ' ' ' $ ' ' ' ' & ? □ CD?CG

1 ' ' H□ FC ' ' %$ ' +GHCMG@GH

$ ' ! HN?H GD8N' A' F□ ' J□>G' W' @BDCFGD8N' F□ ' OF□MNDGH' W
' I ' A' CFG' ODE' AG
$ ' ' ?@' ADDE' ' G8GD' (HGJ' F□@' 3
#F?C' GPGD' FG' CAA(' M□>G' ?HN' H?CBD?M' LG□H '
DA@' BOF' ?H' FAHABD8N' CAO(' ?HN' >?□D' NG OGHC
#□MM' CF□ ' LM?O(' @□HBCG' J□CFABC' C?□H' AD' LMG@□ F
' I ' GDG' OA@G' CFG' @GH

1 ' ' $ ' ! .' Nc .' 0 $' ' D□ AHGD

$ ' #FG' GDKGHC' A>' F□ ' FAB G ' ' ?@' ADDE
AD' CF□ ' C□@G ' CF?C' ' ?@' □H' KM?OG' A>'SB C□OG
' MG? G' EAB ' □D
$ ' %A' HAC' DGKG?C' □C' CJ□OG ' ' (HAJ' CAA' @BOF'
ABMN' □C' F?N' HG8GD' LGGH' CFAB FC' AH' ' □D ' ' LMGGN' >AD' EAB
' I ' , ABD' >?CFGD8 ' ADDAJ ' ?DG' ?M□PG' □H' @G
F?C' @?NG' EAB' FAJ' BOF' @AH CDAB ' ODBGMCE' W
' H' ?' JADN ' □D ' ' F?PG' OAH B@GN' ?MM ' KM?EGN' ?J?E' MAH ?ODG' '
?HN' ' CFAB FC' □C' CFG' OF?D□C?LMG C' NGGN' ' OABMN' NA ' CA' OATGH' LG ?DE '
?HN' (HAO(' @E' FAB G' A8' CFG' FG?N
$ ' ' □H' ?' OAAMGD' LMAAN' EAB' J□MM' DGKGHC' □C
' ' DGKGHC' HAJ' CF?C' AHG' □ ' MG>C' BH' (□MM8N
& E' LD?C' ?C' HBD G ' ' JABMN' >BMM' >?□H' F?PG' JG?H8N' F□@
$ ' GMM ' ' NA' HAC' CF□H(' LBC' □H' CA @ADDAJ8 ' SBN @GHC
#FG' CGDDAD' J□MM' □C' OMA GD' CA' EABD' ABM
FGH' CFG' NDG?N' CFAB FC' A>' NG?CF' DG@G@LGD ' EAB'
#A' >BDCFGD' JF□OF ' C?(G' CF□ ' ?N' PA□OG' >DADH' @G
GPGD' J? ' ?OC' KM?E8N' @ADG' BHH?CBD?MME
' ' CF?H(' EAB ' □D
$ ' +A ' MG?N' F□@' CA' CFG' ?AM
FGDG' SB C□OG' OM?□@ ' ?MM ' CFGDG' @B C' K□CE' >?□M
' A@G ' OA@G' ' ?J?E' J□CF' @G ' Q18 '%($ ' S
' □D ' EAB' NG GDPG' CFG' JAD F□K' A>' EABD' KM?OG
ABMN' ?MM' N□N' A' ' H' EAB' CFG' M?J' □ ' D?OG
$ ' C' □ ' @E' J□ F' □C' FABMN' LG' A R "B□HAB ' @?H'
#□G' NG AM?C□AH' A>' F□ ' FAB G ' CFG' LMAC'
* KAH' F□ ' KDGNGOG AD 8' FAHABD8N' H?@G'
#F?C' @?H' □ ' HG?DG C' F?@G ' CF?C' □ ' K? C' F?@G' Q18

! ! ' 5 H L ' ?MPGDME' ?MM

1 ' %($ ' .' ' $ ' ! .' +GHCMG@GH '
CCGHN?HC

' ' ?@' D□ FC' ? ?□H C' @E' FAB G C G?C' A>' @E' ?HOG CAD
' FG?D' @E' J□>G8 ' ?M□PG ' LBC' @BOF' GHN?H GD8N'
$GC' @G' GHCDG?C' CA' KG?(' J□CF' FGD ' LG>ADG'
#FG' KD□ AH' D□KG' @G

' X203' ' " $ '

I ' GG ' FGDG' FG' OA@G ' A>' FGD GM>
S ' ' @E' JGGC' FB L?HN ' @E' NG?D' N□ CDG 8N' FB L?HN '
AJ' □H' CFG' F?HN ' A>' BHDGMGHC□H ' M?J
& E' DG?CG C' ADDAJ ' @E' G CDG@G C' LMGGN□H
AJ' @E' ABM' LMGGN

' AJ' HAJ' W' □HN' CA' @G' W' %□N' ' HAC' JABHN' CFGG' W
$G>C' CFGG' >AD' NG?N' W
S ' #BC ' >?D ' >?D' DG?CGD' JABHN ' N□N' @E' LDG? C' >GGM'
*H(□HNHG ' CD□(G ' ?' NGGKGD' JABHN' CF?H' CGGM
, AB' F?PG' LGGH' C□MM' BH(□HN' CA' @G
' 8 ?□CF ' ?HN' A' ' CF□H(' ' F?PG
' N□N' @E' @BDCFGD ' DAB FME' ABC' A>' F?HN
%G KGD?CG' ?HN' BNNGH ' LBC' CFAB' F? C' NGP□ 8N'
' >□HG' J?E' HAJ' CA' (□MM' @G ' CFAB' F? C' □PGH' @□HG' GEG '
GPGH' JABHN ' ?K□GOG ' AJ' M□NG ' CFG' NGP□M' >DA@' @G
%GK?DC ' ?C' GPGDE' SA□HC ' FG?PG ' BK' @E' H?□M
' O?COF' F□@' CAD@GHC ' CF?C' JGDG' HG8GD' □HPGHCGN'
. □HN' F□@' AHG' CFAB ?HN' @ADG ' EAB' LMG GN' ?H GM
H' CF?C' K□C' LACCA@MG ' ' $GC' F□@' HAC' D□ G'
#A' @?(G' @GH' ?OC' BHH?CBD?M' CD? GN□G
#A' KDG?N' □HCA' ?' >?CFGD ' ?HN' □H' >BDE'
&?(G' F□@' F□ ' OF□MNDGH8 ' G GOBC□AHGD
&BDCFGD' F□ ' J□>G ' F□ ' GDP?HC ' ?HN' JFA' HAC R
AD' CF?C' @?H8 ' N?D(' JFGDG' FG?PGH' □ ' QB□CG' >AD AC
S ' ' @E' DGKGHC?HC' FB L?HN'
' ' @E' NG?D' ABM ' JFA@' ' CAA' @BOF' F?PG' JDAH 8N
AD' NG?CF' ' N□G ' ?HN' >AD' CF□ ' F?PG' ' MAH 8N
S ' #FAB' FABMN C' HAC ' LG' ? BD8N ' >AD' CFG G' >?BMC ' N□G'
>' CFG' M?J' OABMN' >AD □PG' ? ' AAH' ? ' ' Q%$ ' %O ' F□MNDGH' ' '
' F?C' □ FC' □ ' EAHNGD' W'
S ' ' ABD' CJA' LMGGN□H ' LAE
$?□N' >ADCF' BKAH' CFG' CFDG FAMN
' GDG8 ' JG□ FC' GHAB F' CA' @?(G' ?' FG?DC CD□H ' OD?O(
' JGDG' □C' M?J>BM' CF?C' EABD' KDGCCE' ABM '
'&□ FC' MAA(' >DA@' FG?PGH' □HCA' EABD' >?CFGD8 ' GEG
#FGH' FABMN' EAB' GG' CFG' KGH□CGHC' M? G ' @GMC
HN' LACF' EABD' @BDCFGD ' FAAC' BKAH' @E' OFGG(' '
. BC' EAB' ?DG' KM?E□H ' □H' CFG' ?H GM 8' M?K
HN' J□MM' HAC' MAA(' AH' @G ' JFA ' PA□N' A>' D?OG
□MM8N' EAB' □H' LG ?DE
7 ' CF?C' ' @□ FC' @E' J□ FG ' HAJ' ?CC?□H
' FABMN' CFGH' J□ F' EAB' M□P□H ' JGDG' ? ?□H
#FAB F' ' N□N' LG ' J□CF' EAB ' JF□OF' CF□H ' ' >G?D8N
' 8CJ? ' CFG' GHG@E' @E' GEG ' A' LMG?D8N'
' JABMN' EAB' OABMN' KD?E' FG?PGH' @G' CA' >AD □PG
#F?C' J□MM' BHCA' @E' GHN' DGKGHC?HC' M□PG
S ' C' @?(G ' @G' GPGH' >AD GC' ?MM' ACFGD' ADDAJ
HN' M□PG' ?K?DC' J□CF' CF□
' A@G ' J□MM' EAB' A' W
' 8MM' (□ ' CFG' LMAAN' ' K□MC ' ?HN' CFGH' 8MM' A'
& E' ABM' □ ' LMAAN□GN ' JGMM' @?E' @E' M□K ' LG' A
?DGJGMM ' NG?D' J□>G ' HAJ' CFAB' ?HN' ' @B C' K?DC
' A>' CFE' JDAH ' DGKGHC' @G' J□CF' @E' FG?DC
S ' #' C?E ' CFAB' F?MC' HAC' A
' #F?C8 ' LBC' □H' P?□H ' EAB' GG' □C' @B C' LG' A
?DGJGMM ' EG' LMAANE' ? FG ' A>' @E' LAE '
& E' KBH□ F@GHC ' ?DG' CFG□D' GCGDH?M' SAE
$GC' GPGDE' >?CFGD' MAA(' □HCA' @E' NGGN
HN' CFGH' CFG□D' FG□D ' @?E' KDA KGD ' JF□MG' @□HG' LMGGN
Q18 ' B ' ' >>□OGD '
S ' &ADG' JDGCOFGN' ?@' ' HAJ' □H' CF□ ' N□ CDG
#F?H' >AD@GD' ADDAJ ' @?NG' @G
' (□HN' J□>G
. G' OA@>ADCGN ' AHG' SAE' □ ' EGC' BH@BDCFGD8N
, AB' F?PG' ?' LAE' ?C' HBD G ' EABD' SAE8 ' □H' F□@
S ' %G?DGD' CF?H' ?MM' □ ' @E' KAAD' FB L?HN8 ' M□>G
G?PGH' □PG' @E' LANE' CDGH CF' JF□OF' □ ' EGC' >?□HC'
□CF' @BOF' G KGH G' A>' LMAAN ' ?HN' ' J□MM' (HGGM
BG' >AD' F□ ' M□>G ' HB@LGD' BK' ?MM' @E' >D□GHN '
#A' KMG?N' >AD' K?DNAH' >AD' @E' NG?D' FB L?HN8 ' M□>G
' ? ' □C' □H' @?H' CA' JABHN' A' (□HN' ?' ODG?CBDG' W
8MM' GPGD' KD?□ G' ?' JA@?H' >AD' CFE' ?(G
' @B C' DGCBDH' J□CF' D□G>' @E' ?H JGD8 ' GC
' F?MM' LD□H ' HGJ ' JG□ F ' FG?P□GD' CF?H' CFG' NGLC
#JA' LDACFGD ' AHG' □H' LAHN' M□G ' APGDCFDAJH
#F□ ' AH' ?' NG?N□GD' G GOBC□AH' Q18 '

s s !

* ' 512' J? ' >D C KBLM FGN = #FG M?@GHC?LMG ?HN CDBG #D? GN G A>
& ' DNGH A> GPGD F?@ ' ?' NA@G C O CD? GNE ' JABMN ' H KA HC A>
?L AMBCG @GD C ' F?PG NAHG HA' N ODGN C CA CFG G?DME @?HFAAN A>
F?(KG?DG F @ GM> ' LBC ' LACF H OAHOGKC AH ?HN G GOBC AH ' C '
QB CG BHM (G GPGH F ' G?DM G C @?HHGD ' JF MG ' AH CFG ACFGD F?HN ' C '
N?CG O?HHAC KA LME LG DG@APGN A' >?D L?O (' ? ' CFG C@G LG>ADG
JF OF F ' AJH CEMG F?N NG@AH CD?LME LGGH >AD@GN I U #GO (' F? '
CD?H M?CGN CFG CD? GNE HCA +GD@?H ' ?HN FG ? H ' C JCF MCCMG
FG C?C AH CA F?(KGDG ' * MD O ?M A BL OD LG ' CA CF ' AK H AH ' LBC
FG @?(G ' ?' MAJGD G C@?CG A> C ' @GD C CF?H F ' LDACFGD OD C O ' #FG
)GD >O?C AH FG FAMN ' CA LG CGN AB ' ?HN @AHACAHAB ' ?HN CFG N?MA BG '
FG ?E ' ' OAHNBOCGN JCF @BOF G ? GD?C AH A> G KDG AH ' #FG
KM?E ?KKG?D ' CA B ' NG GDP H ' A> ?' A@GJF?C >BMM OAH NGD?C AH ' C
J? ' KD HCGN ? ' G?DME ? ' 512 ' ?HN J? ' @A C KDAL?LME KGD>AD@GN
GPGD?M EG?D ' G?DM GD ' CFG GPGHC JF OF >AD@ ' C ' BLSGOC CAA (' KM?OG H
55 ' F?C ' PGDE DG@?D (?LMG ' CAA ' >AD ?' KM?E A> CF ' KGD AN V?HN H
CF ' AK H AH JG N>>GD >DA@ * MD O ' CFGDG ' PGDE M CCMG G CD?P? ?HOG A>
M?H B? G ' ?HN CFG OD @H?M K? AH H ?MM C ' C? G ' ' OAHNBOCGN JCF
H BM?D NGM O?OE ' #FGDG ' ?DG @?HE K? ? G ' CAA ' JF OF ?@ CA LG
KAGC O?M ' ?HN ?DG ' H >?OC ' KAGC O?M ' LBC >AD CFG @A C K?DC CFGE J?HC
CF?C P P>E H ' ND?@?C O KAJGD JF OF @?(G ' CFG KAGCDE NABLME G>>GO-
C PG >DA@ C ' H?CBD?M ?HN H GK?D?LMG BH AH JCF CFG CB?C AH JF OF
O?MM ' C >ADCF ' ?HN CFG 0F?D?OCGD JF OF PG ' C BCCGD?HOG ' #FG
CD? GNE ' >ABHNGN BKAH ?' DG?M GPGHC ' JF OF F?N LGGH KAKBM?DME CAMN
JCF DG?C @HBCGHG ' A> NGC? M ' ?HN CFG ND?@?C C F? ' GP NGHCME
CFAB FC C HGOG ?DE CA KDG GHC ?MM CFG KA HC ' A> CFG CADE ' ?HN H A
NA H ' F? ' A> OABD G A@GC @G ' N P NGN ?HN JG?(GHGN CFG HCGDG C '
> HPGHC AH ' KDAKGDME A O?MMGN ' CFGDG ' HGOG ?DME PGDE M CCMG ' LBC
CFGDG ' CMM A@G HPGHC AH ' ?HN CF?C A> ?' H?CBDG CA FAJ' CF?C CFG
?BCFAD F?N ?H @? H?C PG OAHOGKC AH A> HO NGHC ?HN OF?D?OCGD '
* KAH CFG JFAMG ' JG FABMN LG HOM HGN CA DG ?DN C ? ' CFG JAD (' A> ?'
EABH ' @?H ' ?HN CFG QBG C AH CFGH ?D G ' JFGCFGD CF?C EABH ' @?H
J? ' F?(KGDG ' > , ' DNGH A> GPGD F?@ I' M (G CFG =' , AD(F DG

' " $' 82 9 2WW8 L + #D? GNE I' F?N LGGH >ABHNGN BKAH ?H GPGHC JF OF F?KKGHGN H
F?(KGDG8 ' @?CBDG EG?D ' CF?C O D0B@ C?HOG JABMN F?PG LGGH NGO PG
? ?H C F ' LG H ' H ?HE GH G A> CFG JADN CFG ?BCFAD ' . BC JF M C
JG ? DGG J CF CFG JD CGD H CFG 1 " $' 3 3' CF?C =' LACF H OAH-
OGKC AH ?HN G GOBC AH C ' QB CG BHM (G GPGH F ' G?DM G C @?HHGD I' JG
?DG HAC A' OAH>NGHC CF?C =' C ' N?CG O?HHAC KA LME LG DG@APGN A'
>?D L?O (' ? ' CFG C@G LG>ADG JF OF F ' AJH CEMG M?N NG@AH CD?LME
LGGH >AD@GN I' FGCFGD C LG NBG CA CFG ?L ADL H ' H?CBDG A> CFG
BLSGOC ' AD CA CFG @ANG H JF OF CFG CADE ' ND?@?C O?MME CDG?CGN
JG CF H (' CF?C =' DNGH A> GPGD F?@ I' O?HHAC LG DG?N >AD CFG >D C
C@G J CFABC G O C H ' ?' PGDE OAH NGD?LMG HCGDG C ' ?HN CF ' HCGDG C
' OGDC? HME HAC KDANBOGN LE' ?HE P AMGHC G F L C AH ' A> K? AH ' ?HE
BNNGH CD?H C AH ' A> CB?C AH ' AD ?HE G O C H ' N KM?E A> DFGCAD O'
AD KAGCDE ' LBC LE' ?' QB GC ?HN H?CBD? BOOG AH A> HO NGHC ' LE' ?'
CAMGD?LME OAH CGHC ' >' HAC F FME >ADO LMG ' NGM HG?C AH A> OF?D?OCGD '
?HN LE' GQB?LMG ?HN BH?@L C AB ' N ?MA BG ' H JF OF CFGDG ' OGDC? HME
MG ' G CD?P? ?HOG A> G KDG AH CF?H JG FABMN DG?N ME >HN H ?HE A>
CFG JD CGD ' >AD CFG C? G LGC JGGH 565' ?HN 512 ' %A' JG CFGH CF H (' '
CF?C = DNGH A> GPGD F?@ I' LGMAH ' CA CFG G?DME @?HFAAN A>
F?(KGDG W G NA' HAC CF H (' A' J CF ?HE OAH> NGHOG ' LBC JG NA'
CF H (' CF?C ' OAH NGD H ' C ' N?CG ' C ' ?' PGDE DG@?D (?LMG KM?E ' ?HN JG'
FABMN LG ?C ?' MA ' CA' ? H C CA' ?HE JD CGD JFA G H?@G ' ? AO?CGN
J CF CF?C G?DME KGD AN A>CFG ND?@?' G OGKC CA F?(KGDG ' H QBG C AH '
A> CF ' H?CBDG CFGDG @?E' LG ?' OAHP OC AH DG BMC H ' >DA@ ?H G ?@H?-
C AH A> CFG JFAMG GP NGHOG ' CFG DG? AH ' >AD JF OF O?HHAC LG ?C >?O-
CAD ME OA@@BH O?CGN CA' ACFGD ' . BC JG ?DG MG ' ?H AB ' CA' @?(G ABD'
DG?NGD ' CF H (' J CF B ' CF?H CA' GH?LMG CFG@ CA' CF H (' >AD CFG@ GMPG ' '
?HN JG F?MM GHNG?PABD CA' G>>GOC CF ' ALSGOC H CFG ?H?ME ' CA' JF OF
JG HAJ' KDAOGGN

#FG @BDNGD A> DNGH A> GPGD F?@ @B C F?PG KDANBOGN ?H G CD?-
ADN H?DE ?HN GPGH KGD@?HGHC GH ?C AH H ?H ? G JFGH NGGN ' A>
P AMGHOG JGDG LE' HA' @G?H ' BH>DGQBGHC ' AM H FGN8 ' FDAH OMG J? '
>D C KBLM FGN H 5 ' ' CFG GPGHC F?KKGHGN CJGHCE ' EG?D ' LG>ADG '
LBC CFG JD CGD A> CFG FDAH OMG ?E R =' #FG JF OF @BDNGD ' >AD CFG
FADD LMGHG ' CFGDGA> ' ?MCFAB F ACFGDJ G C @?E GG@ CA' LG' LBC ?'
KD P?CG @?CCGD ' ?HN CFGDG>ADG ? ' C JGDG @KGDC HGHC CA' CF ' F CADE ' '
F?PG CFAB FC AAN CA' GC C >ADCF A@GJF?C ?C M?D G ' F?P H ' CFG
H CDBOC AH ' NGM PGDGN CA' @G LE' CFG@ CF?C F?PG B GN A@G N M GHOG
CA' ?CFGD CFG CDBG BHNGD C?HN H ' A> CFG O DOB@ C?HOG I' #FG H?DD?-
C PG H AM H FGN AOOBK G ' GPGH OMA GME KD HCGN OAMB@H ' ?HN ?MM
CFG NGC?M ' ?DG LDAB FC ABC J CF ?' DG@?D (?LMG D?KF O KAJGD ' G
F?PG HA' NABLC CF?C CF ' H?DD?C PG CDAH ME G TGN BKAH CFG @? H?-
C AH A> CFG JD CGD A> CFG KM?E ' #A' SBN G OADDGOCME A> CFG KAGC O?M ?DC
A> CF?C JD CGD JG @B C >AMMAJ' CFG H?DD?C PG CGK LE' CGK ' #FG DGM?-
C PG KA C AH A> CFG GPGD?M K?DC G ' CFB ' NG OD LGN R

=' #F ' DNGH J? ' ?' @?H A> ?' C?MM ?HN OA@GME KGD AH? G' ?HN
@?COFGN H @?DD? G JCF ?' GHCMGJA@?H ' EABH ' C?MM ' ?HN JGMM '
>?PABDGN A> F?KG ?HN OABHCGH?HOG ' JFA' OF?HO H ' CA' >?MM H >?@M-
?D CE' JCF' AHG' & A LG ?' C?MAD LE' AOOBK?C AH ' ?' LM?O (' J?DC @?H '
GDP?HC CA' CFG $ADN ADCF ' C F?KKGHGN CF ' & A LG BKAH A@G @ -
C?(H ' CA' >?MM ABC JCF FGD ' LBC FG LG H ' NG DAB ' CA' LG H >?PABD
JCF F@ ? ?H ' GHC F@ ?' K?D A> MPGD NOG LE' AHG N?@' ABMG '
NJGMM H ' ?C CFG MAJGD NG MBOG ' H GPGD F?@ ' >CGD JF OF FG
DG ADCGN CA' FGD ? ?H ' ?HN A>CGHC @G ' M?E H DNGH8 ' FAB G ' ?HN
?MCFAB F V? ' C J? ' ?N ' DNGH KGDOG PGN D FC JGMM CFG D @BCB?M
>?@M D CE' CA' Lg @BOF DG?CGD CF?H CFG D FAHG CE ' EGC LGO?B G FG
JABMN HAC A>>GHN FGD ' ?HN A' MA G CFG LGHG>C FG FAKGN CA' ?H ?C
A@G A> FGD >D GHN 8 F?HN ' H LG?D H ' J CF FGD MGJNHG ' JF OF FG

1 / 22 ' > =

@ FC F?PG MA C >' FG FABMN F?PG >?MMGH ABC J CF FGD FG J? OAH-CGHCGN CA J H(' ?C FGD >MCFE N ADNGD ?HN LACF KGD@CCGN ?HN ?M A HP CGN & A L G PGDE A>CGH CA MAN G H F ' FAB G HN CFB C OAH-C HBGN ?' AAN K?OG LG>ADG ?HE KD?OC OG J? ' LG BH LE CFG@ ? ?H C & ? CGD DNGH FG ?C MGH CF H>M?@GN H MAPG J CF & A L G ?HN MA?CF H FGD FB L?HN J FGN ?HN ?>CGD KD?OC GN CFG @G?H FAJ CA F? CGH F GHN I

#FG >D C GP NGHOG A>' ?' ABHN SBN @GHC H CFG ND?@?C C ' CFG DGSGOC AH A>' CFG @KBC?C AH A>' CFG OFDAH OMGD CF?C DNGH OAHH PGN ?C CFG OAHNBOC A>' F ' J>G >DA@ @GDOGH?DE @AC PG H CFG AKGH H OGHG FG KBC ' DNGH H ?' CFADAB FME N>>GDGHC KA C AH ' #FG KM?E AKGH J CF ?' N?MA BG LGCJGGH & ? CGD DNGH ?HN F ' >D GHN & ? CGD D?H(M H ' H JF OF D?H(M H G FADC 'F@' CA OFGGD BK F ' K D C 'LGO?B G CFG (H ' F? ' D?HCGN F@' MGCCGD K?CGHC A>' CFG M?HN ' A>' CFG ?LLGE A>' GPGD F?@ ' #F ' ' CFG ?H JGD A>' DNGH R

=' D?H(M H ' CFE MAPG KDAMAH ' @E JG?DE M>G
HN LBC >AD CFGG ' FAJ' AN AB ' JGDG CF ' M>G
#F?C FAJ ' @G HACF H ' LBC CAD@GHC ' @E ABM
HN CFA G >ABM ALSGOC ' CF?C A>>GHN @ HG GEG
S $ $' D ' '0 $' $.' ' $ '3 ' '$ 3
%$ ' $' $ ' 3 ' '$ ' ' 3 F ' 'R
$APG MGCCGD ' KA C 8CJ C & A L G ?HN @E J>G
HN CFGE F?PG KD PE @GGC H ' H CFG CAJH
?E ' AH F ' >H GD N N ' KE CFG D H '
F OF ' ?C ABD @?DD ? G ' CFG KD G C KBC AH
?H ?HE D G>' LG F?M>' A DG?C ? ' CF 'W I

DG GHCME DNGH LDG?(' ABC HCA ?' LBD C A>' K? AH ' ?HN D?H(M H CFB ' OABH GM ' F @ R

S

=' . G K?C GHC ' GHCMG >D GHN ' ?HN MG?DH A>'@G '
#A G? G CFE D G>' ?HN ?PG FGD 0F? C CE
!HCDG?C FGD >? D ' JGGC JADN ' ?DG >CCG C GH HG '
#A D?TG CFG >M HC J?MM ' A>'?' JA@?H8 ' LDG? C
H ?HE 0? G LG HAC CAA SG?MAB
AD @?(G HA QBG C AH A>'FGD MAPG CA CFGG
. BC ' ? ' GOBDGME ' KDG GHCME C?(G FAD G
HN M G J CF @G ?C $AHNAH ?MM CF ' CGD@4
AD JA@GH ' JFGH CFGE @?E ' J MM HAC
. BC ' LG H ' (GKC L?O(' CD? FC DAJ ' ABCD? GAB I

M OG ' CFG J>G A>' DNGH ' GHCGD ' ?HN FG ?OOB G ' FGD ' LBC @ MNME ' A>' F?P H ' O?MMGN AK & A L G H FGD MGGK ' CFG JA@?H N G@LMG ' ?HN CFGE K?DC H KG?OG ' G F?PG CFGH CFG HO NGHC A>' CFG MPGD N OG GHC CA CFG K?D?@ABD LE N?@' A>' CFG MAJGD NG MBOG ' #FG OFDA-H OMGD F? ' DGKDG GHCGN M OG ' ? ' CFG KD HO K?M ? GHC H KDAOBD H ' CFG @BDNGD A>' FGD FB L?HN ' ?HN CFG ND?@?C C F? ' C ?KKG?D ' CA B ' J CF OAH NGD?LMG (MM ' FAJH CFG JA@?H ' >DA@ CFG >D C BHNGD CFG H>MB-GHOG A>' ?' FG?NMAH ' K? AH ' JF OF O?HHAC CAK CA OAHOG?M C ' KBD-KA G ' JF OF F? ' HA NABLC ' HA B K O AH ' HA >G?D ' #FG G?DHG C-HG ' J CF JF OF FG KDAOGGN ' H FGD CGDD LMG NG H ' CFADAB FME CD? O ' ?HN FGD ?DNABD ' CD (H ME OAHCD? CGN J CF CFG @ADG O?BC AB ' B MC A>' FGD OF G>' ?OOA@KM OG ' ' FG ?PAJ ' FGD K? AH >AD & A L G CA CFG M?HNMADN A>' CFG MAJGD NG MBOG ' FG AKGHME KDA@KC ' DNGH8 ' AJH GDP?HC & OF?GM CA @BDNGD F ' @? CGD ' CG@KC H ' F@' J CF ?' >' KDA@ G CA KDA@ACG F ' B C CA & A L G8 ' CGD ' #FG >D C OGHG LGCJGGH & A L G ?HN M OG ' ?' CD (H ' AHG R

8 =' " ' FGDG ' EABD FB L?HN W
& ' 8# ' HAJ' F F J ?CGD ' ?HN FG ' ?C CFG QB?E
" ' #FGDG MGC F@ ' FGHOG>ADJ?DN ' (HAJ' @G HAC
& ' CF ' CFG GHN A>'?MM CFE AMG@H A?CF 'W
' CF ' CFG >DB C CFE DGOAHO MG@GHC LBN ' W
?PG ' >AD CF ' PGH CFGG A @?HE' >?PABD
HOBDD8N @E FB L?HN8 ' F?CG ' ?HN ABC ' ?M? '
& ?NG F KJDGO(' A>'@ HG FAHABD >AD CFE ?(G W
HN NA C CFAB ?E ' FGHOG>ADJ?DN (HAJ' @G HAC W
"G@G@LGD JFGH ' MAO(8N CFGG H @E OMA GC
#?C JGDG CFE JADN ' ?HN @ HG W %N JG HAC LACF
%GODGG CA @BDNGD DNGH H CFG H FC W

S !GNPMÓ 7+

#FG FG?PGH ' O?H JCHG ' ?HN CFG JADMN O?H CGMM
. G>ADG ' ?J' CF?C >?M GFAAN MAA(' A>' CF HG
8 ADG ' J? ' C?H MGN JCF CFE 8C O H ' KGGOF
DNGH CA @G J? ' NG?DGD CF?H @E ABM R
& ' $ ' " ' ' .? G KG? ?HC ' GC CFGG AHG
HN LA? C HAC A>' CFE OAHQBG C APGD @G
+ACCGH LE JCOFOD?>C ?HN @GDG ADOGDE
AD JF?C F? C CFAB CA OABHCGH?HOG @E MAPG ' :
. G H ' NG OGHNGN A>'?' HALMG FAB G
HN @?COF8N ?MDG?NE JCF ?' GHCMG@?H
FA G GDP?HC CFAB @?E8 C LG WR ?HN A ' >?DGJGMM
" ' * H GHCMG ?HN BH(HN M OG ' HAJ' ' GG
#F?C JF OF ' GPGD >G?D8N ' ?HN >HN CAA CDBG
& ' 0 : ' 3 ' ' ' $ ' $ '
S $ $' 3 ' " ' $' ['
#A CDE CFE OAH C?HOE F?PG ' LGGH CD?H G
ABMN ' F?N HGPGD CD GN ' LBC M P8N H FAKG '
& ' F?C HGGN ' CFAB CDS '@G ' JFA@' CFAB HGPGD >ABHN >?M G W
" ' , GC ' K?DNAH @G ' >AD MAPG ' SG?MAB
& ' A M C ' CFG ?MAD CA CFG @GD@?N8 ' AH
A MAA(' CFG CD?PGMMGD CA CFG L? M (
' ?@' OAHCGHC >AD CA LG DGOAHO M8N
HN CF?C ' (HAJ' J MM LG @HG APGDCFDAJ
" ' #F HG APGDCFDAJ' W D C MGC CFG JADMN N AMPG
& ' ?E ' & A L G ' MGC @G C MM GHSAE CFE MAPG
HN ' F?KKGH JF?C J MM ' ' ?@' DG AMBCG I

C ' @KA LMG CA NABLC ' JFAGPGD J? ' CFG JD CGD A>' CF ' KM?E ' CF?C JG F?PG LG>ADG B ' CFG JAD(' A>' ?' @?H A>' HA ADN H?DE KAJGD ' #FG CD?H C AH ' A>' K? AH H CF ' OGHG ?DG CDBG CA H?CBDG ' ?HN ' H CG?N A>'CFG G CD?P? ?HC D?P H ' A>'CFG JD CGD ' A>' CF ' G?DME KGD AN A>'ABD ND?@?' CFG ?KKDAKD ?CGHG ' A>' CFG M?H B? G CA CFG K? AH ' ' @A C DG@?D(?LMG ' #FGDG ' KAGCDE ' CAA ' H CFG ADN H?DE GH G A>' CFG JADN ' LBC CFG CB?C AH ' HAC GH0B@LGDGN J CF CFG ADH?@GHC ' G JABMN DG@?D(' ?M A ' JF?C ' PGDE CD (H ' CFDAB FABC CFG KM?E ' CF?C CFG PGD >O?C AH KA G G ' CF?C >DGGNA@' JF OF JG >HN H HA ACFGD JD CGD A>CFG C@G LBC F?(KGDG ' * MD O FAMN ' ?' OAHCD?DE AK H AH ' LBC JG O?HHAC OAH GHC CA BDDGHNGD ABD SBN @GHC CA ?' >ADG H G?D ' #FGDG ' CAA ' H CF ' OGHG CFG OAHNGH ?C AH A>' F?(KGDG ' CF?C AHNGD>BM QB?M CE LE F OF FG @?(G ' ?' H MG JADN OAHPGE ?' OA@KMG ' NG? R

=' ' CF ' CFG >DB C CFE DGOAHO MG@GHC " ' W I

' ?H G ?@KMG A>' CF ' QB?M CE ' #FG JFAMG OGHG ' OAHNGH GN ' JD CGD A>' MG ' GH B ' JFAGPGD FG J? ' JABMN F?PG @?NG C CFD OG ?' MAH ' #FG B MCE K? D LG H ' DGOAHO MGN ' & A L G ?E ' CF?C FG F? ' >ABHN ?' K? HCGD JFA' O?H A' OBHH H ME KDANBOG ?' K OCBDG CF?C CFG KGD AH MAA(H ' AH C F?MM N G ' M OG ' ' >AD @ADG N DGOC @G? BDG R ' >AD ?' KA AH CA LG PGH H FGD FB L?HN8 ' >AAN ' GDG ? ? H CFG FDAH OMG ' ' >AMMAJGN R

= #FGDG J? ' ?' K? HCGD NJGMM H ' H GPGD F?@ ' JFA' F?N (MM A>' KA AH ' ? ' J? ' DGKADCGN ' FG CFGDG>ADG NG@?HNGN A>' F@' JFGCFGD C JGDG CDBG CF?C FG F?N BOF (MM H >G?C AD HAC W HN FG NGH GN HAC LBC CF?C FG F?N HNGGN ' , G? ' ?N FG ' LBC ' JABMN F?PG BOF ?' AHG @?NG ? ' FABMN F?PG HA C PGFG@GHC ?HN KGGNE AKGD?C AH CA NG K?COF CFG G?CGD CFGDGA>' #F?C O?H ' NA ' QBACF FG ' ?HN >ADCF J CF @?NG FGD BOF ?' AHG I

#FG K? HCGD GHCGD ' ?HN F ' DGJ?DN ' C ?KKG?D ' ' CA LG B ?H & A L G ' #FG K? HCGD ' ?' N?H GDAB ' ?HN J O(GN KGD AH ' LBC FG KG?(' A>' F ' ?DC ?HN A>' C ' H K D?C AH J CF ?' F F GHCFB ? @ R

=' AD ' ?' F?DK J CCGN KAGC ' O$ ' O '3 '
D '$ 3 ' ' " D' ' $ ' J $.
& K ' ' $ ' ' O ' ' $ ' O ' $
* G FB@LMG KDA@ G CA CFG D ?ODGN @B G
A' JG ' CF?C ?DG CFG KAGC 8 >?PABD CG
& B C F?PG ?' MAPG E ' MAPG ' CFG K?HCGD8 ' @B G
#F?C @?(G ' F@' >D?@G ?' KG?(H ' OABHCGH?HOG
' JGGK H ' GEG CF?C J CHG GCF FG?DC8 ' D G> I

#FG OAH>GDGHOG ' HCGDDBKCGN LE CFG GHCD?HOG A>' DNGH ' A>' JFA@' & A L G DG?N ME ? ('?' QBG C AH ?LABC CFG ?LLGE M?HN ' #FG >AMMAJ H

OGHG' GH BG ' ?HN' □C' □ ' ?H' G ?@KMG' A>' CFG' SBN @GHC' J□CF' JF□OF' CFG' ND?@?C□ C' F? ' ?NAKCGN' CFG' K? ? G' >DA@' CFG' FDAH□OMG ' CF?C' DNGH' LACF' KGD@□CCGN' ?HN' ?M A' □HP□CGN' &A L□G' PGDE' A>CGH' CA' MAN G' □H' F□ ' FAB G I' J□CFABC' ?C' CFG' ?@G' C□@G' OA@KDA@□ □H ' F□ ' AJH' FAHABD

='& ' &A L□G ' CF?C' QBG C□AH' JG8MM' NGO□NG' ?HAH
M□OG ' @?(G' DG?NE' @E' LDG?(>? C ' ' @B C' FGHOG ' OP18 ' '
' >AD' CFG' M?HN ' &A L□G ' CFGE' ?DG' @□HG'
. E' MGCCGD K?CGHC' A>' F□ ' @?SG CE
. BC' ' @B C' F?PG' ?' @?HN?C' >AD' @E' J□>G
#FGE' ?E' EAB' GG(' CA' DAL' @G' A>' FGD' MAPG'
)□MM?□H ' JF?C' @?(8 C' CFAB' □H' FGD' OA@K?HEW
FG8 ' HA' OA@K?H□AH' >AD' A' L? G' ?' DAA@
' " ' DNGH ' ' CFAB FC' HAC' AH' FGD ' ' O?@G' CA' CFGG
. BC' D?CFGD' CF?H' 8MM' KBC' BK' CF□ ' JDAH
D ' F?C' J□MM' EAB' NA ' □D'W
" ' " GPGH G' □C' AH' CFG' KDABNG C' A>'EAB' LACF
0%$ ' ' 0 ' $' ('2 '' 0 '
& ' A ' □DD?F ' EAB' @?E' HAC' JG?D' ?' JADN
#FG' C?CBCG' @?NG' ? ?□H C' ?DC□>□OGD ' >ADL□N ' □C
' J?DD?HC' CF?C' ' NA U' A J ' B G' EABD' LAN(□H
,ABD' K?H□ F' HGGNMG ' ?HN' EABD' KDG □H □DAH
AD' CF□ ' F?MM' A' J□CF' @G ' HN' @?D(' @E' JADN R
,AB ' AAN@?H' LACOFGD ' 8C□ ' CA' EAB' ' KG?(R
#FG' HG C' C□@G' CF?C' ' C?(G' CFGG' HG?D' @E' FAB G
H CG?N' A>' MG ' 8MM' @?(G' CFGG' OD?J M' AH' CB@K
" ' F ' @? CGD' DNGH ' EAB' F?PG' □HSBD8N' @G
' NA' ?KKG?M' CA' +AN' ?HN' CA' CFG' JADMN
D ' FE ' O?H C' CFAB' NGHE' CFAB' JGDC' ?' LACOFGD' AHOG'W
" ' &G? BDG' @G' JF?C' ' ?@ ' HAC' JF?C' ' AHOG' J?
& ' FE ' JF?C' ?DC' CFAB' HAJ' LBC' ?' PGMPGC' NDBN G
' OFG?C□H ' CGJ?DN ' ?HN' L? G @□HNGN' KG? ?HCW
" ' DNGH ' HAJ' F? C' CFAB' LGMOF8N' ?HN' PA@□CGN'
#FG' D?HOADAB ' PGHA@' A>' CFE' @□ JAMH' FG?DC
G?D' @G' LBC' KG?(' ' ' ' □HCGHN' CA' M□PG'
□CF' +AN ' ?HN' F□ ' GMGOCGN' ?□HC ' □H' FG?PGH
' ' HGPGD' @G?HC' @ADG' CA' AM□O□C' FGD
HN' CF?C' FG' (HAJ ' ?HN' ?MM' CFG' P ADMN' F?MM' GG'
' MAP8N' FGD' AHOG ' JGGC' DNGH ' K?DNAH' @ G
' OABMN' HAC' OFAA G ' FGD' LG?BCE' >□D8N' @E' FG?DC
. BC' C□@G' F?CF' QBGHOFGN' CFG G' AHOG D? □H ' OA?M
HN ' DNGH ' CFAB F' ' >DGQBGHC' CF□HG' FAB G
8#□ ' >AD' @E' □ CGD8 ' ?(G ' FGD' J?□C□H @?□N
HN' HAC' >AD' FGD ' & ?E8 C' CFAB' GHSAE' FGD' MAH '
GMM' >□DG' ?HN' JD?CF>BM' PGH G?HOG' M□ FC' AH' @G'
>' ' N□ FAHABD' FGD ' AD' □HSBDG' CFGG'
& ' □CF' CFG G' CFE' KDACG C?C□AH
#FG' NG?NME' F?CDGN' A>' @E' FG?DC8 ' ?KKG? 8N
HN' CFAB' ?HN' 8MM' LG' >D□GHN ' □>' CF□ ' KDAPG' CDBG
' >AD' CFG' L? G' CGD@ ' CF?C' ' ?PG' CFGG' M?CG
AD GC' CFG@ ' & A L□G ' ' F?N' O?B G' CA' KG?(
FGH' ?MM' CFG' (H□ FC ' ?HN' GHCMG@GH' A>' GHC'
&?(G' OA@@AH' C?LMG C?M(' A>' FGD' ?HN' CFGG
" ' FA' M□PG ' CF?C' □ ' HAC' CABOFGN' J□CF' M?HNGDAB ' CAH BG W'
D ' #FGH ' &A L□G ' CA' G OFGJ' CFG' KGGOF' A>' @GH
*KAH' JFA G' GHGD?M' LDB□C' ?MM' FAHABD' F?H
ADLG?D' F□ ' FAB G
& ' ADLG?D' □C ' H?E ' D?CFGD' >DGQBGHC' □C' @ADG'
#FG' JADMN' F?MM' GG' CF?C' ' N□ CDB C' FGD' HAC
#A' J?DH' F□@' AH' CFG' BNNGH' >DA@' @E' FAB G'
GDG' CA' OAH>□D@' CFG' DB@ABD' CF?C' □ ' DAJH I

#FG' >□D C' N□DGOC' ?CCG@KC' A>' M□OG' BKAH' FGD' FB L?HN8 ' M□>G' □ ' CFB ' CAMN'
LE' CFG' OFDAH□OMGD R

=' AJ ' &? CGD' DNGH' KBDKA □H ' CF?C' N?E' CA' D□NG' CA' ?HCGDLBDE'
F□ ' J□>G' LDAB FC' F□@' F□ ' LDG?(>? C ' JF□OF' J? ' JAHC' CA' LG' @□M(' ?HN'
LBCCGD' G ' F?P□H ' DGOG□PGN' ?' KAAH>BM' AD' CJA' A>' CFG' @□M(' @□ M□(GN'
CFG' C? CG' ?HN' OAWABD' CFGDGA>' ?HN' ?□N' CA' F□ ' J□>G ' &□ CDG ' M□OG '
JF?C' @□M(' F?PG' EAB' □PGH' @G' FGDG' W' FGDGJ□CF?M' FG' C□MCGN' □C' APGD'
J□CF' FGD' F?HN' ?E□H ' ' JGGH' HACF□H ' O?H' KMG? G' EAB' #FGH' FG'
CAA(' FAD G ' ?HN' DANG' CAJ?DN ' ?HCGDLBDE' ?HN' LE' CFG' J?E' >GMM' □HCA'
G CDG@G' □O(HG ' ?HN' A' G O?KGN' >AD' CF?C' C□@G I

' 2'EJGN 7T'NHMN' HKH2'O +

H' CFG' CD? GNE' CFG' □HO□NGHC' □ ' G ?OCME' >AMMAJGN ' * KAH' K?DC□H '
J□CF' FGD' FB L?HN' CFG' N□ G@LM□H ' A>' M□OG' □ ' FG?DC □O(GH□H ' LBC' CFG'
OGHG' □ ' C□MM' @?H? GN' H?CBD?MME' ?HN' OAH □ CGHCME
#FGDG' □ ' HA' N□P□ □AH' A>' CF□ ' KM?E' □HCA' ?OC ' ?D□N' OGHG ' LBC' □C' □ '
KDAL?LMG' CF?C' CFG' >□D C' ?OC' GHN ' J□CF' CFG' NGK?DCBDG' A>' DNGH' >AD'
$AHNAH ' HACFGD' ? GHC' ?KKG?D ' BKAH' CFG' OGHG ' JFA G' @AC□PG '
?HN' KA □C□AH' ?DG' CFB ' NG OD□LGN' □H' CFG' FDAH□OMG R

= >CGD' CF□ ' F□ ' J□>G' >GMM' □H' ?OQB?□HC?HOG' J□CF' AHG' +DGGHG ' A>'
GPGD F?@ ' GDP?HC' CA' □D' HCFAHE' GD ' >DA@' JF□OF' +DGGHG' &? CGD'
DNGH' F?N' JDG CGN' ?' K□GOG' A>' DABHN' AH' CFG' L?O(' □NG' A>' CFG' LLGE'
A>' GPGD F?@ ' ?HN' CFGDG' F?N' DG?C' LMAJ ' ?HN' DG?C' CFDG?C ' K? GN'
LGCJ□ C' CFG@' ?LABC' CF?C' @?CCGD ' #FGDG>ADG' FG ' (HAJ□H ' CF?C'
+DGGHG' F?CGN' FGD' FB L?HN ' LG ?H' CA' KD?OC□ G' J□CF' F□@' FAJ' CA' @?(G'
F□@' ?J?E'$ NHN' OAHOMBNGN' CF?C ' □>' FG' OABMN' GC' ?HE' CF?C' JABMN' (□MM'
F□@ ' FG' FABMN' F?PG' CGH' KABHN ' >AD' ?' DGJ?DN I

#FG' @?HHGD' □H' JF□OF' CFG' B□MCE' J□>G' KD?OC□ G ' J□CF' CF□ ' DGPGH G>BM'
@?H' □ ' (□M>BMME' JDAB FC' ABC' □H' CFG' CD? GNE ' FG' E@K?CF□TG ' J□CF'
F□ ' BKKA GN' JDAH ' FG' CGMM ' ?' C?MG' A>' FGD' AJH' □HSBD□G ' ?HN' CFGH'
FG' KDAOGGN ' CA' CFG' AKGH' ?PAJ?M' A>' FGD' KBDKA G ' +DGGHG' □ ' CA' KDA-
OBDG' ? GHC ' CA' @BDNGD' FGD' FB L?HNZ' ?HN' F□ ' DGJ?DN ' LG □NG ' @AHGE '
□ ' CA' LG' CFG' DG CAD?C□AH' A>' F□ ' M?HN ' FG' OA@@BH□O?CG ' FGD' KDA-
OGGN□H ' CA' &A L□G ' LBC' FG' DGKDA?OFG ' FGD' >AD' FGD' □@KDBNGHOG' □H'
C?@KGD□H ' J□CF' A' @?HE' ? GHC
#FG' OABD G' A>' CFG' FDAH□OMG' OAHC□HBG ' CA' LG' >AMMAJGN' J□CF' @BOF'
G ?OCHG ' #FG' OGHG' OF?H G ' CA' CFG' DA?N' >AD' $AHNAH ' ?HN' CFG'
>AMMAJ□H ' NG OD□KC□AH' □ ' CFGH' ND?@?C□TGN ' C' □ ' A' OBD□AB ' ?' K□OCBDG'
A>' @?HHGD ' ? ' □HNGGN' CFG' JFAMG' H?DD?C□PG' □ ' CF?C' JG' HGGN' O?DOGME'
?KAMA □TG' >AD' □C ' MGH CF R

='#F□ ' +DGGHG ' F?P□H ' NA□H ' >AD' F□ ' @? CGD' □D' HCFAHE' GD '
F?N' AOO? □AH' CA' A' BK' CA' $AHNAH ' JFGDG' F□ ' @? CGD' CFGH' M?E' ?HN '
F?P□H ' A@G' OF?D G' BK' J□CF' F□@ ' NG □DGN' AHG' .D?N F?J ' ?' AMN @□CF'
A>' GPGD F?@ ' CF?C' J? ' F□ ' HG□ FLABD8' CA' ?OOA@K?HE' F□@' CA' +D?PG -
GHN ' ?HN' FG' JABMN' OAHCGHC' F□@' >AD' F□ ' K?□H ' #F□ ' .D?N F?J ' LG□H '
?' PGDE' FAHG C' @?H ' J? ' OAHCGHC ' ?HN' DANG' J□CF' F□@' HN' JFGH'
CFGE' O?@G' CA' "?□HF?@NAJH' CFGE' OF?HOGN' CA' GG' CFDGG' AD' >AB□'
GDP□H @GH' CF?C' JGDG' OAHC□H ' >DA@' $GGN ' ?HN' CFGDGJ□CF' .D?N F?J'
G K□GN ' OA@□H ' BK' CFG' F□MM' >DA@' "AOFG CGD' AHG' .M?O(' □MM' ?' CGDD□LMG'
ODBGM' DB>>□?H ' J□CF' ?' JADN' ?HN' ?' LBO(MGD' ?HN' ?HACFGD' J□CF' ?' DG?C'
C?>>' AH' F□ ' HGO(' #FGH' ?□N' .D?N F?J ' CA' +DGGHG ' G' ?DG' F?KKE'
CF?C' CFGDG' OA@GCF' A@G' OA@K?HE' >DA@' $GGN ' >AD' FGDG' OA@GCF' BK'
? ?□H C' B ' ? ' @BDNGD□H ' ?' (H?PG' ? ' ?HE' □ ' □H' ! H M?HN ' □>' □C' JGDG' HAC'
>AD' CFG@' JG' @□ FC' OF?HOG' F?DNME' G O?KG' J□CFABC' MA ' A>' ABD' @AHGE'
?HN' M□PG ' ,G?' CFAB FC' +DGGHG' V?' FG' ?>CGD' OAH>G GN ' BOF' 3'
AHG' □ ' >AD' @E' KBDKA G ' ?HN' CFGDG>ADG' ? (GN ' F□OF' □ ' FG'W ,AHNG□'
□ ' FG ' QBACF' .D?N F?J ' CFG' ?@G' CF?C' F?CF' CFG' JADN' ?HN' LBO(MGD'
F□ ' H?@G' □ ' .M?O(' □MM' AJ ' (HAJ' EAB' CF?C'W ?□N' +DGGHG ' .D?N-
F?J' ?H JGDGN ' ' (HGJ' F□@' ?C' .ABMA HG ' JFGDG' JG' LACF' GDPGN ' FG'
J?' ?' AMN□GD' ?HN' ' J?' □D' " □OF?DN' ?PGHN□ F8 ' @?H ' ?HN' CFGDG' FG'
OA@@□CCGN' @?HE' DALLGD□G ' ?HN' FG□HAB ' @BDNGD ' AH' BOF' ? ' CD?PGMMGN'
LGCJ□ C' .ABMA HG' ?HN' D?HOG ' . E' CF□ ' C□@G' CFG' ACFGD' OA@K?HE' A>'
GDP□H @GH' O?@G' CA' CFG@ ' ?HN' CFGE ' A□H ' ?MCA GCFGD' @GC' J□CF' .M?O('
□MM' ?HN' F□ ' >GMMAJ ' #FG' GDP□H @GH' (HGJ' .M?O(' □MM' ?HN' ?MBC□H '
F□@ ' NG@?HNGN' A>' F□@' JF□CFGD' FG' JGHCW G' ?H JGDGN ' .E' F□ '
LMAAN' V>AD' F□ ' B G' J? ' CA' JG?D' ?M@A C' ?C' GPGDE' JADN ' ' (HAJ' HAC'
HAD' O?DG' HAC ' LBC' GC' BK' @E' C?>>' ?HN' GPGH' ? ' □C' >?MMGCF' ' A' >'
CFAB' QBACF' CFGE ' J□MM' A' L?O(' ? ?□H' CA' +D?PG GHN ' JG' J□MM' □PG' CFGG'
CFE' BKKGD' . E' F□ ' LMAAN ' ?□N' FG' ' O?DG' HAC ' ' ?@' OAHCGHC ' F?PG'
J□CF' EAB ' ?HN' A' FG' DGCBDHGN' ? ?□H' J□CF' CFG@' #FGH' .M?O(' □MM'
CAA(' ?OQB?□HC?HOG' A>' .D?N F?J ' ?E□H ' GMMAJ' .D?N F?J ' FAJ' NA C'
CFAB' W' .D?N F?J ' BHJ□MM□H ' CA' DGHGJ' ?OQB?□HC?HOG ' AD' CA' F?PG' ?B FC'
CA' NA' J□CF' A' F?@GMG ' ?' DB>>□?H ' ?□N ' FE ' NA' EG' (HAJ' @G' W' ,G?'
CF?C' ' NA ' QBACF' FG4 N□N' HAC' JG' GDPG' □H' .ABMA HG' CA GCFGD' W' .BC' EG'
@B C' K?DNAH' @G ' QBACF' .D?N F?J ' >AD' ' F?PG' >AD ACCGH' EAB' #FGH'
+DGGHG' C?M(GN' J□CF' .M?O(' □MM' ?HN' ?□N ' FGH' EG' F?PG' BKKGN'
OA@G' CA' @□HG' FA C8 ' FAB G' ?C' BOF' ?' □ H ' ?HN' ' J□MM' □PG' EAB' CFG'
?O(' ?HN' B ?D' . E' F□ ' LMAAN ' ?□N' FG' ' CF?H(' EAB ' ' J□MM' OA@G'
?HN' C?(G' □C' ' J?DD?HC' EAB ' OOADN□H ' CA' F□ ' KDA@□ G' FG' O?@G ' ?HN'
CFGDG' CFGE' @?NG' AAN' OFGGD' #FGH' .M?O(' □MM' ?HN' +DGGHG' JGHC'
?HN' C?M(GN' ?K?DC' >DA@' .D?N F?J ' ?HN' CFGDG' OAHOMBNGN' CA GCFGD' CF?C'
□>' FG' JABMN' (□MM' &? CGD' DNGH' FG' FABMN' F?PG' CGH' KABHN ' >AD' F□ '
M?LABD' #FGH' FG' ?H JGDGN ' . E' F□ ' JABHN ' CF?C' ' J□MM' □>' ' @?E

(HAJ' F=@' &?DDE' CA @ADDAJ' DH ?BM8 ' 'JMM FAJ' F=@' CFGG' ?N +DGGHG' #FGH' CFGE MG>C CFGD' C?M(' ?HN +DGGHG' L?N' F=@' A' FA@@ CA' F=' FA Q8 ' FAB G' #FGH' +DGGHG' JDACG' ?' MGCCGD' CA' &= CDG ' DNGH' ?HN' ?@AH ' ACFGD' CFEH ' KBC' DH CFG G JADN R G' F?PG' AC' ?@?H' >AD' ABD' KBDKA G' JG @?E CF?H(' @E' LDACFGD' .D?N F?J ' AJ' .D?N F?J ' HAC' (HAJDH' ?HECFEH ' A>' CF= ' CAA(' CFG' MGCCGD' A>' F=@' ?HN' DH' CFG @ADHDH ' NGK?DCGN' FA@G ? ?H' ?HN' NGM?PGDGN' CFG' MGCCGD' CA' &= CDG ' DNGH' ?HN +DGGHG' ?HN' JGHC' BK' CA' $AHNAH' ?C CFG CDNG I

#FG' OGHG DH CFG KM?E GTTG ' BKAH' CFG' KDEHOE<?M' KAEHC ' A>' CF= ' NG ODE<KAH' LBC' CFG' D?D<?CAH ' ?DG CFA G A>' @? @?' CGD' .D?N F?J ' C GG@ ' = ' ?' AMN @ECF ' ?HN' FG' = ' EHPAMPGN' DH ?' 0F?D G' A>' LBEDH ' A@G CAMGH' KM?CG' G' CFB ' NG ODELG ' CFG' @?H' JFA' AMN' C' F=@' ?HN' JG' O?H' O?DDGME ?PAN' CFEH(EH ' CF?C' FGDG = ' CFG' ?@G' KAJGD' CFAB F' DH EHC>BN' NE CEHOCAH' LGCJGGH' =' DNGH' A>' GPGD F?@'I' ?HN' CFG G GHC?M' FDG #D? GNE I' ? ' LGCJGGH' F?(KGDG' ?HN' GEJAAN ' ?HN' F?(KGDG' ?HN' $EMA' H' CFG' @?CBDECE A>' F=' GHEB ' F?(KGDG' NEN' HAC' PBM ?DG G' GPGH' F=' @BDNGDGD ' C' CFG EH C?HC' LG>ADG' CFG ? ?BMC' BKAH' .?HQBA ' AHG A>' CFG' BMCE EH CDB@GHC ' A>' &?OLGCF' ?E ' EH CFG PGDE' KCDEC A>'KAGCDE R

=' #FG' JG G' EGC' M@@GD ' JECF' A@G' CDG?(' A>'N?E
AJ' KBD ' CFG' M?CGN' CD?PGMMGD' ?K?OG
#A' ?EH' CFG' CE@GME EHH I

i ?DME'H' CFG' ND?@?'? ' JG' F?PG' GGH' MEOG' KDAKA G ' CA' FGD' FB - L?HN' GDP?HC' CA' @?(G ?J?E' JECF' F=' @? CGD' #FG' OEDOB@ C?HOG F? '0A@G CA' CFG' (HAJMGN G' A>' +DGGHG' JFA' ?>CGD' CFG' NG>G?C A>' CFG KM?H' CFDAB F' CFG' ?KKDGHCEOG8 ' FBCCGD' F?' CA' NGP= G' JECF' F= ' DB>E?H ' ?HACFGD' @ANG' A>' ?OOA@KME F=H ' DNGH8 ' NG?CF' #FG' FDAHEOMG' CFB ' CGMM ' CFG' CADE R

=' +DGGHG' FAJGN' ?MM' CF=' C?M(' CA' &? CGD' DNGH8 ' @?H' JFA G' H?@G' J? ' &=OF?GM' JFEOF' GPGD' ?>CGD' CAAN' EH NABLC' A>' .M?O(' EMM ' MG C' FG

HG' A>' CFG' ABDOG ' A>' CFG GHOF?EH=H ' EHCGDG C' A>' CF=' ND?@? = ' CA' LG' >ABHN' EH CFG' DGKG?CGN' G 0?KG ' A>' DNGH' >DA@' CFG @?OF=H?EAH ' A>' F=' GHG@EG ' F?PG' GGH' CFG' KA' EH' HAJ' CFG' DB>E?H' @?H' JFA G H?@G' J? ' &=OF?GM' JFEOF' GPGD' ?>CGD' CAAN' EH NABLC' A>' .M?O(' EMM ' MG C' FG

' N SPWKPGG P.

HN' FAME 0FBDOF D□CG ' @?(G B 'CJA'LB' AHG
. B' JF2' >AD' CF2' ,' '@?E' HA' CDB C EAB' M□OG'
, AB' F?PG' BKK⊡?HCGN' D⊡NGH' >AD' @E' ?(G
HN' J□MM G C□D⊡KGH' @G CA' K⊡?H' ?HACFGD
8#' '>G?D>B⊡' M⊡GGK□H 'H' ?' GDKGHC8 'LGN
HN' 'J□MM O⊡MG?HME D□N' @E' F?HN ' A;' FGD
. BC' FGDG' FG 0A@G ' ?HN' ' @B C ⊡M?CCGD FGD

HN' NDE' @E' @?DDA;' J□CF' CFG□D' J?COF>BMHG '
AHC□HB?⊡' CDABL⊡MG' A;' @E' @ANE' LD?□H'
GGL⊡MG ' @E' LANE' LE' G OG ' A;'ND□H(
HN' H□K ' @G ? ' CFG' L□CCGD' HADCF G? C J□HN'
%AC⊡' 0FGO(' CFG' CGHNGD' LMA A@ ' □H' CFG' K□H
GMM' >?DG ' CFG' @?H' FAJG8GD' F□ '0?CG ' NA' C? CG
#F?C' C?LMG ' HAC' J□CF' >ABM' B K□O□AH
HN' FG' LBC' K□HG ' ?@A ' F□ ' NGM□O?CG '
FA G' CDABL⊡MG' @□HN □ ' CB>>8N' J□CF' N□ OAHCGHC'
&E' AMNGH' C□@G' J?' J'FGH' ' F?N' HA' AMN
#FAB F' CFGH' ' J?HCGN ' EGC ' M⊡GKC' GOBDG
&E' N?□ME' CAM' LG ?C @G H□ FG□ ' D⊡KA G
&E' H□ FG□ ' D⊡KA G @?NG N?EM□ F□ >DG F' CA' @G
. BC' □HOG' ' OM□@L8N' CFG' CAK LAB F' A;' CFG' CDGG
HN' AB F□ CA' LB□M' @E' HG C ?@A ' CFG' OMABN
i ?OF' GHCM□' C?DE'U' ?MG' NAC F' F?(G @E' LGN
HN' @?(G ' @G' NDG?N' @E' NAJH>?MM' CA' CFG' G?DCF
. BC' J F□CFGD' NAC F' 0AHCG@K⊡?C□AH' O?DDE' @G'W
#FG' J?E' ' GG('CA'>□HN' J FGDG' KMG? BDG' NJGMM '
'FGN 8N' LGF□HN' @G' CF?C' ' O?HHAC' L?O(
. BC' HGGN ' @B C AH' ?MCFAB F' CA' N?H GD8 ' ?CG
#FGH ' DNGH ' KGD□ F' CFAB' LE' CF?C' NGODGG
AD' +DGGHG' NACF FG□D' CFG' M?HN ' ?HN' JGGN' CFGG BK'
#A' @?(G' @E' F?DPG C' HACF□H ' LBC' KBDG' OADH'
HN' >AD' F□ ' K?□H ' 8MM' FG?PG' F□@' BK' ? JF□MG
HN' ?>CGD' @ACFGD' F□@' CA' F?PG' F□ ' J ?
BOF' LGG ' ? ' +DGGHG' @B C HGPGD' M□PG' CA' C□H
#FGH' □ ' CFGDG' &□OF?GM' ?HN' CFG' K?□HCGD' CAA
F□G?'?OCAD ' CA' DNGH8 ' APGDCFDAJ
FA ' J FGH' CFGE' GG @G' □C □H' DNGH ' G?C
#F GE' J□MM □H BMC' BKAH' @G >AD' @E' @GGN
D' >D□ F□ @G' LE' NGCGOC□H ' A;' F□ ' GHN'
8MM' HAHG' A;' CF?C' >AD' ' 0?H' 0? C ? LAHG'
#A' @?(G' CFG G'0BD ' KMBO(' ABC' G?0F' ACFGB8 ' CFDA?C
HN' CFGH' ?@' ' AMG' DBMGD' A;'@□HG A J H
, G C' @□ CDG ' DNGH' M□PG ' LBC' FG8 ' @E GM>

M̃ 4' 2 SGW' i'% ¡ i*N ¡'1 P± 1J7' 0% ' 'G GJLL GPO N ' AP OP P07 1' NHP #iQ@ '

#FG' J□H(MG ' A;'F□ ' >ABM' NG?CF CFDG?CGH□H ' >?OG'
+?KG' AKGH' J□NG' M□(G' D?PG ' CA' J?MMA J' @GDD
&E' NG?CF' CA' F□@' □ ' LBC' ?' @GDD□@GHC
HN' FG' J□MM' @BDNGD' @G' CA' @?(G F□@' KADC R
G' 0A@G ' FG' 0A@G ' ' &? CGD' D?H(M□H ' FGM□'
?MM' BK' CFG' HG□ FLABD ' A□' J□G' ?DG' LBC' NG?N I

#F□' ?H' ?' EABH 'KAGC' JABMN' HAC' AHME' LG' KDA@□ G A;' >BCBDG' D□G?CHG '
LBC' □C' JABMN' LG' CFG□ D□G?CHG ' □C GM>' #FG' OAHOGK□AH' A;' CF□ ' OGHG'
□ ' JFAMME' AD□ □H?H' #FG' B□MCE' OAJ?DN ' ND□PGH' L□' CFG' >ADOG' A;' F□ '
□@? □H?□AH' □HCA' ?H' ? AHE' A;' CGDDAD' A' ? ' CA' 0?MM' >A□' FGMK ' ?HN' CFB '
NG>G?□ CFG' KMAC□H' J F□OF' FG' L?N' LGGH' ?H' ?OOA@KM□OG ' □ ' ?' DDG?□AH' A;'
D□G?M' GH□B ' #FG' CD?H □□AH' A;' F□ ' >□?@' CFG' K□OCBDG' A;' CFG'
@BDNG□' A;' F□ ' @? CGD' CA' CF?□' A;' F□@ GM>' F?' ?' KDA>BHN□CE□H' □C' J F□OF'
J□' GMNA@' >□HN' G O□K□' □H' CFG' OAHOGK□AH ' A;' AHG' ND?@?□C□ C' #FG'
H?DD?□P□G' BKAH' J F□OF' CFG' OGHG' □ ' >ABHNGN' A>>GD ' B ' ?' @GDG' M□@K G
A;'CF□ ' @A C G>>GOC□PG' KADC□AH' A;'CFG' CADE R

= #F□ ' &□OF?GM' F?PH ' F□ ' @? CGD' CA' LGN ' MG>C' AKGH' CFG' NAAD '
?OOADN□H ' CA'CFG ?KKA□HC@GHC' □ ' @? CGD'CFGH' LG□H '□H' LGN'? ' (GN'
F□@' □' FG F?N' FBC' >? C CFG' NAAD ' ?HN' FG ?□N' , G ? ' LBC' EGC' ?>CGD-
J ?DN '>G?D□H ' MG C' .M?O(' □MM' JABMN' (□MM' F□@' ? ' J GMM' ? ' F□ ' @? CGD'
?>CGD' FG' J ? ' □H' LGN' F□@ GM?'FG DA G ? ?□H'?HN' FBC' CFG' NAAD '□AMC□H '
CFG@' >? C I

H' CFG' ND?@?' CFG' DB>>□?H ' ?DD□PG ' ?HN' ?DG ' A;' 0ABD G ' N□ ?KKA□HCGN' A;'
CFG□D' KBDKA G' L□' CFG' OMA □H ' A;' CFG' NAAD ' #FGE' J G?D' DGPGH G
? ?H C &□OF?GM' LBC' FG' BL' GQBGHCME' @?(G ' F□ ' KG?OG' L□' □H>AD@□H '
CFG@' CF?C' F□ ' @? CGD' □ ' NGK?DC□H ' >DA@' $AHNAH ' ?HN' CF?C' CFG□D'
KBDKA G @?□' LG' ?OOA@K□□ FGN' AH' "?□HF?@NA J H

#FG' OGHG' HA J' 0F?H G ' J□CF' ?' (□M>BM' ND?@?C□D' @?H? G@GHC ' CA'
G F□L□C' CA' B ' CFG' NGKCF' A;' F□ ' NGKD?P□CE' □H' CFG' >AMMA J□H ' A□MAQBE R
FA J ' B ' CFG' NGKCF' A;' F□ ' NGKD?P□CE' □H' CFG' >AMMA J□H ' A□MAQBE R

=' " ' %□ CBDLGN' CFAB' F□ ' ND□PG' @G' >DA@' OA@K?HE

HN' FAME 0FBDOF D□CG ' @?(G B 'CJA'LBC' AHG
. BC' JF2' >AD' CF?C',' '@?E' HAC' CDB C EAB' M□OG'
, AB' F?PG' BKK⊡?HCGN' D⊡NGH' >AD' @E' ?(G
HN' J□MM' G C□D⊡KGH' @G' CA' K⊡?H' ?HACFGD
8#' '>G?D>B⊡' M⊡GGK□H 'H' ?' GDKGHC8 'LGN
HN' ' J□MM' OMG?HME' D□N' @E' F?HN ' A;' FGD
. BC' FGDG' FG' 0A@G ' ?HN' ' @B C ⊡M?CCGD' FGD

AD' GC' ' KD?E' CFGG' JF?C' F?' K?' 8N' LGCJ□ C B
' AD' HA7' ' LMB F' ?HN' CDG@LMG' ?C' CFG' CFAB' FC
" ' F?C' ?DG' EAB' OF?H 8N'W
& ' E ' CA' @E' >AD@GD' F?KKE' M□>G ? ?□H
DA@' C□CMG' A;'?H' AN□AB ' C□B@KGC8 ' H?@G
#A' FAHG C' D□GH8 ' J□>G' HAC' D□GH8 ' FAHG C J□>G
F ' & L□G' 8C□ ' CFAB' F? C D□MGN @G A;'CF?C
HN' @?NG @G' M?HNGDAB ' CA' ?M' @E (□H
i PGH' □H' @E' >ADGFG?N □ ' CFE' H?@G GH D?PGH R
'@G?H' ?DC□>□OGD R CF?C' MAJ LAD□H' H?@G
' J ? ' LGJ□CO□8N R JAG JADC□' CFG' F?KMG ' FABD'
HN' ?M' CFG' 0?B G ' CF?C' GH0F?HCGN' @G
" ' ?E ' □;'CFAB' L?H ' MGC' @G' LDG?CFG' OBD G ' >ADCF
HN' □;'EAB' C?HN' A' H□OGME ?C' EABD' >?@G
$GC' @G' DGKGHC' CFG' ODGN□C' ' F?PG' MA C
' F?PG' HG' MGOCGN' @?CCGD ' A;'□@KADC'
#F?C' JABMN' F?PG' C?CGN' @G' ?LAPG' CFE' C?CG
AD' MAJ8N' ?NP?HC? G ' ?HN' KBDH8N' ?C' C□@G
E ' ADCBH8' □' FC' F?HN' &A L□G' F?CF' >AD' AA(
#A' C?(G ;' J ?HCAH' □ MAC' LE' CFG' MG>C
' MG>C' CFG' @?DD□? G' A>'?H' FAHG C' @?□N
FA G' NAJ DE' JABMN' F?PG' JG□ F8N' NAJ H' ?MM' CFE' JG?MCF
FA G' LG?BCE' ?HN' NG@G?HABD' >?D' G OGGNGN' CFGG
#F□ ' 0GDC?□H' AAN' ' MA C' >AD' OF?H □H ' L?N
HN' JD?KK8N' @E' DDGN□C □H CFE' 0A@K?HE
' J? ' LG J□CO□F8N R CF?C □ ' HA' CFG@G A>' CF□HG
HN' CFAB' BHF?MMAJ8N ' F? C GHOF?HCGN' @G
. BC' ' J□MM' LDG?(' CFE' KGMM ' ?HN' G ADO□ @
HN' KBC' ?HACFGD' □ F□ BKAH' CFG G GEG
#F?C' FAJ8N' @E' FG?DC' ?' D?PGH' >AD' ?' NAPG
#FAB' ?DC' HAC' >?□D ' ' P□G J8N' CFGG' HAC' C□MM' □DAJ'
#FAB' ?DC' HAC' (□HN ' C□MM' HAJ' ' (HGJ' CFGG' HAC
HN' HAJ' CFG' D?□H' F?CF' LG?CGH' A>'?' CFE' □MC
C' □ ' HAC' MAPG' CF?C' MAPG ' CA' ?H GD' MAPG
& ' C' □ ' HAC' MAPG' CF?C' MAPG ' CA' @BDNGD' MAPG
" ' A J' @G?H' EAB' CF?C'W
& ' #FAB' (HAJ8 C' FAJ' NG?DME' DNGH' MAPGN' @G
" ' HN' CFGH
& ' HN' CFGH' OAHOG?M' CFG' DG C' >AD' 8C□ ' CAA' L?N
$G C' CF?C' @E' JADN ' LG' O?DD□GN' J□CF' CFG' J□HN
HN' KBLM□ F8N' H' CFG' JADMN' CA' LACF' ABD' F?@G
' KD?E' CFGG' & A L□G ' MGC' AB□' KD□H C□@G' J□CFGD
BD' F?PG C' GM G' J□MM' E□GMN' LBC' MA?CF A@G' J GGN
1/4 22#' ' E ' HAJ' ' GG ' ?HN' CAA' AAH' >□HN □C' CDBG
& ' ' &

AD' HAJ' ' LMB F' ?HN' CDG@LMG' ?C' CFG' CFAB' FC
' F?C' ?DG' EAB' OF?H 8N'W
" ' E ' CA' @E' >AD@GD' F?KKE' M□>G ? ?□H
& ' E ' CA' @E' >AD@GD' F?KKE' M□>G ? ?□H
DA@' C□CMG' A;'?H' AN□AB ' C□B@KGC8 ' H?@G
#A' FAHG C' D□GH8 ' J□>G' HAC' D□GH8 ' FAHG C J□>G
F ' & L□G' 8C□ ' CFAB' F? C D□MGN @G A;'CF?C
HN' @?NG @G' M?HNGDAB ' CA' ?M' @E (□H
i PGH' □H' @E' >AD@GD' F?KKE' M□>G ? ?□H
DA@' C□CMG' A;'?H' AN□AB ' C□B@KGC8 ' H?@G
' J ? ' LGJ□CO□F8N R CF?C □ ' HA' CFG@G A;' CF□HG
HN' CFAB' BHF?MMAJ8N ' F? C GHOF?HCGN' @G
. BC' ' J□MM' LDG?(' CFE' KGMM ' ?HN' G ADO□ @
HN' KBC' ?HACFGD' □ F□ BKAH' CFG G GEG
#F?C' FAJ8N' @E' FG?DC' ?' D?PGH' >AD' ?' NAPG
#FAB' ?DC' HAC' >?□D ' ' P□G J8N' CFGG' HAC' C□MM' □DAJ'
#FAB' ?DC' HAC' (□HN ' C□MM' HAJ' ' (HGJ' CFGG' HAC
HN' HAJ' CFG' D?□H' F?CF' LG?CGH' A>'?' CFE' □MC
#FE' JADCFMG ' OAKKGD' FAJ ' CFGG' OABHCGD>G□C
C' D□GPG ' @G' HAC' CA' GG FAJ' >AB\M' CFAB' ?DC
. BC' @?N ' @G' CF?C' GPGD' ' CFAB' F□' CFGG' >?□D
+A' GC' CFGG' AHG ' ?' OAKG' @?CG' >AD' CFE' F□HN
' ?@' CAA' AAN' CA' LG' CFE' >?PABD□CG
& ' E ' HAJ' ' GG ' ?HN' CAA' AAH' >□HN □C' CDBG
1/4 22#' ' E ' HAJ' ' GG ' ?HN' CAA' AAH' >□HN □C' CDBG

AD' GC' ' KD?E' CFGG' JF?C' F?' K?' 8N' LGCJ□ C B
' AD' HAJ' ' LMB F' ?HN' CDG@LMG' ?C' CFG' CFAB' FC
" ' F?C' ?DG' EAB' OF?H 8N'W
& ' E ' CA' @E' >AD@GD' F?KKE' M□>G ? ?□H
DA@' C□CMG' A;'?H' AN□AB ' C□B@KGC8 ' H?@G
#A' FAHG C' D□GH8 ' J□>G' HAC' D□GH8 ' FAHG C J□>G
F ' & L□G' 8C□ ' CFAB' F? C D□MGN @G A;'CF?C
HN' @?NG @G' M?HNGDAB ' CA' ?M' @E (□H
i PGH' □H' @E' >AD@GD' F?KKE' M□>G ? ?□H
DA@' C□CMG' A;'?H' AN□AB ' C□B@KGC8 ' H?@G
' J ? ' LGJ□CO□F8N R CF?C □ ' HA' CFG@G A;' CF□HG
HN' CFAB' BHF?MMAJ8N ' F? C GHOF?HCGN' @G
. BC' ' J□MM' LDG?(' CFE' KGMM ' ?HN' G ADO□ @
HN' KBC' ?HACFGD' □ F□ BKAH' CFG G GEG
#F?C' FAJ8N' @E' FG?DC' ?' D?PGH' >AD' ?' NAPG
#FAB' ?DC' HAC' >?□D ' ' P□G J8N' CFGG' HAC' C□MM' □DAJ'
#FAB' ?DC' HAC' (□HN ' C□MM' HAJ' ' (HGJ' CFGG' HAC
HN' HAJ' CFG' D?□H' F?CF' LG?CGH' A>'?' CFE' □MC
#FE' JADCFMG ' OAKKGD' FAJ ' CFGG' OABHCGD>G□C
C' D□GPG ' @G' HAC' CA' GG FAJ' >AB\M' CFAB' ?DC
. BC' @?N ' @G' CF?C' GPGD' ' CFAB' F□' CFGG' >?□D
+A' GC' CFGG' AHG ' ?' OAKG' @?CG' >AD' CFE' F□HN
' ?@' CAA' AAN' CA' LG' CFE' >?PABD□CG
& ' E ' HAJ' ' GG ' ?HN' CAA' AAH' >□HN □C' CDBG
1/4 22#' ' E ' HAJ' ' GG ' ?HN' CAA' AAH' >□HN □C' CDBG

A' J?7C AG&GD @E &A L"G& >?CFGD J?
□@ GM>□ ' P?MBGN GHCMG LE' F□ ' JADCF
" ' F' ' FAJ' EAB' JA@GH' 0?H' □H □HB?CG
HN' OMG?D' ? CDG K?' ' J'CF' EABD' JGGCG ¢ CAH BG
' J'M' >AD GC CF□ ' QB?DDGM' GHCMG' M□OG
DAP□NGN' 8WM' LG' CG@KCGN' A' HA' @ADG I

#FG' @?H' JFA' JDACG CF?□ OGHG J? ' HA' ADN□H?DE?$BN G' A>'CFG J?E J?DN-
HG ' ?HN' J□O(GNHG 'A>'CFG FB@?H FG?DC ' ¢' JABMN' LG' N□>>□OBM¢ CA' ?E
CF?¢ F?(KGDG ?¢ ?HE' □@G OABMN' F?PG @ADG H?¢BD?MME K?□HCGN' CFG
>G?D>BM' OAHC ¢ A'?'M□H GD□H 'PDCDBG' J□CF ?H' APGDJFGM@□H 'K? □AH
G' F?PG GGF' CFG OAH KD?0E CA' @BDNGD' DNGH' AH' "?□HF?D?NAJH'
#FG' NGPACGN' @?H ? ?J□H G O?KG ' LE' ?OO□NGHC' ?HN' CFG FDAH□OMG CFB'
LD□G>ME' DGOADN 'CFG O□DOB@ C?HOG R

=' FGH' &? CGD' DNGH' O?@G CA' "AOFG CGD' F□ ' @?H' C□MM' >G?D□H '
CF?C .M?0(' □MM' JABMM' (□MM' F□@' J□CF' F□ ' @? CGD' KD□0(GN' F□ ' FAD G' A>'
KBDKA G ?HN' @?NG F□@' CA' F?%C'CA' CFG GHN' FG @□ F¢ KDACD?OC CFG C□@G
?HN' C?DDE'LGF□HN' □ '@? CGD'? (GN' F□@' JFE'F□ ' FAD G' F?MCGN' G';
?N' ' (HAJ' HAC' GMM' QBACF' F□ ' @? CGD' JFGH' EG' OA@G ?C' CFG
H□CF' FGDG' LG>ADG' VLGCJGGH' "AOFG CGD' ?HN' CFG F□MM >AAC' APGD' ? ?□H ¢
F?CF?@ ' D@APG F□ ' FAG' ?HN' G?DOF F□@' ?HN' CFGH' OA@G ?>CGD' @G'
A' &? CGD' DNGH' DANG' A H ' ?HN' GDG FG' O?@G ?¢ CFG KM?OC JFGDG
. M?0(' □MM' M?E' H' J ?J□¢ >AD' F□@' G'CFGDG' APGDCAA(' F□@' N□PGD ' GHCMG@GH'
A>' F□ ' ?QQB?□HC?HO6' JFA' (GK¢' F□@' OA@K?HE' A' CF?C .M?0(' □MM'
@□ GN' FGDG ?M A' A>'F□ ' KBDKA G I

#FG' ND?@?□ ¢ FAJ 'B ' +DGGHG' ?HN' CFG CJA' DB>□?H ' J?□CH ' >AD' CFG□D
KDGE ' ?HN' CFG G OB G A>' &□OF?GM' CA' NG GD¢' F□ ' @? CGD' DNGH' ?HN'
D?H(M□H' ?DG' HAJ' BKAH' CFG C? G ' ?HN' CFG N□?MA BG' JF□OF' K? G '
LGCJGGH' CFG@ □ ' ?' PGDE'DG@?D(?LMG' G ?@KMG A>' CFG ND?@?C□D' (□MM
J□CF' JF□OF' CFG KD□HO□K?M' 0F?D?OCGD ' ?DG @?NG CA' B C?□H' ?H' HND>>GDGH¢
OAHPGD ?□AH' LB¢' JF□OF □ ' C□MM □H FJD@AHE' J□CF CFG CAHG A>' CFAB FC
CF?¢ KGD□P?NG ' CFG' JFAMG' ND?@?' DNGH' □ ' BHF?KKE' H' F□ ' NA@G C□D'
0□DB@ C?HOG '?HN' FG G? GDME'M□ CGH ' CA'CFG C?MG A>'?HACFGD8 ' BHF?KK-
HG ' #FG' KGD>GC□ G? G J□CF' JF□OF' CF□ ' OAHPGD ?□AH □ ' @?H? GN'
?KKG?D ' CA' B ' ?' □H BM?D G OGMMGHOG ' JFGH' J DG ?DN' CFG G?DME N?¢G' A>'
CF□ ' C□D? GNE R

FGH' FG O?@G'FA@G' F□ ' @□ CDG ' CAA(' CFG' MGCCGD'?HN' (GK□C□' □MM□H '
FGD'@?H' CA' CGMM' F□ ' @? CGD' CF?C FG F?N' ?' MGCCGD' NGM□PGDGN' F□@' LE' □D'
#FA@? ' FG□HG' ?HN' CF?C FG◁F?N' MA ¢ C□C ' ?NN□H ' CF?C FG' CFAB F□ C□
LG ¢ CF?C' F□ ' @? CGD' FAB MN' A' CFG' HG ¢ @ADH□H ' CA' □D' #FA@? '
LGO?B G FG' (HGJ' HA□ CFG @?CCGD' FG' ?N' FG' JABMN' ?HN' CFGDG>ADG' FG
J□MGN F□ ' @?H' CA' LG' C□DD□H ' LGC□@G ' H' CF□ ' @G?H' J□FMG' . M?0('
□MM' ?HN' AHG' +GAD G' F?(GL? 'F□ ' 0A@K?H□AH' JGDG (GK□'H' ?' CADG-
FAB G A>' □D' HCFAHE' GD8 ' ?C' DG CAH' LE' +DGGHG8 ' ?KKA□HC@GHC'
?HN' CF□CFGD' 0?@G' &□ CDG ' DNGH' CA' GG F□@' LD□H □H ' ?HN' GHN□H '
F□@' @G?C' ?HN' ND□H('@?HE' C□@G ' G 'CFGDG>ADG' MBD(□H 'CM□GDG' ?HN'
J?CO F□H ' A@G' AKKADCBH□CE' >AD' F□ ' KBDKA G' J? ' J□MMGN' □H' ?HE' J□ G'
CA' LG' BK' G?DME' □H' CFG @ADH□H ' CA' M□G' □H' J?J?' >AD' &? CGD' DNGH' □H' ?'
OGDC?□H' LDAA@ OMA G' LGCJ□ ¢ GPGD F?@' ?HN' CFG' >GDE' VJ F□OF' OMA G' FG
@B ¢' HGGN ' K? ' CFGDG' CA' NA' F□ ' >G?C' A J' .M?0(' □MM' C□DDGN' □H'
CFG @ADH□H ' LGC□@G ' LB¢' @□ GN' CFG J?E' ?HN' C?DD□GN' □H' ?' JDAH '
KM?OG

=' &? CGD' DNGH' ?HN' F□ ' @?H' 0A@□H ' AH' CFG□D' J?E' G?DME' □H' CFG
@ADH□H ' CAJ?DN' FADHGM?H' J'FGDG' □D' #FA@? ' FGH□G' M?E' ? ' CFGE'
J'GDG' ?M@A ¢ 0A@G' CA' CFG' LDAA@ OMA G' F□ ' @?H ' ?MJ?E ' >G?D□H ' CF?C
. M?0(' □MM' JABMM' (□MM' F□@' J□CF' F□ ' @? CGD' >G□ HGN' CF?C FG' F?N' MA ¢
F□ ' KBD G' FE ' ?□N' F□ ' @? CGD' CFAB' >AAM□ F' (H?PG' 0ABMN ¢ CFAB'
HAC' MAA(' CA' CFE' KBD G' LB¢' MA G □C'W F?C J?' □H □C'W #FDGG' KABHN '
?□N' FG' FE ' CFGH' A' CFE' J?E ' L?O(' ? ?□H ' M□(G ?' (H?PG' V ?□N' F□ '
@? CGD ' ?HN' GG(' □C ' >AD' LG□H ' A' G?DME ? ' □C □ ' CFGDG □ ' HA' @?H' C□D-
D□H ' ?HN' CFGDG>ADG' CFAB' @?E ¢' LG' BDG' CA'>HN' □C ' ?HN' CFGH' 0A@G' ?HN'
APDDC?(G' @G' ?C' CFG' >GDDE' . B□' HGPGDCFGMG ' LE' DG? AH' CF?C' .M?0('
□MM' MA ¢' F□ ' J?E' &? CGD' DNGH' G 0?KGN' EG□' AHOG' ? ?□H' C'
CF?C' C□@G' .M?0(' □MM' EG□' CFAB F□' FG' FABMN' F?PG' LGGH' BDG' CA'
F?PG' @G□' F□@' FA@G'J?DN ' LB□' JFGC□GD' CF?C' A@G' A>' CFG' MADN'
J?DNGH8 ' @GH' ?OOA@K?HDN' F□@' L?O(' CA' GPGD F?@ '?AD' CF?C' LG□H 'H'
NABLC' >AD' CF?C □C' J? 'MPCG' CA' A' CFDAB F' CFG' LDAA@ OMA G' ?HN' CFGDG-
>ADG' CAA(' ?HACFGD' J?E' .M?0(' □MM' J? ' N□ ?KKA□HCGN' CFGH' ?M A I

FGH' FG O?@G'FA@G' F□ ' @□ CDG ' CAA(' CFG' MGCCGD'?HN' (GK□C□' □MM□H '
FGD'@?H' CA' CGMM' F□ ' @? CGD' CF?C FG' F?N' ?' MGCCGD' NGM□PGDGN' F□@' LE' □D'
#FA@? ' FG□HG' ?HN' CF?C FG◁F?N' MA ¢ C□C ' ?NN□H ' CF?C FG' CFAB F□ C□
LG ¢ CF?C' F□ ' @? CGD' FAB MN' A' CFG' HG ¢ @ADH□H ' CA' □D' #FA@? '
LGO?B G FG' (HGJ' HA□ CFG @?CCGD' FG' ?N' FG' JABMN' ?HN' CFGDG>ADG' FG
J□MGN F□ ' @?H' CA' LG' C□DD□H ' LGC□@G ' H' CF□ ' @G?H' J□FMG' . M?0('
□MM' ?HN' AHG' +GAD G' F?(GL? 'F□ ' 0A@K?H□AH' JGDG (GK□'H' ?' CADG-
FAB G A>' □D' HCFAHE' GD8 ' ?C' DG CAH' LE' +DGGHG8 ' ?KKA□HC@GHC'
?HN' CF□CFGD' 0?@G' &□ CDG ' DNGH' CA' GG F□@' LD□H □H ' ?HN' GHN□H '
F□@' @G?C' ?HN' ND□H('@?HE' C□@G ' G 'CFGDG>ADG' MBD(□H 'CM□GDG' ?HN'
J?CO F□H ' A@G' AKKADCBH□CE' >AD' F□ ' KBDKA G' J? ' J□MMGN' □H' ?HE' J□ G'
CA' LG' BK' G?DME' □H' CFG @ADH□H ' CA' M□G' □H' J?J?' >AD' &? CGD' DNGH' □H' ?'
OGDC?□H' LDAA@ OMA G' LGCJ□ ¢ GPGD F?@' ?HN' CFG' >GDDE' VJ F□OF' OMA G' FG
@B ¢' HGGN ' K? ' CFGDG' CA' NA' F□ ' >G?C' A J' .M?0(' □MM' C□DDGN' □H'
CFG @ADH□H ' LGC□@G ' LB¢' @□ GN' CFG J?E' ?HN' C?DD□GN' □H' ?' JDAH '
KM?OG

=' &? CGD' DNGH' ?HN' F□ ' @?H' 0A@□H ' AH' CFG□D' J?E' G?DME' □H' CFG
@ADH□H ' CAJ?DN' FADHGM?H' J'FGDG' □D' #FA@? ' FGH□G' M?E' ? ' CFGE'
J'GDG' ?M@A ¢ 0A@G' CA' CFG' LDAA@ OMA G' F□ ' @?H ' ?MJ?E ' >G?D□H ' CF?C
. M?0(' □MM' JABMM' (□MM' F□@' J□CF' F□ ' @? CGD' >G□ HGN' CF?C FG' F?N' MA ¢
F□ ' KBD G' FE ' ?□N' F□ ' @? CGD' CFAB' >AAM□ F' (H?PG' 0ABMN ¢ CFAB'
HAC' MAA(' CA' CFE' KBD G' LB¢' MA G □C'W F?C J?' □H □C'W #FDGG' KABHN '
?□N' FG' FE ' CFGH' A' CFE' J?E ' L?O(' ? ?□H ' M□(G ?' (H?PG' V ?□N' F□ '
@? CGD ' ?HN' GG(' □C ' >AD' LG□H ' A' G?DME ? ' □C □ ' CFGDG □ ' HA' @?H' C□D-
D□H ' ?HN' CFGDG>ADG' CFAB' @?E ¢' LG' BDG' CA'>HN' □C ' ?HN' CFGH' 0A@G' ?HN'
APDDC?(G' @G' ?C' CFG' >GDDE' . B□' HGPGDCFGMG ' LE' DG? AH' CF?C' .M?0('
□MM' MA ¢' F□ ' J?E' &? CGD' DNGH' G 0?KGN' EG□' AHOG' ? ?□H' C'
CF?C' C□@G' .M?0(' □MM' EG□' CFAB F□' FG' FABMN' F?PG' LGGH' BDG' CA'
F?PG' @G□' F□@' FA@G'J?DN ' LB□' JFGC□GD' CF?C' A@G' A>' CFG' MADN'
J?DNGH8 ' @GH' ?OOA@K?HDN' F□@' L?O(' CA' GPGD F?@ '?AD' CF?C' LG□H 'H'
NABLC' >AD' CF?C □C' J? 'MPCG' CA' A' CFDAB F' CFG' LDAA@ OMA G' ?HN' CFGDG-
>ADG' CAA(' ?HACFGD' J?E' .M?0(' □MM' J? ' N□ ?KKA□HCGN' CFGH' ?M A I

FGH' FG O?@G'FA@G' F□ ' @□ CDG ' CAA(' CFG' MGCCGD'?HN' (GK□C□' □MM□H '
FGD'@?H' CA' CGMM' F□ ' @? CGD' CF?C FG' F?N' ?' MGCCGD' NGM□PGDGN' F□@' LE' □D'
#FA@? ' FG□HG' ?HN' CF?C FG◁F?N' MA ¢ C□C ' ?NN□H ' CF?C FG' CFAB F□ C□
LG ¢ CF?C' F□ ' @? CGD' FAB MN' A' CFG' HG ¢ @ADH□H ' CA' □D' #FA@? '
LGO?B G FG' (HGJ' HA□ CFG @?CCGD' FG' ?N' FG' JABMN' ?HN' CFGDG>ADG' FG
J□MGN F□ ' @?H' CA' LG' C□DD□H ' LGC□@G ' H' CF□ ' @G?H' J□FMG' . M?0('
□MM' ?HN' AHG' +GAD G' F?(GL? 'F□ ' 0A@K?H□AH' JGDG (GK□'H' ?' CADG-
FAB G A>' □D' HCFAHE' GD8 ' ?C' DG CAH' LE' +DGGHG8 ' ?KKA□HC@GHC'
?HN' CF□CFGD' 0?@G' &□ CDG ' DNGH' CA' GG F□@' LD□H □H ' ?HN' GHN□H '
F□@' @G?C' ?HN' ND□H('@?HE' C□@G ' G 'CFGDG>ADG' MBD(□H 'CM□GDG' ?HN'
J?CO F□H ' A@G' AKKADCBH□CE' >AD' F□ ' KBDKA G' J? ' J□MMGN' □H' ?HE' J□ G'
CA' LG' BK' G?DME' □H' CFG @ADH□H ' CA' M□G' □H' J?J?' >AD' &? CGD' DNGH' □H' ?'
OGDC?□H' LDAA@ OMA G' LGCJ□ ¢ GPGD F?@' ?HN' CFG' >GDDE' VJ F□OF' OMA G' FG
@B ¢' HGGN ' K? ' CFGDG' CA' NA' F□ ' >G?C' A J' .M?0(' □MM' C□DDGN' □H'
CFG @ADH□H ' LGC□@G ' LB¢' @□ GN' CFG J?E' ?HN' C?DD□GN' □H' ?' JDAH '
KM?OG

=' &? CGD' DNGH' ?HN' F□ ' @?H' 0A@□H ' AH' CFG□D' J?E' G?DME' □H' CFG
@ADH□H ' CAJ?DN' FADHGM?H' J'FGDG' □D' #FA@? ' FGH□G' M?E' ? ' CFGE'
J'GDG' ?M@A ¢ 0A@G' CA' CFG' LDAA@ OMA G' F□ ' @?H ' ?MJ?E ' >G?D□H ' CF?C
. M?0(' □MM' JABMM' (□MM' F□@' J□CF' F□ ' @? CGD' >G□ HGN' CF?C FG' F?N' MA ¢
F□ ' KBD G' FE ' ?□N' F□ ' @? CGD' CFAB' >AAM□ F' (H?PG' 0ABMN ¢ CFAB'
HAC' MAA(' CA' CFE' KBD G' LB¢' MA G □C'W F?C J?' □H □C'W #FDGG' KABHN '
?□N' FG' FE ' CFGH' A' CFE' J?E ' L?O(' ? ?□H ' M□(G ?' (H?PG' V ?□N' F□ '
@? CGD ' ?HN' GG(' □C ' >AD' LG□H ' A' G?DME ? ' □C □ ' CFGDG □ ' HA' @?H' C□D-
D□H ' ?HN' CFGDG>ADG' CFAB' @?E ¢' LG' BDG' CA'>HN' □C ' ?HN' CFGH' 0A@G' ?HN'
APDDC?(G' @G' ?C' CFG' >GDDE' . B□' HGPGDCFGMG ' LE' DG? AH' CF?C' .M?0('
□MM' MA ¢' F□ ' J?E' &? CGD' DNGH' G 0?KGN' EG□' AHOG' ? ?□H' C'
CF?C' C□@G' .M?0(' □MM' EG□' CFAB F□' FG' FABMN' F?PG' LGGH' BDG' CA'
F?PG' @G□' F□@' FA@G'J?DN ' LB□' JFGC□GD' CF?C' A@G' A>' CFG' MADN'
J?DNGH8 ' @GH' ?OOA@K?HDN' F□@' L?O(' CA' GPGD F?@ '?AD' CF?C' LG□H 'H'
NABLC' >AD' CF?C □C' J? 'MPCG' CA' A' CFDAB F' CFG' LDAA@ OMA G' ?HN' CFGDG-
>ADG' CAA(' ?HACFGD' J?E' .M?0(' □MM' J? ' N□ ?KKA□HCGN' CFGH' ?M A I

,' D ' %A'EAB' DG@G@LGD' J'FGDG' @E' C?MG' N□N' OG? G'W
&' E ' J'FGDG' CFG' GHCMG@?H' N□N' OF□GO(' F□ ' J□>G
D ' FG' LG□H ' DGKDGFGHNGN' >AD' CFG' >?OC
□HG ' KDANBO8N' CF?C' CAA(' FGD' J□CF' CFG' NGGN
GD' MAPG'LDAB' F□' H' J'F□F' CFGDG' FG'MG>C' LGF□HN
HN' @?HE'AC'FGD' ? BDGN'?D B@GHC
GD' FB' L?HN' ? (8N' FGD' J'FGCFGD'□C' J'GDG' HAC' A
&' ' GD' ?H' J'GD' CFGHW ' J'AHNGD' FA'J' FG' MAA(8N
?P□H '>AD' J'ADH'□C' J□CF' BOF' PGFG@GHC' A?CF
HN'?C' CFG' □H C?HOG' A' ?KKDAP8N' BKAH' FGD
D ' □D ¢' N□N' FG' O? ¢' FGD' GEG ' NA'J'H' CA' CFG' G?DCF' ' '
?COF□H ' CFG' NDAK ' CF?C' >GMM' ?@?□H' >DA@' CFGH□G
#FGH' A>'CME' ND?'J ' FG' >ADCF' FGD' F?HN(GDOFGD
J'GDG' ?M@A ¢' 0A@G' CA' CFG' LDAA@ OMA G' F□ ' @?H ' ?MJ?E ' >G?D□H ' CF?C
HN' @ANG' CME' FG' J□KG ' FGD' CG?D' C?H8N' >?OG
#FGH' FG@@8N' FG' ABC' CA' OMG?D' FGD' PA□OG' FABMN' GG@
HN' J'CF' ?' @?5G' CE' ?NND5 8N' FGD GM?'
#A' GHOABHCGD' ?MM' CFG□D' ?OOB ?C□AH R
?DNAH' @G' ?' CGD' DNGH ' ' 0?H' HA' @ADG
#F□ ' >□ F□H ' ?¢' @E' FG?DC @?(G ' FAD¢ @E' J□HN
&' ' A@G' J'G ?DG ?M@A ¢' HAJ' ?¢' "?□HF?@NA'J H
, ABD' KDGCCE' C?MG' LG' B□MG ' CFG' J'G?DE' J'?E
' JABMN' EAB' J'GDG' □H' 0?' G' CA' CGMM' □¢' ABC' I

', " . .M?O(' DMM ?HN' F?(GL? 'JF?C @?(G EAB' FGDG'W
F?C' □ ' CFG NGGN' NAHG'W □ ' DNGH' NG?N'W
S ;' F?C' 0ABMN' ?' LMDHNGN' @?H' KGD>AD@' □H' ?D@ 'W
?'EAB' HAC' FA'J' CDMM' HA'J' CFG (E' J? '.M?D(
#F?C' HGDCFGD' FAD G' HAD' @?H' 0ABMN' LG' NQ OGDH8N'W
, GC' NDN' JG' FG?D' CFGDD' FAD G ' ? ' CFGE K? 8N I

' DNGH' ?HN' D?H(MDH' DGCBDH' CFGE ?DG □HCGDOKCGN' LE' "G?N ' ?
?DMAD' JFA' ?00B G ' DNGH' A>' ?' DA 'DHSB CDOG '□H NGKD□P□H 'F□@' A>' ?
KGOOG' A>' M?HN' #F□ 'DHONGHC □ ';>ABHNGN' BKAH' ?' C?CG@GHC' A>' CFG
OFDAH□OMGD' □H ?OOADN?HOG' J□CF' CFG BKGD C□C□AH' A>' CFG C□@G ' CF?C
JFGDG' CFG @BDNGDGN' LANE' A>' DNGH' J? ' >D C M?DN' CFG D? ' N□N' HAC
DA'J'>AD' CJA' EG?D ' ?HN' CF?C A>'CF□ ' PGDE' >GMN' FG F?N' JDAH >BWE' KA -
G GN' F□@ GM> R

'=' &.?HE' CD?H GD ' O?@G □H CF?C @G?H' C□@G' LG □NG' CFG' CAJH @GH'
CA' GG' CFG KD□HC' A>'F□ ' LANE' CFGDG' AH' CFG DABHN' □H CF?C' >□GMN ' JF□OF
>□GMN' FG' F?N' ? ' A@G' F?PG' DGKADCGN' @A C ODBGME' C?(GH' >DA@' ?
JA@?H' CF?C F?N' LGGH' ?' J□NAJ' CA' AHG' AA(G' ?HN' ?>CGD' @?DD□GN' CA'
AHG' "□OF?DN' "G?N ' ?' @?D□HGD' CA' CFG DG?C F□HND?HOG' A>' FGD' ?HN' FGD'
FB L?HN' CFG' ?□N' "G?N ' >AD' CFGE' F?N' MAH ' GHSAEGN' □C LE' ?' MG? G '
J F□OF' CFGE F?N' A>' □C >AD' @?HE EG?D ' HAC' CFGH G K□DGN' ' HGPGDCFGMG '
FG' AC' □C >DA@' CFG@' ' AD' CFG J F□OF' CFG ?□N' "G?N8 ' J□>G' HAC' AHME
G OM?□@GN' ? ?□H □ F□@' □H ' FGNN□H ' @?HE' ?' ?MC' CG?D' LBC' ?M A' OBD GN'
F□@' @A □ L□CCGDME GPGH' CA' F□ ' >?OG ' J□ F□H ' @?HE' ?' PGH G?HOG' CA' M□ F□
BKAH' F□@ ' ?HN' CF?□ ?MM CFG' J□ADMN' @□ F□ J□AHNGD' i' F□@ I

#FGDG□ ' BDGME' DG?□ KAJGD' □H' CFG >AMMAJ□H 'K? ? G ' ?HN' CFG NGHBH-
O□?C□AH' A>' CFG ?□MAD' OA@G ' J□CF' ?' CGDD□LMG' AMG@H□CE'?>CGD' CFG @?H□-
>AMN' G O?KG ' CA' JF□OF' JG F?PG' LGGH' J□CHG R

=' ' F?□' J□MC' CFAB' NA' @G' J□DAH ' ?HN' CFDG?CGH' @G' CAA'W
?E ' CFGH' 8MM' CG@K□' CFGG' DNGH' ' NA' CFE' JAD □
+ A N ' 'LG GGOF' CFGG' FAJ' A@G' @□D?OMG'
H' CFGG' AD' CF□HG ' □H' KM? B□H ' CFGG' >AD' CF□ '

$' E ' CDBME
D' C C ' FL ' LMAAN' JF□OF' CDB@KGC' CFAB' F? C FGN
. BC' □?' ' M□PG ' CFAB' ?HN' CFE' 0A@KM□OG
F□OF' F?PG' 0AH K□DGN' ?HN' JDAB' FC' FL ' NG?CF
F?MM' DBG' □C I

H'?' BL' GQBGH□' □GHG' CFG' BHF?KKE' JA@?H' @?(G ' 0AH>G □AH' R

=' GG' &□ CDG ' DNGH ' JFGDG' EABD' FB' L?HN' M□G '
FGDG□H' HA' >MGN' KA□HC ' ?DG' >A□ CGN' □H'
AH>G ' CF□ ' >ABM' >?BM□' ?HN' LG' KGH□CGHC
& ' DNGH ' JGGC' FB' L?HN' J F?□' F?MM ' ?E'W
#FG' @AD□ ' ABHN' F□ ' H?@G' CFG' @ADG' FG' LMGGN
#F□ ' LMAAN' 0AHNG@H ' @G' ?HN' □H' B' F□H ' >AD□F
KG?(' ? ' □C >?MM ' ?HN' ? (' @G' J FE' ' N□N' □C
AD' □PG' @G' DNGH ' ' DGKGHC' @G' HA J
HN' JABMN' @E' NG?□F' ?PG' CF□HG' CFAB' FABMN' C' HAC' N□G
"□ G' BK' JGGC' DNGH ' ?HN' GHSAE' CFE' MAPG
HN' >DAJ'H' HAC' AH' @G' JFGH' JG' @GGC' □H' FG?PGH'
H' FG?PGH' 'MAPG' CFGG' CFAB' F' AH' G?DC□F' ' N□N' HAC I

#FG' 0AHOMBN□H ' □GHG' FA J ' B ' CFG' KD□HO□K?M' OBMKD□C ' 0AHNG@HGN' CA'
N□G R

=' ' $G?PG' CA' ?00B' G' G?0F' ACFGD' HA J
HN' M□ CGH' CA' CFG' GHCGHOG' ' F?MM' □PG
. G?D' &A L□G' ?HN' F□ ' □ CGD' CA' $AHNAH' CD?□ FC
F□GD□ CFGE□H' @□CF=□GMN' @B C' LG' G' GOBCGN'
. G?D' &□ CDG ' DNGH' BHCA' ?HCGDLBDE
F□GD□ FGD' GHCGHOG□ ', FG' @B C' LG' LBDHC
&□OF?GM' ?HN' . D?N F?J'H' GPGD' F?@'
&B C' B>>GD' NG?CF
& ' $GC' @E' NG?CF' @?(G ?@GHN' >AD' ?MM' @E' □H
" ' □G' BKAH' JA@GH' CF□ ' F?MM' LG' @E' AH I

>CGD' CFG' KM?E' D?H(M□H ' □H ?' ADC' A>' GK□MA' BG' A@GJF?C' □H?DC>?O□?MEF
CGMM ' B ' CF?C' F?(GL? ' J? ' @BDNGDGN' □H' ABCFJ?D(' ?HN' .M?O(' □MM
LBDHC' ?C' MB F□H ' CF?C' +DGGH□' J? ' F?H' GN' ?C' LD□N G ' ?HN' CFG

?DC' CF?H' CF?C' M□CCMG' KM?E' C' □HPAMPG ' @ADG' 0AH>M□OC□H ' K? □AH ' C □ '
HAC' BOF' ?' @GDG' GHNG?PABD' CA' KDG' GHC' ?' GDG' A>' G O□C□H ' >?OC ' CA' CFG'
GH G ' A>' ?H' ?BN□GHOG' C' J? ' □H ?MM' KDAL?L□M□CE' J□CCGH' CJ GHCE' EG?D '
L□>ADG' CFG = ,AD(F□DG' #D? GNE I' ?HN' CF□ ' □ ' ? ' @A C' □@KADC?HC' O□D-
0B@ C?HOG' □H' 0AH □NGD□H ' J□GCFGD' F?(KGDG' J? ' ?C' ?MM' 0AHOGDHGN'
□H' □C' #A' ?' PGDE' EABH ' @?H' JFA G' KD□HO□KMG ' A>' ?D□ JGDG' HAC'
>AD@GN ' ?HN' JFA' F?N' O?DOGME' ?HE' @ANGM ' L□>ADG' F□@' CF□ ' CD? □D'
CADE' @□ FC F?PG' ?KKG?DGN' HAC' AHME' G? E' CA' LG' ND?@?C□TGN' LBC' ?'
JADCFE' BL□GOC' >AD' F□ ' >□D C' G>>ADC ' G' F?PG' LGGH' CA' CFG' EABH ' F?(KGDG'
>?@□M?D' CFG' >G?D>B\' H?DD?C□PG' @B C' F?PG' LGGH' CA' CFG' EABH ' F?(KGDG'
#FG' H?@G' A>' F□ ' AJH' @ACFGD' J?' DNGH ' KGDF?K ' CFG GHC□ F'
DNGH' F?N' A@G' M□ FC' DGM?C□AH' F□K' J□CF' FGD' >?@□ME ' LBC' □C' □ ' GP□NGHC'
CF?C' CFG' KM?E' AD□ ' H?MME' LADG' CFG' H?@G' A>' DNGH' A>' GPGD' F?@' ? ' □>'
□C' JGDG' CA' @?D' (CFG' N□ C□HOCAH' LGCJGGH' CF?C' >?@□ME' ?HN' CFG DNGH '
A>' CFG' F□NNGH' KD□H ' A>' FB@?H' B□MC' ?HN' J G?(HG ' J F□OF' □ ' HAC' CA'
L G' >ABH' □H' CFG GHGD?M□CG ' A>' ?HE' A>' CFG' G?DME' A>' ?BHOA@@AH' MGH CF' □H'
HABH0G' ?HE' NGO□NGN' AK□H□AH' BKAH' CFG' QBG' C□AH' A>' ?BCFAD F□K ' G'
HGCFGD' FAMN' J□CF' CFG' +GD@?H' OD□C□O ' J FA G' LGM□G>' ?KKDA?0FG ' CA'
□DGNB□CE' □H' CF□ ' ?HN' ACFGD' 0? G ' HAD' J□CF' CFG' i H M□ F ' J FA' ?KKG?D'
CA' 0AH □NGD' □H' @A C' CF□H ' CF?C' OGKC□O□ @' ?HN' AB□□N' SBN @GHC' ?DG'
□NGHC□O?M

)

=') " ? HG A> H ' !NJ?DN CFG CF DN ' ' C F?CF L H BHND G C @G ' KM?GN ?LABC CFG C G A>$AHNAH I J? ' >D C KBL M FGN H)= C J? ' GHCGDGN AH CFG DG CGD ' A> CFG C?C AHGD A@K?HE %G-OG@LGD C ')=) #FG KM?E J? ' DGKD HCGN H)== ?HN ' SBN H ' >DA@ ACFGD GHCD G ' H CFG C?C AHGD DG CGD ' ?M A H = ?HN) DA@ CF?C C @G CFG JAD(' J? ' (HAJH AHME CA CFG OAM-MGOCAD ' A> H MG KM?E ' C MM ' H ?KGMM DGKD HCGN C H ?' PAMB@G GHC CMGN =' DAMB AH ' AD GMGOC GOG ' A> HO GHC AGCDE I ' ? ' ='?' KM?E' CFAB FC CA LG JD C LE F?(G KG?DG I' #FG GN CAD A> CF?C PAMB@G CFB ' KG?(' A> CFG KM?E H F ' KDG>?OG R =' . BC JM?C F?MM LG ?N A> CFG KAG@ CF?C OAH C CBCG ' CFG GOAHN K?DC W AD FAJ F?MM CFG OBD A CE LG ?C >GN JF OF C ' KDAL?LMG @?E F?PG LGGH D? GN LE CFG DG?C H?@G H GDCGN H CFG C CMG K? G W #F?C C J? ' HNGGN JD CCGH LE F?(G KG?DG ' C O?HHAC LG ?N J CF O?HNABD CF?C CFGDG ' ?HE G CGDH?M GP NGHOG ?C ?MM ' A@GCF H ' A> KDAA> ?D G ' >DA@ DG G@LM?HOG LGCJGGH CFG CEMG A> F ' G?DM GD KGD>AD@?HOG ' ?HN CFG JAD(' H QBG C AH ' ?HN ?' @ADG OAHOMB PG AHG EGC >DA@ OAH NGD?C AH A> CFG C@G C ?KKG?DGN H ' H ' JF OF CFGDG J? ' HA (HAJH JD CGD GQB?M CA BOF ?' K M?E ' CFG >?LMG A> C CAA ' C?(GH >DA@ CFG ?@G LAA(' JF OF CF?C ?BCFAD ' (HAJH CA F?PG >AMMAJGN H A@G ACFGD KM?E ' CA J C ' AM H FGN8 ' < FDAH OMG ?HN ?' LAA(' A> HAPGM ' O?MMGN <#FG ?M?OG A> MG? BDG . BC ' ?>CGD ?MM ' C @B C LG OAH>G GN CF?C C ' LG H ' F ' JAD(' ' OAHSGOCBDG AHME ' ?HN @?CCGD A> AK H AH ' ?HN CFG DG?NGD @B C >AD@ AHG A> F ' AJH ' B NGN LE JF?C ' HAJ LG>ADG F@ ' ?HN LE JF?C FG F?MM @GGC J CF H KGDB ?M A> CFG K GOG C GM> I' ?KGMM J? ' HAC ?' KGD AH CA A>>GD ?HE OD C O?M DG? AH ' >AD F ' AJH LGM G> ' LBC CFG AK H AH ' A> GPGD?M ?LMG OD C O ' H ABC AJH C @G JABMN FAJ' CF?C FG J? ' HAC CA LG M?B FGN ?C ' ? ' CGGPGH ' J? ' HOM HGN CA M?B F ?C F @ ' >AD DG OB H ' CF ' KM?E >DA@ CFG F?HN ' A> CFG @GDG ?HC-QB?D ?H U #FG ?HAHE@AB ' OD C O JFA@ JG F?PG A>CGH QBACGN ?E ' R = ?KGMM J? ' CFG >D C JFA N DGOCGN ?CCGHC AH CA CF ' KM?E ' ? ' KGDF?K ' F?(KG?DG8 ' ?HN C ' H GPGDE DG KGOC AHG A> CFG LG C ND?@? ' A> C ' C@G ' C ' PGDE BHGQB?M ' ?HN C ' KMAC ' BH (M>BMME N P NGN HCA CJA K?DC 4 LBC CFDAB F @A C OGHG ' CFGDG DG H ?' KA HCGN CDGH CF A>CFAB FC ?HN G KDG AH ' ?' OMG?D D FHG ' A> @? GDE ' ?HN ?H ?KC CFAB F DAB F NGM HG?C AH A> OF?D?OCGD ' JF OF GHC CMG C CA D?H(' F FGD CF?H ?HE F CAD O?M KM?E A> CFG CGGHCF OGHCBDE ' G OGKC H ' F?(KG?DG8 ' ?N@CCGN JAD(' A> CF ' OM? ' ?HN & ?DMAJG8 ' < !NJ?DN I'C #FG AK H AH A> * MD O ' PGDE >BMM ?HN NGO NGN BKAH CFG ?BCFAD F K A> ,' !NJ?DN I' ?HN JG @?E ? ' JGMM KDG GHC C ?C AHOG CA CFG DG?NGD H C ' GHGD?M LG?D H

='#FG KM?E A> < !NJ?DN ' ?HN CFG . M?O(' D HOG Y O ' ' GHCGDGN HAC MG ' CF?H >ABD C @G ' H CFG DG CGD A> CFG C?C AHGD A@K?HE ' >D C ' AH %GO ' ' 515 ' ?HN M? CME ' AH GL ' 23 ' 425 ' C J? ' >D C KD HCGN H 514 ' ?HN DGKD HCGN H 511 ' LACF GN CAH ' LG H ' J CFABC CFG H?@G A> CFG ?BCFAD ' >?HE M?CGD GN CAH ' F?PG HA (HAJMGN G ' . ACF CFG G G?DME GN CAH ' LG H ' ?HAHE@AB ' O?H ' FAJGPGD ' KDAPG HACF H ' ' . BC GPGH >' CFG M?CGD GN CAH ' JGDG GQB?MME J CFABC CFG ?HHABHOG@GHC A> CFG ?BCFAD ' CF ' OGDC?H ME D?CFGD CD (H ' >?OC @?E LG ?C >?OCAD ME G KM?HGN LE CFG H?CBDG A> CFG K GOG C GM> ' H CFG >D C CJA ?OC ' JG >HN @?HE LCCGD ?CC?O(' BKAH CFG OAC ' H K DGN LE ! H M F K?CD AC @ ' CFG G JGDG CFADAB FME H KM?OG NBD H ' ! MT?LGCF8 ' M>GC @G ' JFA ' C ' JGMM (HAJH ' MAPGN FGD BOOG AD HAC @BOF LGCCGD

 NPP P!G ! M ! NP JL ! NHP P!N T ! NHP NMN !P G% PO GNP GMTG S6 H G G MGK APO N HMUGLPM P AT NHP K IL 9P G 7 M!K P!N KMM9 CUPG+R HG MG !P 7 NHP I OPG ! 9 KH NPP P!G NH JQHN N K P N ! GJ9N MLP99 AT M K !_ NP I LNJ JG !PQ9PKN+

CF?H FG N N F ' @ACFGD ?HN GPGD CAAN H ?' B?DNGN ?CC CBNG ? ?H C OACM?HN ' #A 0?@G ' ' AH CFG OAHCD?DE ' CFG G K? ? G ' @B C F?PG PGH A>>GHOG ' . BC F?(KGDG J? ' HNGLCGN CA 0?@G ' >AD @?HE (HNHG G ' ?HN FG F? ' KD? GN ?HN OGMGLD?CGN F@ H GPGD?M A>' F ' KM?E ' #FB ' H ADNGD CA ?PA N JABHN H ' F ' GH G A> D?C CBNG ' FG @?E G CFGD F?PG G KDG ME NGH GN CFG K?CGDH CE A> ! NJ?DN ' AD F?PG DG>B GN CA DGOA H G C ' ?HN ?L?HNAHGN CA C ' >?CG ?' K GOG CF?C KGDF?K ' N N HAC ?C >E F@ BKAH ACFGD DABHN ' HN H CF ' J?E C @?E LG ?M A G KM? HGN FAJ' ?' KAG@ ' JF OF LG?D ' F?(KGDG8 ' C?@K A GP NGHCME ' FABMN F?PG LGGH APGDMAA(GN AD HCGHC AH?MME A@ CCGN LE F ' >D GHN ' G@ H G ?HN AHNGMM ' CFG GN CAD ' A> CFG >D C >AM AU #F?C CFG K GOG KDAL?LME LGMAH ' CA F?(KGDG8 ' G?DM GD M?LABD ' VJ CF-ABC NABLC CJA EG?D ' ?C MG? C LG>ADG CFG N?CG A> C ' >D C LG H ' KD HCGN ' ' GP NGHC >DA@ CFG M?H B? G ?HN PGD >O?C AH ' >DA@ CFG @?HE DFE@GN K? ? G ' LBC @ADG K?DC OBM?DME >DA@ CFG OA@KA C AH ' JF OF ' >' JG OAH NGD CFG K GOG ? ' AHG JFAMG ' ' HOAHCG C?LME >?BMCE ' AD CFG >D C CJA ?OC ' OMG?DME C?HN ?MAHG @BOF CAA HNGKGHNGHCME ' HCGDH?MME AHME K?DC ?MME BH CGN ' ?HN HAC ?C ?MM G CGDH?MME ' J CF CFG >AMMAJ H ' CFDGG ?OC ' H' CFG >D C K?DC CFG KA HC A> CFG ?OC AH CBDH ' BKAH CFG MAPG A> CFG (H ' >AD CFG LG?BC>BM ABHCG ' A> ?M LBDE ' JFA@ FG F? ' DGMG? GN >DA@ CFG LG G H ' OACC F ?D@E ' #FG JFAMG A> CF ' OAHHGOC AH ' HA >?DCFGD @GHC AHGN H CFG >AMMAJ H ' K?DC C OA@G ' CA ?' CAC?M OAHOMB AH ?C CFG GHN A> CFG GOAHN ?OC JFGDG CFG (H ' OAHQBGDGN ' ?HN ?C CFG ?@G C @G CDGH CFGHGN ' LE CFG P DCBAB ' DG?CHG ' A> CFG OABHCG ' DGHABHOG ' F ' K? AH ' ?HN LGOA@G ' ? ?H CFG @? CGD A> F @ GM> ' #FG OABHCG ' CFGH N ?KKG?D ' JFAMME >DA@ CFG OGHG ' JF OF ' OF?H GN CA CFG P OCAD AB ' O?@K? H A> ! NJ?DN ' ?HN F ' FGDA O AH CFG . M?O(' D HOG ' #FG KM?E CFB ' >?MM ' HCA CJA N >>GDGHC ?DC ' . BC CFG >?BMC JF OF CF ' HPAMPG ' JFAMME P?H FG ' @@GN ?CGME CF?C JG C?(G CFG CJA F?MPG ' >AD CJA N >>GDGHC K GOG ' BH CGN HCA ?' JFAMG ' H CFG ?@G @?HHGD ? ' CFG # JA ?DC ' A> GHDE) ' ! PGDECF H ' CFGH DABHN ' C GM> HCA ?' OA@KMGCG ?HN LG?BC>BM F CAD O?M OA@KA C AH ' JF OF ' ' CFDAB FABC JADCFE A> CFG DG?C KAGC I

>' CFG P?MBG A> CF ' AK H AH A> CFG PGDE ?LMG +GD@?H OD C O LG>ADG B ' JG F?MM GHNG?PABD CA MG?N ABD DG?NGD ' CA >AD@ CFG D AJH SBN -@GHC ' >' CFGE OA@G CK CFG OAHOMB AH CF?C CFG KM?E ' HAC F?(KGDG8 ' CFGE J MM ?C MG? C ?OQB DG ?' >?@M?D CE J CF A@G CD (H ' OGHG ' ?HN K? ? G ' JF OF ?DG M CCMG (HAJH CA ! H M F DG?NGD ' #FG G?DME GN CAH ' ?DG PGDE D?DG ' ?HN ?KGMM8 ' PAMB@G ' LE HA @G?H ' ?' OA@@AH LAA(#FG P G J' JF OF * MD O F? ' C?(GH CF?C ,' #FG " G H A> ! NJ?DN I' @B C LG OAH NGDGN ? ' ?' KM?E H # JA ?DC ' ' KGD>GOCME SB C ' . BC C @B C ?M A LG LADHG H @HN CF?C F?(KGDG F? ' F@ GM> >BDH FGN B ' HA G ?@KMG A> BOF ?' OA@KMGCG N P AH A> CFG ?OC AH H ?HE ' F CAD O?M KM?E' JF OF FG F? ' MG>C B U #FG # JA ?DC ' A> GHDE) ' OA@KD GN CJA N C HOC KM?E ' G?OF OA@KMGCG H C GM> ' G?OF KGD>AD@GN AH ?' GK?D?CG N?E ' LBC G?OF OAHHGOCGN J CF CFG ACFGD LE ?' OFADB ' JF OF >MM ' BK CFG ?K A> C@G ' A CFG #FDGG ?DC ' A> GHDE) ' ?HN " OF?DN ' ?DG KGD>GOCME GK?D?CG ' ?MCFAB F G GHC ?MME OAH-HGOCGN ' #FG KM?H KBD BGN H CFG ,' !NJ?DN I' ' CA ?E CFG MG? C ' G OGGN H ME H?DC >O ?M ' >' CFG JD CGD A> CF ' KM?E' F?N KA G GN @ADG ND?@?C O (MM ' FG @ FC F?PG @?NG CFG GPGD?HOG A> CFG ?OC AH MG ' ?LDBKC ' C ' CFG M H(' ' H?KKGN FADC ' H CFG >D C CJA ?OC ' JG F?PG CFG ! NJ?DN A> DA@?HOG R ?' KB M H ' MAPGD ?' FG?DCMG ' GNBOGD ?' NG KAC ' ?HN CFGH ?' KGH CGHC ' H CFG M? C CFDGG ?OC ' JG F?PG CFG

J ?E' >DA@' FGD' ?HN' EGC' DGC?□H' @E' ABM
&.E' LANE□' FGD' LAJ'D' FGD' 0ABDC' FGD'?LLGE
HN' FG ?H' ?H GM' KBDG' N□P□HG' BH KACCGN
>' ' FABM'MGHN' FGD' FAB G' @E'MADN' CA' CFGG
' (□MM @E' KAAD' ABM' ?HN' @E' KAAD' ABM' @G I

#FG' I?DM A>' ?DJ□O(' >?CFGD' CA' CFG ABHCG 'A>' ?M□ LBDE'□' DGQB□DGN'
LE' iNJ?JD' BKAH'L□ 'A?CF A>' NBC=' CA' A' CA' F□ ' N?B FCGD' ?HN' 0A@-
@?HN' FGD' CA' ? DGG' J□CF' F□ ' N□ FAHABD?LMG' KDAKA ?M ' #F□ ' PGDE'
BHH?CBD?M' ?HN' □@KDAL?LMG'□HO□NGHC' □ ' >ABHN' □H' CFG CADE' A>' =#FG'
?M?OG' A>' MG? BDG'I' LBC' □C □PG ' A00? □AH' CA' ?' OGHG' A>' PGDE' F□ F'
@GD□CR ?' M□CCMG' JADNE' KGDF?K 'LBC' C□MM BKAH' CFG' JFAMG' H?CBD?M' ?HN'
G>>GOC□PG' #FG' (□MM' J□CF' J□OF' CFG >?CFGD □ ' @?NG' CA' NGM□PGD' CFG'
@G ? G A>'CFG (□H ' ?HN' CA' ?KKG?D' CA' DGOA@@GHN' ?' 0A@KM□?HOG' J□CF'
F□ 'NG@?HN ' LBC' A' ?C' CFG ?@G C□@G ? ' CA' @?(G CFG B□MCE' KBDKA G'
NABLME' ?LFADDGHC'□HN□O?CG 'HA' 0A@@AH' KA J GD R

=' S ' A J' F?MM ' GHCGD□H' CF□ ' D?OGMG ' GDD?HN'W
' @B C HAC 0?MM FGD 0F□MN ' >AD' J FGDG8 ' CFG >?CFGD'
#F?C J□MM'□H' B0F?' B□C' GNB0G F□ 'OF□MNW
#FGH' □>G A>' ?M□ LBDE R F?MM ' A'LG □H'W
A ' FG8 ' @E' >D□GHN' ?HN' J FGDG □ ' >ABHN' CFG >D□GHN'
#F?C J□MM NA'>D□GHN F□K B0F' GHN?@? G@GHC'W
G□CFGD' @E' N?B FCGD' HAD' @E' NG?D'>D□GHN8 ' J□>G
'?@' HAC ?DJ□O(' ? ' CFAB' CF□H(8 C ' ?@
. BC' ?H' ?CCADHGE'>DA@' CFG' OABDC' A>'FGMM
#F?C CFB ' F?PG' FAB 8N' @E' K□D□C □H' F□ '>AD@
#A' NA'?' @G ? G CA' CFGG >DA@' CFG (□H
#F@ @□ FCE (□H 'A>'iH M?HN' NACG ' AH' CFGG
G ' CF?C' KAJGD' CA' C?(G ?J?E' CFE M□>G
?CF' KAJGD' CA' C?(G CF□HG FAHABD4 CFGH' OAH GHC'
AHABD' □ ' A>CGH'WA C' ?HN' AC' ? ?□H
. BC' M□>G' AHOG' AHG ' F?CF' HA' DGOAPGDE
#FG' BH ' CF?C' J□CFGD ' F?E' NACF' HABD□ F' D?
#FG' (□H ' CF?C' JABMN' N□ C?□H' CFGG ' J□MM ?NP?HOG' CFGG

S ' FE ' HAJ'CFAB' KG?(8 C ? ' ' JABMN' F?PG'CFGG KG?(

HN' @?D('FAJ' 'BH ?E' @E' JADN ' ? ?□H
H' FAHABD?LMG' D?PG'□ ' @ADG' G CGG@8N'
#F?H'CFG KAMMBCGN'OMA GC'A>'? (□H '
#FG' DG?CGD'@?H'CFG' DG?CGD'□ ' CFG CF□H
. G' C' AAN' AD' L?N' CF?C' FG' F?MM' BHNGDC?(G
H' BHDGKBCGN'@ACG'>ME□H '□H'CFG BH
DG GHC ' ?' DG?CGD' BL C?HOG'CF?H'□C□ '
#FG'>DG FG C' B@@GD8 ' N?E' NACF' AAHG C C?□HC
#FG'MA?CFGN'0?DD□AH'CF?C□C GG@ '□A'(□
%GGK'?DG'CFG'LMAJ ' @?NG'J□CF'?'@□ FCE ? G'
#F?C' □H'NACF'CGH'C□@G ' ? D?P?CG'□C GN?'
#F?C' ' 0A@@□CCGN'□H'?' FAME'KM?OG'
H' GP□M'NGGN' NAHG'LE'?BCFAD□CE
' □H'?HN' BLADH?C□AH' ' %GO(' ?H'?KG'
H' C□ BG' ?HN'CFG'LG?BCE'A>'CFG'DALG
NN ' LBC'CFG DG?CGD' OADH'BHCA'CFG'LG? C'
' K?0□AB'>□GM'A>'DG? AH ' 0ABM' 'BD G
. GCJGGH'F□ ' MADE' N?B FCGD'?HN'CFE F?@G
#F?C'KA□ AH' FAJ ' JAD C □H'?' AMNGH'0BK
%?D('H□ FC GG@ ' N?D(GD'LE'CFG'M□ FCH□H'>M? F
$□MG ' CF?C>G CGD' @GMM'>?D'JAD G CF?H'JGGN
HN'GPGDE' MADE'CF?C'□HOM□HG ' CA' □H
#FG' F?@G'□ ' CDGLMG'LE'CFG'AKKA'□CG
A'MG?PG' ' J□CF'@E'LMG □H ' □H'CFE'LA A@
F□OF'CFGH'0AHPGDC'CA'?' @A C FG?PE'0BD G' '
FGH'CFAB'0AHP□DC8 C'>DA@'FAHABD8 ' AMNGH'H?@G
#A'CFG'LM?O(';>?OC□AH'A>'LGN LMAC□H ' F?@G '
i ' 8MM'>AMMAJ'CFGG' HN ' JFGH'@E'@□HN'CBDH ' A
& E'LANE' □H('@E' ABM'□H'GHNMG ' JAG' 018 ::

#FGD□ ' ?' M□HG□H'CFG M?CCGD'K?DC'A>'CF□ ' OGHG' JF□OF □ ' CA'LG'>ABHN'
?M A'□H'AHG'A>' F?(KGDG8 ' AHHGC R CFG' □HGCE>ABDCF R

=';$□MG ' CF?C'>G CGD' @GMM'>?D'JAD G CF?H'JGGN I

G'?DG'NGO□NGNME'A>'AK□H□AH'CF?C'CFG'M□HG'J?'AD□'□H?M'□H'CFG AHHGC'
?HN'CD?H KM?HCGN'CFGH0G'□HCA'CF□'KM?E' #FG' KA□HC' J?'@?CGD□?M'□H

#FG' 0ABHCG ' GHCGD ' ?HN' J□CF' CFG' >AMMAJ□H ' 0GHG' BNNGHME' CGD@□H?CG ' CFG' □MM' C?DDGN' K? □AH' A>'CFG' (□H R

=' 1 0 ' AJ ' @E' AB₩ ' KM?E>GMMAJ' ' ?D□' CFAB' 0A@G #A' KG?(' CFG' @AD□' CF?H' FG?PGHME' JADN' A>'EG? #A' @E' ALSGOC□AH' □H' CFE' LG?BCGAB ' MAPGW ▯CF' CFG□D' FG?DC' LMAAN ' CF?C' (GGK' ABD' MAPG' ? BHNGD >' JF□0F' @E' FB L?HN' ?HN' EABD' J□>G' ?DG' CJ?□H 1 0 ' #FE' LG?BCE' @?(G ' CFG@' B□MCE' A>'CFG□D' NG?CF HN' □PG ' □H' GP□NGHOG' CF?C' CFGE' F?₩' N□G ▯FGH ' CA' CFG' DG?□' DG?C' C?D 0F?@LGD' A8GD' ABD' FG?N i ' 'KGDSB8N' LG?BCE' @ADG' OADDBKCGN'$BN G' *KAH' JF□0F' PGDN□OC' ' CFG□D'$BN G' 0AHNG@H' CFG@ #FG' BH?PD ?₩ G □AH ' O?₩' CA' 0ABHC 1 0 ' F?C' ?E ' @E' >?□D' MAPG'W □ ' FG DG AMBCG'W i ' "G AMBCG' CA' LG' N□ AMP8N ' ?HN ' CFGDG>ADG ' CF□ R GGK' LB□' CFE' JADN' DG?C' (□H ' ?HN' ' ?@' CF□HG ?HN' JFGDG' CFAB' ?D□' EGMN' @G' CA' CFE' F?HN HN' GG FAJ' ' J□MM' E□GMN' @G' CA' CFE' F?HN Q%% ' ' ' $; ' $ O ' O ' ' GD□' LE' @E' □NG' NA' F?H ' @E' JGNN□H ' (H□PG #?(G' CFAB' CFG' AHG ' ?HN' J□CF' □C' (□MM' CFE' QBGGH H□PG' JGNN□H' LE' @G' CA' >□HN' FGD' JFGDG' FG' M□G HN' JG?□F' HAJ' M□G ' >? C ? MGGK' J□CF□H' @E' FG?DC F□D□' HAJ' M□G ' >? C ? MGGK' J□CF□H' @E' FG?DC FGH' CFGE' ?DG' AHG ' CFGH' ₩M' OAH GHC' CA' MAPG C□D' HAC' M? O□P□AB ' (□H ' CA' F□HNGD' @G ▯GM' H□@LM□GD' >?D & E' DG AMB□AH' □ ' @ADG' H□@LM□GD' >?D #F?H' CFE' KDGPGH□AH' O?H' LG' □H' @E' DG OBG HN ' □' CFAB' □□D' ' □D□(G ' CFGDG>ADG' C?HN' C□MM HN' FGD?D' CFG' OFA□OG' CF?C' ' J□MM' KBC' CFGD' CA' HN' HGPGF' FGHOG>ADCF' CA' AM□O□C' @ G +:%2' (;%-2'+*' %-7%'+:1' *(*' ' ,:*1' ' + HN' HGPGF' FGHOG>ADCF' CA' AM□O□C' @ G D' GM G' LE' FGJ?PGH' QD D' CF□' F?DK KA□HCGN' (H□'G ▯GM' J□MM' □D□(G' ?HN' N□G' L□>ADG' CFGG' FGDG ' 1 O ' !PGH' LE' CF?C' AJGD' ' JG?D' CF?C □PG ' @G H P' ?□DGD' CFAB' ?D□' LE' >?D' CF?H' GDA' J ? #FG' KAJGD' CA' LG' ? F?@GN' A>' @E GM> >

' HGPGD' @G?H' CA' K?D□' @E' M□K ' ? ?H H' ?HE' JADN' CF?□' GCHN ' CA' BOF ?' B□□ D□ G ' CDBG' i H M□ F' M?NE'$ JFA@' ABD' □ MG &?E' LGCCGD' LA? □' A>' CF?H' G8GD' "A@?H' @□ F□ >'FGD' JFA G D?H ?0(8N' CDG? BDE' F?CF' C? (8N KDH□OG' F?' ?M A' AHG' CFDAB F' CFG' ?@G' 0FAAM' FG' KDAPG ' CF□ ' CAJ?DN ' CFG' GHN' A>' CFG' GOAHN' ?0C' LE' F□ ' QBO(' □MGHC' ALGN□GHOG' CA' CFG' AD□GD' A>' F□ ' >?CFGD' ?M□FAB F' N□DGOCME' AKKA GN' CA' F□ ' J□ FG I H' CFG' CF□DN' ?0C' J□G' ?DG' ?□ AHOG' □□' CFG' FG?DC' A>' J?D ' J□G' F?PC' CFG' DGH0F' 0?@K ' J'FGDG' 0AFH' J□CF' F□ ' OABDC' FG?D ' A>' CFG' ?DD□P?M' A>' iNJ?DN8 ' >MGGC' ?HN' CFG' N□ 0A@>□CBDG' A>' F□ ' AJH' #FG' NG OD□K□AH ' A>' CFG G' GP□H' ?DG' ? ' J□G' CF□H(' □GN□AB ' ?HN' APGD C□?□HGN' ?□' ?HE' D?□G' CFGE' ?DG' BHND?@?□O' #FG' J□D□GD' □ ' GHNG?PABD□H ' CA' KBG' AB□' F□ ' KAJGD' J'FGDG' CFG' F□ FG □ KAJGD' JABM' LG' J? □GN' #FGDG' □ ' MG ' ?@L□□AH ' LB□' @BOF' @ADG' >ADDG ' H' CFG' >AMMAJ□H ' KGGOF' A>' ?' KAAD' D□H0F@?H' J'FA' □ ' >ME□H ' >DA@' CFG' □HP?NGD ' R

=' ME ' OABHCDE@GH ' ?HN' O□C□TGH ' A>' D?HOG' J'GGC >MAJ8D□H ' KG?OG ' CFG' DAAC' A>' F?KKE' M□>G ' QB□CG' ?L?HNAH8N' ?HN' G KBM 8N' CFG' M?HN' H □G?N' A>' JFA@' D?H ?O(OAH □□?□H□H ' J?D □C ' M□(G' □A' D?PPGH ' AH' EABD' FAB G ∦ □AK M?B F□GD' ?HN' @□ OF□G>' J?M(' J□CF□H' EABD' □DGGC HN ' BHDG □D?□H8N' @?(G F?PA0' ? ' CFGE' K? ' #FG' >AD@' J'FGDGA>'GPGH' HAJ' @E GM>'LGFGMN AJ ' BKAH'□F□ ' >?□D' @ABHC?□H' J'FGHOG' ' O?@G A□' A' >?D' ? ' ' N□N' N□DGOC' @□HG' GE□G ' FC' KGDOGPG' >□PG' O□C□G ' ?MM' AH' >□DG ADH >□GMN ' ?HN' P□HGE?DN ' LBDH□H ' M□(G' ?H' APGH HN ' ? ' CFG' MG?(□H ' P?KABD' □H' CFG' J□HN' #BDHGN' ? □NG ' ' M□(GJ□ G' @□ F□ N□ OGDH #FG' KAA□' □HF?L□C?HC ' G O?K8N' CFG' >M?@G ?MM' HB@LGDMG ' BKAH' CFG' AMN□GD 8 K□(G ' #FDGG' J'?E ' CFG G' ND□G?N>B₩' @□H□ CGD ' A>' J□?CF' %A' CDG?N' CFG' @G? BDG ' A>'CFG□D' C□? □D' @?DOF * KAH' CFG' D□ F□ F?HN' 0A@G ' CFG' 0AHQBGD□H ' (□H * KAH' CFG' M□>C' F□ ' FAC' BHLD□NMGN' AH HN' □H' CFG' @□N C' ABD' H?C□AH8 ' M□CCGD□H ' FA C M₩' J'FDOF' CFAB F' N□ C?HC' EGC' 0AH K□DG □H' AHG #A' MG?PG' ?' NG AM?C□AH' J'FGDG' CFGE' 0A@G I

#FG' >AD@ ' CFG' C□?H □C□AH' CA' CFG' >AMMAJ□H ' GOAHN' ?DC' J'FOF' FAJ ' B ' CFG' CDBG' FGDA□D' DG?CHG ' ?OQB□DGN' CFDAB F' GM> 0AHQBG C' HAC' AH□E' □H' CFG' (□H ' LB□' ?M A' □H' F□ ' 8B CM□' OGMGL□?C?GN' AH' AD' GP□H' CFG' K□H□HOG' FGDA□D' DG?CHG ' ?OQB□DGN' CFDAB F' CFG' AD□GD' A>' F□ ' AHG' CFDAB F' CFG' GOAHN' ?DC' J'FOF' FAJ ' CAJ?DN ' CFG' GHN' A>' CFG' GOAHN' ?DC' LE' F□ ' QBO(' □MGHC' ALGN□GHOG' CA' CFG' AD□GD' A>' F□ ' >?CFGD' ?M□FAB F' N□DGOCME' AKKA GN' CA' F□ ' J□ FG I H' CFG' CF□DN' ?0C' J□G' ?DG' ?□ AHOG' □□' CFG' FG?DC' A>' J?D ' J□G' F?PC' CFG' DGH0F' 0?@K ' J'FGDG' 0AFH' J□CF' F□ ' OABDC' FG?D ' A>' CFG' ?DD□P?M' A>' iNJ?DN8 ' >MGGC' ?HN' CFG' N□ 0A@>□CBDG' A>' F□ ' AJH' #FG' NG OD□K□AH ' A>' CFG' G' GP□H' ?DG' ? ' J□G' CF□H(' □GN□AB ' ?HN' APGD C□?□HGN' ?□' ?HE' D?□G' CFGE' ?DG' BHND?@?□O' #FG' J□D□GD' □ ' GHNG?PABD□H ' CA' KBG' AB□' F□ ' KAJGD' J'FGDG' CFG' F□ FG □ KAJGD' JABM' LG' J? □GN' #FGDG' □ ' MG ' ?@L□□AH ' LB□' @BOF' @ADG' >ADDG ' H' CFG' >AMMAJ□H ' KGGOF' A>' ?' KAAD' D□H0F@?H' J'FA' □ ' >ME□H ' >DA@' CFG' □HP?NGD ' R

' HGPGD' @G?H' CA' K?D□' @E' M□K ' ? ?H H' ?HE' JADN' CF?□' GCHN ' CA' BOF ?' B□□ D□ G ' CDBG' i H M□ F' M?NE'$ JFA@' ABD' □ MG &?E' LGCCGD' LA? □' A>' CF?H' G8GD' "A@?H' @□ F□ >'FGD' JFA G D?H ?0(8N' CDG? BDE' F?CF' C? (8N KDH□OG' F?' ?M A' AHG' CFDAB F' CFG' ?@G' 0FAAM' FG' KDAPG ' CF□ ' CAJ?DN ' CFG' GHN' A>' CFG' GOAHN' ?DC' LE' F□ ' QBO(' □MGHC' ALGN□GHOG' CA' CFG' AD□GD' A>' F□ ' >?CFGD' ?M□FAB F' N□DGOCME' AKKA GN' CA' F□ ' J□ FG I H' CFG' CF□DN' ?0C' J□G' ?DG' ?□ AHOG' □□' CFG' FG?DC' A>' J?D ' J□G' F?PC' CFG' DGH0F' 0?@K ' J'FGDG' 0AFH' J□CF' F□ ' OABDC' FG?D ' A>' CFG' ?DD□P?M' A>' iNJ?DN8 ' >MGGC' ?HN' CFG' N□ 0A@>□CBDG' A>' F□ ' AJH' #FG' NG OD□K□AH ' A>' CFG' G' GP□H' ?DG' ? ' J□G' CF□H(' □GN□AB ' ?HN' APGD C□?□HGN' ?□' ?HE' D?□G' CFGE' ?DG' BHND?@?□O' #FG' J□D□GD' □ ' GHNG?PABD□H ' CA' KBG' AB□' F□ ' KAJGD' J'FGDG' CFG' F□ FG □ KAJGD' JABM' LG' J? □GN' #FGDG' □ ' MG ' ?@L□□AH ' LB□' @BOF' @ADG' >ADDG ' H' CFG' >AMMAJ□H ' KGGOF' A>' ?' KAAD' D□H0F@?H' J'FA' □ ' >ME□H ' >DA@' CFG' □HP?NGD ' R

=' ME ' OABHCDE@GH ' ?HN' O□C□TGH ' A>' D?HOG' J'GGC >MAJ8D□H ' KG?OG ' CFG' DAAC' A>' F?KKE' M□>G ' QB□CG' ?L?HNAH8N' ?HN' G KBM 8N' CFG' M?HN' H □G?N' A>' JFA@' D?H ?O(OAH □□?□H□H ' J?D □C ' M□(G' □A' D?PPGH ' AH' EABD' FAB G ∦ □AK M?B F□GD' ?HN' @□ OF□G>' J?M(' J□CF□H' EABD' □DGGC HN ' BHDG □D?□H8N' @?(G F?PA0' ? ' CFGE' K? ' #FG' >AD@' J'FGDGA>'GPGH' HAJ' @E GM>'LGFGMN AJ ' BKAH'□F□ ' >?□D' @ABHC?□H' J'FGHOG' ' O?@G A□' A' >?D' ? ' ' N□N' N□DGOC' @□HG' GE□G ' FC' KGDOGPG' >□PG' O□C□G ' ?MM' AH' >□DG ADH >□GMN ' ?HN' P□HGE?DN ' LBDH□H ' M□(G' ?H' APGH HN ' ? ' CFG' MG?(□H ' P?KABD' □H' CFG' J□HN' #BDHGN' ? □NG ' ' M□(GJ□ G' @□ F□ N□ OGDH #FG' KAA□' □HF?L□C?HC ' G O?K8N' CFG' >M?@G ?MM' HB@LGDMG ' BKAH' CFG' AMN□GD 8 K□(G ' #FDGG' J'?E ' CFG G' ND□G?N>B₩' @□H□ CGD ' A>' J□?CF' %A' CDG?N' CFG' @G? BDG ' A>'CFG□D' C□? □D' @?DOF * KAH' CFG' D□ F□ F?HN' 0A@G ' CFG' 0AHQBGD□H ' (□H * KAH' CFG' M□>C' F□ ' FAC' BHLD□NMGN' AH HN' □H' CFG' @□N C' ABD' H?C□AH8 ' M□CCGD□H ' FA C M₩' J'FOF' CFAB F' N□ C?HC' EGC' 0AH K□DG □H' AHG #A' MG?PG' ?' NG AM?C□AH' J'FGDG' CFGE' 0A@G I

' HGPGD' @G?H' CA' K?D□' @E' M□K ' ? ?H H' ?HE' JADN' CF?□' GCHN ' CA' BOF ?' B□□ D□ G ' CDBG' i H M□ F' M?NE'$ JFA@' ABD' □ MG &?E' LGCCGD' LA? □' A>' CF?H' G8GD' "A@?H' @□ F□ >'FGD' JFA G D?H ?0(8N' CDG? BDE' F?CF' C? (8N KDH□OG' F?' ?M A' AHG' CFDAB F' CFG' ?@G' 0FAAM' FG' KDAPG ' CF□ ' CAJ?DN ' CFG' GHN' A>' CFG' GOAHN' ?DC' LE' F□ ' QBO(' □MGHC' ALGN□GHOG' CA' CFG' AD□GD' A>' F□ ' >?CFGD' ?M□FAB F' N□DGOCME' AKKA GN' CA' F□ ' J□ FG I H' CFG' CF□DN' ?0C' J□G' ?DG' ?□ AHOG' □□' CFG' FG?DC' A>' J?D ' J□G' F?PC' CFG' DGH0F' 0?@K ' J'FGDG' 0AFH' J□CF' F□ ' OABDC' FG?D ' A>' CFG' ?DD□P?M' A>' iNJ?DN8 ' >MGGC' ?HN' CFG' N□ 0A@>□CBDG' A>' F□ ' AJH' #FG' NG OD□K□AH ' A>' CFG' G' GP□H' ?DG' ? ' J□G' CF□H(' □GN□AB ' ?HN' APGD C□?□HGN' ?□' ?HE' D?□G' CFGE' ?DG' BHND?@?□O' #FG' J□D□GD' □ ' GHNG?PABD□H ' CA' KBG' AB□' F□ ' KAJGD' J'FGDG' CFG' F□ FG □ KAJGD' JABM' LG' J? □GN' #FGDG' □ ' MG ' ?@L□□AH ' LB□' @BOF' @ADG' >ADDG ' H' CFG' >AMMAJ□H ' KGGOF' A>' ?' KAAD' D□H0F@?H' J'FA' □ ' >ME□H ' >DA@' CFG' □HP?NGD ' R

. G>ADG CFG L?CCMG A> DG E JG F?PG ?H HCGDP G J LGC JGGH CFG D P?M (H #FG NGL?CG HAC @?H? GN J CF ?HE PGDE DG?C N H CE AH G CFGD NG * KAH CFG DGC D H A>0AFH ?HN F >AMMA JGD CFG D HOG A> ?MG AMG@HME ?D@GN BKAH CFG >GMN R

, HN GN LGO?B G CF L?CCMG CFG >D C #F?C GPGD EGC CFAB >AB FC8 C H K COFGN >GMN ?HO GHC OB CA@ A>@?DC ?M C #A NBL CFGG J CF CFG CEKG A>OF P?MDE H AMG@H @?HHGD J G J MM PG CFGG ?D@ I

#FG >?@AB HO NGHC A> CFG L?CCMG A> DG E CF?C A> CFG (H DG>B H CA GHN BOOABD CA F ?MM?HC AH CFB CAMN LE DA ?DC R

 , #FGE J CF CFG KD HOG GHC ?@G GH GD CA CFG (H J FA J? AH ?M CCMG J HN@ MM F MM CFGH CFG (H FC ?N CA CFG (H < D CFG ! ?DM A> ?D J O(?HN CFG ! ?DM A> >ADN D " GEHAMN ALF?@ ?HN ACFGD BOF ? LG ?LABC CFG KD HOG EABD AH ?DG >GDOGME >AB FC J CF?M ?HN ?DG ADG F?HNMGN J FGDG>ADG CFGE NG DG EAB CF?C EAB ?HN EABD L?CCMG J MM OA@G ?HN ?N CFG@ >AD > CFG DGHOFHSGH HODG? G ? CFGE NABLC CFGE J MM EABD AH ?HN CFGE F?MM F?PG @BOF ?NA 8 #FGH CFG (H ?N < @E AH NG?N AD FBDC AD AH CFG G?DCF >GMMGN W8 < A D 8 QBACF CFG (H FC <LBC FG F?DNME @?COFGN J FGDG>ADG FG F?CF HGGN A> EAP?D ?N 8 < GMM 8 ?N CFG (H < DGCBDH CA F@ ?HN CA CFG@ CF?C GHC EAB FCFGD ?HN ?E CA CFG@ CF?C CFGE GHN HA @ADG CA @G >AD ?HE ?NPGHCBDG CF?C >?MMGCF ? MAH ? @E AH ?M PG ?HN ?M A ?E CA CFG@ CF?C CFGE B>>GD F@ CF N?E CA J H F KBD >AD > +AN LG KMG? GN J MM CF SABDHGE LG F ?HN CFG FAHABD CFGDGA> ?HN CA CFG@ CF?C LG ?LABC F@ 8 #FGH CFG (H FC DGCBDHGN ? ?H CA CFG@ ?HN FAJGN CFG (H 8 JADN CFG JF OF DG?CME GHOABD? GN CFG@ ?HN DGK HGN H CF?C CFGE F?N GHC CA CFG (H ? CFGE N N I

#FGU ND?@?C C F? JAD(GN ABC CF O DOB@ C?HOG J CF DG@?D(?LMG K D C4 C JG CF H(CFG LG C LB HG OGHG H CFG KM?E R HAC APGD-JDAB FC LBC @KMG ?HN CFGDG>ADG @A C G>>GOC PG R

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1 0 $ADN BNMGE JF MG ABD AH H CFG OF? G CFND? J EABD KAJGD BHCA CF MCCMG F MM HN FGDG ? G? AH MGC B LDG?CFG ABD GMPG & ' ; ' 1 *20 018 # 1 1 0 0B C NAA@H FG?PGH JFA G GODGC KDAP NGHOG #A ABD DA SBN @GHC BH ODBC?LMG AJ ?DG JG LABHN CA KD? G CFE JAHNDAB JAD(#F?C F? C CF N?E P8H J?E BHCA CFG D FC HN @?NG CFG J O(GN CB@LMG ?C CFG@ GMPG

1 $

& "G OBG (H !NJ?DN DG OBG >AD CFE AH 1 0 "G OBG DCA W JF?C FG KD AHGD W D LE P AMGHOG >GMM LG NG F FAD G W & . G CFGD @E MADN LBC H?DDAJME LG GC CF CBDH H DGHOF@GH JFA@ FG N N KBD BG 8C @KA LMG CF?C FG FABMN 8 O?KG ! OGKC EABD F FHG KDG GHCME NG OGHN 1 0 # B C MGC F@ > FC4 0 ?PG F@ ?D@ CA N?E HN FG M?LABD H >AD ? (H FCFAAN @?H

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- #FG KD HOG @E MADN CFG KD HOG B OOABD F@ G8 OMA G GHOA@K? 8N JCF ? JADMN A>ANN 1 05 #FGH JMM FG JH ? JADMN A>FAHABD CAA : % 91 7- * 2 @- , 2%O%% : + : % , @% >HAC JF?C DG@GNEW G F?PG @ADG AH #F?H AHG CA OA@>ADC ABD NGOM H ? G

J ($

& "GHAJHGN !NJ?DN PG @G MG?PG KD?E #A MG?N @E AMN GD JFGDG @?E DGM GPG , ABD D?OG8 AH H N?H GD CA LG M?H #FG H?DG A> DGHOF M (G G@@GC AH ?L?H(

& B CGD ?LABC F@ JF M C FG M AH M (G ! HC?H MGN H CFG HGC A>CFG D ? ?BMC D?HC OME DGHN ?HN L CG CFG JAPGH CA M . BC ?MM H P? H FG O?HHAC >DGG F@ GM> 1 0 BNMGE OAHCGHC J MM HAC F?PG ?@?H H K? H A>NG?CF GHC >ADCF CA BOOABD F@ #F CFG N?E ADN?H8N LE NG C HE #A G? AH F DGGH OABD? G J CF CFA G CFAB FC #F?C >FG LDG?(8CF ABC G CAD8 EG?D AH G?DCF MM @?(G F@ ?PABD C MM A>CF G KMA C - F LBC FG F?MM HAC M PG CA GG CFA G N?E 1 0 FE CFGH F GK C?KF M? C H KD? G & , GC AAN @E MADN 8C CAA @BOF J M>BMHG #A MGC F LMAAN LG K MC CF?C @?E LG ?P8N 1 0 ! OM?@ HA @ADG $ >AD HAHG A>EAB O?H CGMM FGCFGD ?LADDAJ8N ?N J MM GDPG AD HA O GDF?K FG ?MDG?NE M?H AD C?8GH HN N?DG ?>?MOAH JFGH FG8 H FGD >M FC HN GPGD ?>CGD FG8MM LG F? ?DN M (G $GC ! NJ?DN LG NGM PGD8N LE ABD F?HN HN C MM H N?H GD FG8MM G KGOC CFG M (G4 . BC >F@ GM>F@ GM>DGNGG@ >DA@ CFGHOG G J MM F?PG P?HQB F8N OFGGD>BM NG?CF ?HN >G?D HN GPGD ?>CGD NDG?N CFG D >ADOG HA @ADG #F?H >CFGE JGDG LBC L?LG AD O?KC PG M?PG & ODBGM >?CFGD R ?DGJGMM ! NJ?DN CFGH - ?DGJGMM JGGC KD HOG CFG FAKG A>OF P?MDE & JABMN @E M>G @ FC D?H A@ F@ >DA@ NG?CF 1 0 . BC A>C @GCF (FG?D 0 #FG N @?M OF?D G A>CDB@KGC 8 MABN DGCDG?C MM ?DG HAC M?H FAKG CF?C JGHC J CF F@ A@G J MM DGCBDH J CF C N H AAN AD L?N

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= AJ BNMGE ABHN CFA G MPGD J H A>CF HG HN MGC CFA G @M(JF CG @G GH GD A>C@G FAJ CFE C@G8 MG?DH H H CF N?H GDAB C@G #FE GM>?DC LDB 8N ?HN LGHC J CF @?HE LDA M HN CD?C? G@ >ADGK? C J CF DAH KGH DG CG GN H CF HG FAHABD?LMG >?OG $ #FAB ?DC ? @?DD GN @?H H CF N CDG . BC N?H GD JAAG @G ? ? LMB F H @? N #G?OF @G ?H ?H JGD CA CF KGD MAB C@G & #A N G ?M ? OA@@AH ? CA M PG #FG AHG H OFA OG CFG ACFGD FAMN H OF? G $ AD >DA@ CFG H C?HC JG LG H CA M PG G NA KBD BG ?HN FBHC CFG C@G CA N G D C LBN JG CFGH JG LMAJ ?HN ?>CGD GGN #FGH KDG GHCME JG >?MM ?HN ? ? F?NG AMMAJ CFG LANE A JG >AMMAJ NG?CF >CFGH JG FBHC >AD NG?CF JFE NA JG >G?D C W D >JG >G?D C JFE NA JG >AMMAJ C W >JG NA >G?D JCF >G?D JG NA LBC ?N #FG CF H JG >G?D CA G TG AH B CFG AAHGD >JG >G?D HAC CFGH HA DG AMPGN KDA>>GD ?H APGDCFDAJ CFG M@ C A>ABD >?CG AD JFGCFGD D KG AD DACCGH NDAK JG F?MM JG NA ND?J CFG MACCGDE A>ABD NAA@ 7 F AAN AMN @?H ? CFAB ?HN CFAB ?HN ?D@ABD #FG G JADN A>CF HG F?PG LBO(MGN AH @E L?O(1 / 22 V

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#A'M'PG ' AD' NG' ' FAMN' :HN>GDGHC I
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,AB ' KGD?NPGHCBD:' ?DG' LBC' GDP:MG' DAA@
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CFG &A C :: F ?' KD?EGD' ?HN'CF?H(:P:H ' :@LBGN' J:CF' ?' K?CD:AC:D'
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#A'#FGG ' 0D 0 JFA G D?0G' F?CF' LGGH' F:' CDAH G C F:GMN'
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#A'LG' CFG :H CDB@GHC' CA' FAJ' CFE' KAJGD
A' CFAB' J:MC' D?HC' CF?C' @?HE' KD:HOG ' @ADG
. DGN' ?HN' LDAB F:' BK' J:CF:H' CF?C' MCCMG : MG
&?E' C:MM' LG' ?@AB ' >AD' M:(G' P:OCAD:G R
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#FG' ;%-2I' , <:+(' +:-+' ' :-7%') -+@:8O' ,' % O
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' HAC' CFG' CGDD:CAD:G ' A>' D?HOG' ?MAHG
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&: F:' ?C' CFG:D' KDG GHOG' CDG@LMG ' ?HN' DGC:DG ' I

G' F?PG' CFB ' KDG GHCGN' CA' ABD' DG?NGD ' A@G A>' CFG @A C CD:(:H '
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C?@GHG ' CFG ?BCFAD' NAG ' HAC' D: G ' J:CF' CFG' GMGP?C:AH' A>' F:' BL$GOC'
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GHDE') ' #FG' QBG C:AH' CFGH' FABMW' LG ? (GN ' :MW' CFG KA :LMG' N>-
>GDGHOG' A>'? G ?OOABH<' >AD' CF: 'N>>GDGHOG' A>'KAJ GD'W G ?E'KA :LMG'
>AD' JG' F?PG' HA' GP:NGHOG' CF?C' CFG =' iNJ?DN' I' J? ' KDANBOGN' G?DM:GD'
CF?H' 515 ' HAD' F?PG' JG' GP:NGHOG' CF?C' CFG GHDE') ' H A@G' F?KG'
J? ' KDANBOGN' M?CGD' * M:O:D' OAH :NGD ' CF?C' CF:' ' KM?E' >AD@ ' ?H G GHC?M
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F?PG' LDAB F: CFG (GE ' A>' CFG' CAJH' ?HN' A>' CFG O? CMG' ?HN' J:G
BL@:C ' ABD GMPG ' OMG?DME' :HCA' EABD' J:MM' ?HN' KM:G? BDG' CA' PG
CFG D: :NBG A>' CFG' KGAKMG' A>' ?M?: ' JFA' F?PG' B>>GDGN' DG?C' K?:H'
:D ' J:G' LG GGOF' EABD' D?OG' CA' F?PG' @GDOE' ?HN' K:CE' AH' B ' CFDAB F'
EABD' F: F' HALMG G 8 #FGH' ?MM' CFG' G?DM ' ?HN' L?DAH ' ?HN' ACFGD' CF?C
J:GDG CFGDG' J:GKC' >AD' K:CE ' #F:G' (:H ' MAA(GN' >GMME' AH' CFG@' >AD' DG?CME
FG' F?CGN' CFG' KGAKMG' A>' ?M?: ' >AD' CFG DG?C' N?@? G ?HN' N: KMG? BDG '
CFGE' F?N' NAHG' F:@' AH' CFG G?' LG>ADG' #FGH' FG' OA@@?HNGN' CFG:D '
FG?N ' CA' LG' CDO(GH' A>' #FGH' GPGDE' @?H' DGQB:DGN' CFG (:H ' >AD
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A>' &?HHE' ?N' ' F ' HALMG (:H ' >AD +AN8 ' ?(G:DG>D?:H' EABD' OABD? GA'
EG' F?PG' CFG' H?@G' A>' APGDG: H' HALMG G ' CFGDG>ADG' HAJ' NA' HAC' ?
CFH ' CF?C' FABMW' LMG@: F' EABD' DGHAJH ' HAD' CA' :PG' O?B G' CA' A@G' CA'
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OMACFGN ' ?HN' ?PG' CF?H' CFG:D' N:HHGD' ?C CFG:D' MG: BDG ' ?HN' CFGH' FG
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CFG FA C :H ?>G B?DN ' ?HN' GC ?C CFG:D' M:LGDCE I

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>' F?(KGDG JDACG CF?C JAHNGD>BM GD□G 'BKAH? ?' KM?H J□F□OF HGOG -
?D□ME □HOMBNGN GHDE') 'J G CF□H('FG JABMN ?NP□ GNME F?PG A@□CCGN
iNJ?DN' >AD CFG @?□H' BLSGOC A>' CFG OAHQBG C A>' D?HOG JABMN
LG □HOMBNGN □H G?OF KM?E' #FG OAHOMBN□H 'AL GDP?□AH A>' * MD□OC □ R'
="#DBME'□>' CF□ 'K□GOG'? 'CFG iH M□ F' OD□C□O '? GDC'□ 'HAC' F?(KGDG8'
AJH'□C □ '? F?@G' >AD CFG@' CF?C CFGE F?PG NAHG HACF□H 'CA' DGOAPGD'
>DA@' >AD GC>BMHG ' CFG H?@G' A>' CF□' GOAHN' F?(KGDG' CF□' C J□H'
LDACFGD' A>' CFG□D' DG?C' KAGC I' "G C□H ' CF□' AK□H□AH' BKAH' AHG' KM?E
:AHME' CFG G KDG □AH' = C J□H LDACFGDI' F?' A@GJF?C' ?H' BHHGOG ?DE

CDGH CF' N@□CC□H ' J F□OF' J G' NA' HAC' CF?C' CFG' LG C OGHG ' A>' CF□ '
KM?E' N□ KM?E' CFG ?@G' KAGC□07M' KAJGD'CFAB F' A@GJF?C' □@@?CBDG'
JF□OF' □ ' >ABHN' □H' F?(KGDG8 ' F□ CAD□O7M' KMJE ' CFGDG' □ ' AD□G C□D□H '
J?HC□H ' CA' @?(G CFG' JD□CGD' ?' ='C J□H LDACFGD I' JF□OF'□ ' >ABHN' □H '
CFA G' KDANBOC□AH ' FGDG' □ ' CFG' 'A>'=' iNJ?DN' 'W I' #FG'
FGDA□D' A>' F?(KGDG8 ' F□ CAD□G ' @□ F□' LG' 07K?LMG' A>' □@□C?□AH'S
LBC' CFG' GH□B ' JF□OF' DDG?CGN' ?MOAHLD□N G ' ?HN' ?NG ' ?HN'
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GDP?HC ' A>' CFG i?DM' A>' B G ' #FG' G?DMG C' GN□CA□H (HAJH□ ' CF?C A>'
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%GOG@LGD' 513 ' #F□ ' KM?E' J? ' >AD@GDME' ? OD□LGN' LE' □H C?HMGE
?HN' ACFGD ' CA' 0AFH' GEJAAN' CFG >D□GHN' A>' □D' #FA@? ' &ADG'
BOF' ?H' AK□H□AH'?D BG ' CFG @A C' 0A@KMGCG □ HAD?HOG' A>'CFG C?CG' A>'
ABD' M?H B?' G' ?HN' A>' ND?@?CC□D' KAGCDE' G KGO□?MME' ?C' CFG C□@G' JFGH
0AFH' GEJAAN' JDACG' A' iH M□ F' OD□CC□O' JG' LGM□GPG' GPGD' CFAB FC
A>' ? □ H□H ' CFG' KM?E' CA' F?(KGDG' LBC' CFG +GD@?H ' >□HN□H ' □C
DGKD□HCGN' □H' %AN MGE@ ' 0AMMGOC□AH' ? ' CFG' JAD(' A>' ?H' BH(HAJH' ?BCFAD'
GT□G' BKAH' □C ' ?HACFGD' KDANBOC□AH' A>'CFG' DG?C' iH M□ F' ND?@?C□ C'
DG OBGN' LE' CFG@' >DA@' CFG' J?MMGC' A>'#□@G' #□GO(' CCH?H M?CG ' □C' G'
DG@?D(R =' C' □ ' CD?N□C□AH?MME' ?□N' CF?C CFG ‹'7 ' , S D ;□ ' ?'
KM?E' A>' F?(KGDG@ ' ' @B C' ?0(HAJMGN G' >AD' @E GM>'CF?C ?HE' CD?N□-
C□AH' JABMN' F?PG' @ADG' JG□ FC' CF?H' CFG H?DDAJ @□HNGN' OD□CC□O □ @ ' A>'
CFG' iH M□ F' GN□CAD ' JF□OF' KDAOGGN□H ' JFAMME' AH' >?M G' KDG@□ G '
H?CBD?MME'C?(G M□CCMG' HAC□OG' A>' BOF' KDANBOC□AH ' >'□C□ ' LE' F?(KGDG'
□C @B C' LG' ?H' G?DME' JAD(I' G' (HAJ'HAC' JFGDG' CFG CD?N□C□AH□ ' CA'
<LG'>□ @HN' ?HN ' □HNGGN' CFG KM?E□ ' HAJ'KDGCCE' 0AH>□NGHCME' ? □ HGN' CA'
"ALGDC' +DGGHG' C' □ ' □HOMBNGN' □H' &D' %E0G8 ' GN□C□AH' A>'F□ ' JAD('
>AD' ?' DG? AH' CFB ' □PGH

Y

i'MKN ' H ' NP'M'L9MT' i'K ieJiKN i' NH'& 9PT+

:31&:3 # :&33 3+

%?DG @?(G ?'CDG K? 'CA'CFG'CAJH' A>' ?(G>□GMN
.BC' F□ 'KMGN G' AG 'CA'CFG'K□H>AMN'Y0

MM' CF□ ' LGFG?DN' CFDGG' J□CCE' EABH ' @GH
8#J ? ' "AL□H' AAN ' 0?DMGC' ?HN' 0A F H
□CF' CF?C' CFGE' G K□G' CFG' SAMME' K□HNGD
' FG' ?C' BHNGD' ?' CFADH

A J' CBDH' ? ?□H ' CBDH' ? ?□H ' ?□N' CFG' K□HNGD
AD' ?' JDAH ' J ?E' EAB' F?PG' AHG
AD' EAB' F?PG >AD ?(GH' CFG (□H 8 ' F□ F J ?E
HN' @?NG' ?' K?CF' APGD' CFG 0ADH

' CF?C' JGDG' ?' F?@G' ?□N' SAMME' "AL□H
G' LG□H ' CFDGG' ?HN' CFAB' LBC' AHG
#FG' K□HNGD' MG?KC' L?0(' CFGH' CF□DCE' AAN' >AAC
8#J ? ' CF□DCE' AAN' >AAC' ?HN' AHG

G' MG?HGN' F□ ' L?0(' >? C' BHCA' ?' CFADH
HN' F□ ' >AAC' ? ?□H C' ?' CAHG
HN' CFGDG' FG' >AB' FC' ?' MAH ' B@@GD8 ' N?E
' B@@GD8 ' N?E' A' MAH ' :
#□MM' CF?C' CFG□D' JADN ' AH' CFG□D' LDA?N' LBO(MGD '
GDG' LDA(G' >? C' □HCA' CFG□D' F?HN

AMN' CFE' F?HN ' FAMN' CFE' F?HN' ?□N' LAMN' "AL□H' AAN
HN' D?E' @GDDE' @GH' GPGDE' AHG
AD' CF□ ' □ ' AHG' A>'CFG' LG C' K□HNGD '
#F?C' GPGD' 'CDG□N' J□CF' JADN

HN' J□MC' CFAB' >AD ?(G' CFE' K□HNGD8 ' OD?>C
HN' M□PG' □H' CFG' DGGH' JAAN' J□CF' @G'W
‹ C' &□OF?GM@? ' HG C' @E' OAP8H?HC' OA@G ' ABC
FGH' GPGDE' @?H' ?CFGD ' F□ ' >GG8 I

=' I ' .?O(' ? ?□H ' EAB' >AAM□ F' CO?PGMMGD
AD' EAB' ?DG' JDAH ' ?HN' @?E' HAC' JGHN' CF□ ' J?E
" ' #F?C' JGDG' DG?C' F?@G' A J ' LE' @E' ABM' KDABN' □D

)G' LG' CFDGG' C?MM EGA@GH'?HN' CFAB' ?DC' LBC' AHG
A@GZ'J.G' J□MM >AD J?DN' NG KCCG A>'F□@' ; Z
Z 1 ;$G?K' CFG' NCCOF'AD' ' J□MM @?(G EAB' (K
F?C'0?HHAC'CFG' F□ F J?E' GDPG' EABD' CBDH
‹ .BC @B C' EAB' @?(G' ?' K?CF' APGD' CFG' OADHW
" ' FE' ?DC' CFAB' @?NW' N?DB C' CFAB' GHOABHCGD' CFDGG'W
G' ?DG' HA' L?LG ' @?H'MAA(' BKAH' ADDD' MC@L
! ' □DD?F
#FG'L□ G C' MC@L'F?PG' HAC' CFG CABCG C' FG?DC
GDG' EG' ?' AAN' ?' "ALCH' AAN'?HN' F□ 'CFDGG' @GDDE' @GH
8MM' NDCPG' EAB' L?O(' CFG ?@G' J?E' CF?C' EG'O?@G
.G' EG' @GH' EG' OADH' CA' GHOABHCGD' @G' ?MM' ?C' AHOG
.BC' LG' EG' 0 ;' GC ' ' ' $
ś5 HN' CDE' CFG ' 0$ '$ ' ' '
(' GDG' $ ' '$ $' ' '
& 'CFAB' ?DC' $ $ ' '0
#FAB' J□MM @□ FC8 C' LG' ?' OF?@K□AH' >AD' ?' D ;
.BC' G@KCE' PG GM ' F?PG' CFG' MABNG C' ABHN
HN' 0A J?DN 'KD?CCMG' @ADG' CF?H' @GH' A>' JADCF
! ' □DD?F'N?DG C' CFAB' CDE' @G'W
(' E ' □DD?F'CF?C' 'N?DG
Q%G ' $J' ' i 6 6 ';$ ',$ '
$' A J'HAJ'W J F?C'?DC' CFAB' NAJH'W
A@G' □D' '?@' HG C
0%$ ' $;' ' i 6 6 ';" ',$ '
"' A@G' □DD?F'HAJ'CA' @ G' K?DG' @G HAC
AD' 8MM' HAC' K?DG' CFGG
#FAB' ?DC' CFG CABCG C' OF?@K□AH' CF?C' GPGD' '
$?□N' F?HN 'BKAH
! ' A>C' EAB' □D ' LE' EABD' MG?PG ' EAB' MCG
, AB' HGPGD' EGC' M?□N' F?HN ' AH' @G
"' +GAD G' J□MC' CFAB' >AD ?(G ?(G>□GMN
HN' A' J□CF' @G'W
#J A' MCPGD□G ' J□MM ' □PG' CFGG' GPGDE' EG?D
HN' >ADCE' ODAJH ' F?MM' LG' CFE' >GG I
?DC CFAB'W I' CFB ' DGKMCG R
=' FE' ' ?@' +GAD G ? +DGGHG
#BG' MCG G@?H' CA' @E' (□H
FA' 0ADH ' CF?C' @GH' A>' BOF G CGG@' ? ' CFG G
FABMN' LDAA(' CFG' LD?PG ' A>' ?HE' CD?□CADAB ' QB□DG
, AB' A>' CFG' LGHOF' ?HN' EAB ' @E' >GMMA J >□GHN
G□ FLABD ' J G' BLSGOC ' ?MM' BHCA' CFG' (□H
G' ?DG' iH MC F' LADH' ?HN' CFGDG>ADG' iNJ J?DN8 ' >□GHN
)AJ8N' BHCA' F□@' GPGH' □H' ABD' @ACFGD8 ' JA@L
BD' @□HN ' CA' +AN ' ABD' FG?DC ' BHCA' ABD' (□H

BD' JG?MCF' ABD' FA@? G' ?HN' ABD' O?DO? G '
.G' ?MM (□H ' iNJ J?DN8 ' #FGH' □DD?F' JG' F?PG'
AOF□H 'MG>C' >AD' CD?□CAD ' LBC' ABD' JADN
FGCCGN' CA' L?CFG CFG@' □H' EABD' LMAAN ' ?HN' NCG'
?H C' EAB' LG>ADG' JG' GHN' EAB' ?HE' P□OCB?M I
#FG "□OF?DN' A>'CFG' DA@?HOG' F?' LGOA@G' □C □ ' CFB ' GGH ' CFG' iNJ ?DU'
A>' CFG' KM?E' #FG' JD□CGD' F?' KBTTMGN' &D' +DA G ' CFG' ?HC□QB?D□?H'
JOCF' CF□ ' 0F?H G'CFG' AAN' @?H' J□ GME' ?D' B□H ' CF?C' "ALCH' AAN' ?HOZ
iNJ?DN') ' JFA@' FG' BKKA G ' CA' LG' (□H ' A>' CFG' K□GOC' N□N' HAC' MCG'
?C' CFG' ?@G' C□@G' G' OAHOMBNG ' CFGDG>ADG' CF?C' CFG' ND?@?' F?'
M□ FC' >ABHN?COAH □H' F□ CADE' G' QB□CG ? DGG' J□CF' F□@' H' CFG' OGHG'
LG>ADG' CFG' SB C□OG ' +GAD G ? +DGGHG' @?(G' &?HHG□H ' G?C' F□ ' 0A@-
@□ □AH' G?M ' ?HN' ?MM' #F□ '□ ' ?H'□HO□NGHC' A>'CFG' AMN' DA@?HOG' JFOCF'
J? ' CD?H >GDDGN'? ' ABD' DG?NGD ' J□MM' DGOAMMGOC' CA' CFG' KM?E' A>' =' □D' 0AFH'
MNO? CMG'I' ?HN' J? ' ?' KD?OC□O?M SA(G' JFOCF' "ALGDC' +DGGHG' F□@ GM>'
KM?EGN' A>>' BKAH' ?H' ?KK?D□CAD' >CGD' CF□ ' >G?C CFG' .□HNGD' A>' ?(G-
>□GMN' AG ' >AD J?DN' J□CF' F□ ' OMBL' OF□P?MDE' ' CFG' ODAJH□H ' JAD('A>'
A@G' CD?C? G@ ' FG ' (□MM ' AHG' A>' CFG' DGLGM' MADN ' ?HN' C?(G ' CFG' ACFGD
CJA' KD□ AHGD ' FG >□ FC ' ? ' J G' F?PG' GGH ' J□CF' "ALCH' AAN ' O?DMGC'
?HN' 0AFH' ' ?HN' FG' ABHNME' LG?C ' CFG' FAG@?(GD ' A>' .D?N>ADN ' H' CFG'
KDG GHOG' A>' □H ' iNJ?DN' ?HN' CFG' □H ' A>' OAC ' J'FA' ?DG' 0A@G' □H'
N□ B□ G' CA' GG' CFG' DB C□O' FGDA' +GAD G ? +DGGHG' A>'0ABD G' ?DD□PG ' ?C'
D□OFG ' ?HN' FAHABD' ?HN' ? ' NBD□H ' CFG' KM?E' J G' F?PG' A00? □AH?M'
M□@K G ' A>' F□ ' LG□H ' □H' MAPG ' CFG' (□H ' DGJ?DN ' F□@' ?M A' J□CF' F□ '
@□ CDG R

=' 1 O ' +GAD G ? +DGGHG' □PG' @G CFE' F?HN
#FGD□ ' HAHG□H' iH M?HN' CF?C' F?MM' NA' CFGG' JDAH
iPGH' >DA@' @E' OABD□' '0?@G' CA' GG CFE GM>
HN' HAJ' ' GG' CF?C>?@G' KG?('HAB' FC' LBC' CD?CF
! ' FB@LME' CF?H('EABD' DAE?M' @?SG CE
#F?C' JF□OF' 'N□N' ? ?□H C' CFG' G?DM' A>' GHN?M
C' J? ' LBC' ? BLSGOC8 ' NBCE' CA' F□ ' APGD□ H
HN' CFGDG>ADG' MCCMG' @GD□C ' BOF' AAN' JADN
1 O ' .BC' GDG' ' A' 8MM' D?OG' CFGG' JCF' AAN' NGGN

' CFG =' #FG?CDB@ AGC?DB@ I A> !NJ?DN FMM K ' JG F?PG CFG >AMMAJH ' HAC OG A> CFG ?BCFAD FK A> CF ' KM?E R =' "ALGDC +DGGH ' AHG A> CFG ? CAD?M AHHGC @?(GD ' A> B ' !MT?LGCF8 ' C@G ' OAH-CG@KAD?DE JCF %D ' $AN G ' JCF JFA@ FG J? ' ? AO?CGN H CFG JDCH ' A> GPGD?M OA@GNG ' H?@GME ' 8 #FG $?J ' A> ?CBDG 8 8 $?NE M@AHE 8 8 $LGD?MCE ?HN DAN ?MCE 8 ?HN ?' @? QBG O?MMGN < $B@ ' H?M?S8 LG NG ' JFOF FG JDACG ?MAHG CFG OA@GN G ' A> < DD?D' . ?OAH8 ?HN < ?D' !@@G 8 I' $?H L?HG OAHCD?NOC ' CF ' C?CG@GHC ' ? ' >?D' ? ' DG ?DN ' +DGGHG8 '? AO?CAH JCF $AN G ' LBC FG ?N@C ' CFG ? GDCAH DG ?DN H ' =' D?D' . ?OAH I' ?HN ?E ' HACFH ' A> =' ?D' !@ I' &D ' %EOG CFH(' CF?C C ' KA LMG CF?C +DGGHG @ FC F?PG JDCCGH =' ?D' !@ I' ,' ' MG? ?HCG A@GNG A> ?DG' !@ ' CFG &MMGD8 ' %?B FCGD A> &?HOFG CGD ' JCF CFG $APG A> MM?@' CFG AHQBGDAD ' C' J? ' BHNDE C@G ' ZBLMQBGME ?OCGN H CFG AHABD?LMG CCG A> $AHNAH ' LE CFG DF C AHABD?LMG CFG $ADN CD?H G F ' GDB?HC I' J? ' KBL-MF FGN H 43 ' A LME CF ' @?E HAC F?PG LGGH CFG >D C GNCAH ' ?HN CFG KM?E @?E LG ? ' G?DME ? ' CFG C@G A> +DGGHG ' LBC A> CF ' JG ?DG DG?CME HOMHGN CA NABLC ' #FG PGD >O?CAH NAG ' HAC A>CGH G FLC CF?C ?HCQB?CGN CDBOCBDG JFOF JG AOO? AH?MME @GGC JCF H +DGGHG ?HN F ' OAHCG@KAD?DG ' #FG ND?@?CO @APG@GHC ' @ADG MPGME ?HN (M>BM CF?H JG >HN H CFG OAHNBOCG JCFABC A>>GHOG CA KDAKDGCE ' F?C OA@GNE CFGDG ' H CC ' ?MCA GCFGD P?KN ?HN DNOBMAB ' $GC B ' F? CME DBH CFDAB F CFG KMAC ' P H ' ?' >GJ G CD?OC

#FG CADE O?DDG ' B ' L?O (' CA CFG N?E ' A> MM?@' CFG AHQBGDAD ' #FGDG ' ?' CMCH @?COF H JFOF CFG (H ' ' P OCAD ' LBC FG F? ' AH ?' : BNNGH =' O? C ?J?E F ' C?>> I' ?HN MG>C CFG >GMN ' $BLGO (' ?' %?H F (H FC F? ' LA@GZBKAH F ' FGMN CFG KOCBDG A> ?' LG?BC>BM JA@?H ' ?HN CFG (H ' F? ' >?MMGH H MAPG JCF CFG KOCBDG ' JFOF ' ?' KADCD?C A> .M?HOFG ' ?' N?B FCGD A> CFG H ' A> %GH@?D(' #FG ?@ADAB ' @AH?DOF @@@GN?CGME NGMG ?CG ' F ' ?BCFADCE CA OGDC?H MADN ' ?HN GC ' ABC >AD CFG %?H F OABDC ' CA LGFAMN ?HN ALC?H CFG ALSGOC A> F ' K? AH ' #FG @MMGD ?HN F ' N?B FCGD ?D' !@ ' HAJ KDG GHC CFG@ GMPG ' G ' ' HA DG?M @MMGD ' LBC D' #FA@? ' +ANN?DN G FCE OD0B@ C?HOG ' OA@KGMMGN F@ CA CF ' OABD G A>M>G ' ?HN F ' N?B FCGD BL@C ' CA FGD OF?H G A> >ADCBHG JCF ?' LGOA@H ' DG H?CAH ' #FG >?CFGD CFB ' OABH GM ' CFG @?NGH R

=' ' #F?H(' @E NG?D N?B FCGD ' CFG G ' CFE KMG? ?HC JADN
#D?H >GD @E ABM HCA ?' GOAHN FG?PGH
HN H CFE GCCMGN @HN ' @E SAE ' OAH C
& E C?CG DGPP8N ' ?HN ' H >AD@GD KM FC
MCFAB F ABD ABCJ?DN KA@K LG CFB ' ?L? 8N
HN CFD?MM8N CA ND?N H ' C?EMG ' A> CFG JADMN
$GC B ' DGC?H CFA G FAHABD?LMG @HN '
#F?C M?CGME APGDH8N ABD BKGDAD C?CG
FGDGH CDBG GHCDE ' CFG AHME @G?H
#F?C @?(G ' B ' N>>GD >DA@ CDBG @MMGD ' LAD?
#FAB F JG G KGOC HA (H FCME NGMO?CG
AD CFD C H ABM >AD >AD@GD APGDGH HCE

, GC @?E ABD @HN ' ? ' F FME OADH CA CAAK
#A L? G NG DG A>PBM ?D8 ' JADMNMHG
' >' JG JGDG H ABD KDGOGNGHC J?E
HN ' MAPGME N?B FCGD ' HOG CFE EABCF>BM EG?D '
& B C HGGN ' ?N@C ? ' EABH ' ?>>GOCAH
HN CF?C JGGC MAPG BHK?DC?M KGDOGPG '
GD N?HCE BLSGOC ' CFDAB F GPGDE K?DC
H OFG>' DGOGPG CFG G MG AH ' >DA@ @E MK
#FG CDBG N OAPGDGD ' A>?' PD H8 ' NBG
AJ' DGQB CG ' HAJ' CF?C ' (HAJ' CFE @HN
A@GCFH ' HOMH8N CA >?PABD & ?HPMG8 ' BC
' GHCMG@?H ' CFE MAPGD H KDACG C
HN CF?C CFAB @?E8 C HAC LG LE MAPG NGOGP8N
. BC CDE F ' @G?HH ' >C >AD CFE NG GDC
H KBD BC A>?MM ?@ADAB ' NG DG
"G ?DN CFHG FAHABD ' $GC HAC PGFG@GHC F
AD' G?DHG C PLJ ' @KADCH ' >GDPGHC MAPG
"GHNGD CFGG BLSGOC CA CFG) 2-+:' A>MB C
AD CF?C ' CD?H >AD@8N CA >AD@GD JGGC NGM FC
MM LDH ' CFE LANE ?HN CFE ABM CA F?@G
F? CG CFAB FC ' ?HN @ANG C OAHPGD ?CAH
>' KDAA>' CA (GGK ABC ?MM GHOF?HCH ' PAJ
) ?H F ' >ADOGN CG?D ' ?HN KCC>BM ? KGOC
DG CFGE CF?C @?(G NG>AD@GN M?NG ' >?D
AAD JDGCOF' 0 ?HN BOF GHCOH ' @GH
#F?C GG (' A>?MM LBC AHME KDG GHC D?OG '
F?MM ' H KGD GPGD?HOG A>?' P D H8 ' NBG
DG>GD CFG @A C DG>B GD ' CA CFG OFAOG
> BOF ?' ABM ? ' EGMNGN JF?C CFGE CFAB FC I

BD DG?NGD ' JMM O?DOGME CFH (' CF?C CFG OA@@AHKM?OG ' A>' CF ' PGDE MAH ' KGGOF ?PABD A> F?(KGDG ' #FG @MMGD8 ' @?H HAJ' KDG GHC ' F@ GM>' ? ' ?' BCAD CA >?D ! @ ' ?HN F?PH ' MG?DHC CFG HGOG CE >AD OAHOG?M@GHC ' FG D?CFGD GP?NG ' CF?H DGKBM G ' F ' ?NP?HOG ' . BC FG ' HAC MAH ' NG CHGN CA GQBPAO?CG JCF CFG OMAJH ' &?HPMG ') ?MH ' >ADN ' ?HN &ABHCHGE ' ?MM MADN ' A> MM?@8 ' OABDC ' OA@G GK?D?CGME ' N B GN ' CA JAA CFG @?NGH ' &?HPMG8 ' BC ' ? ' JG F?PG MG?DHC LE FGD >?CFGD8 ' KGGOF ' J? ' A@GJF?C >?PABDGN ' G APGDFG?D ' CFG CJA ACFGD MADN ' OA@@BHO?CH ' CFGD MAPG >AD CFG ?@G ALSGOC ' ?HN ? DGGH ' CA BHCG CFGD G>>ADC ' CA ALC?H FGD ' MG?PH ' CFG DG C CA OF?HOG ' &?HPMG ' A> OABD G ' LGOA@G ' SG?MAB ' ?HN FG CFB ' DGKDA?OFG ' M ' @ CDG R

=' # JA GHCMG@GH ?CCGHNH ' AH NB (G MM?@
&ABHCHGE ?HN) ?MH >ADN ? ' ' FG?DN CFG@ H?@8N
>CC@G ' DG ADC CA GG ?HN CA LG GGH
) ?M (H ' CFG CDGGC >? C LE CFE >?CFGD8 ' NAAD
FA G M?HOH ' GEG ' BK CA J HNAJ ' O? C
+PG CG CG ' A>CFGD @? CGD 8 ?@ADAB ' FG?DC
#F ' ! @ ' ' HACGN ?HN CAA @BOF C?M (8N AH
A@G GG C JCFABC @ CDB C A>MM
CFGD ' CFGDG ?DG CF?C ' OADHH ' DH CFGDG?C
HN ?CF ' CFGDG AG ' CFG @MMGD8 ' N?B FCGD8 ' JAAGD
F @G ' JFA@ OFG>ME ?HN @A C A>?MM C NACF OAHOGDH
#A KGHN @E CG H DG>' ?HN PG ' @E ABM
#A CFH (' @E MAPG FABMN LG DGJ?DNGN CFB
HN >AD CFE ?(G ?LFAD ?MM JA@?H (HN I

#FG MAPGD NGK?DC ' H ?' D? G ' ?HN &ABHCHGE OA@G ' CA KDG>GD F ' BC '
#FG >? D' ! @' DG AMPG ' CA PHNO?CG FGD OAH C?HOE ' ?HN CA CF ' ?N@DGD '
CFGDG>ADG ' FG >G H ' NG?>HG ' H ?' BL GQBGHC OGHG) ?MH >ADN
?KKDA?OFG ' FGD ' ?HN CA F@ ' BKAH CFG ?@G KDHOKMG A> CD?C? G@ '
FG ?>>GOC ' CA LG LMHN ' =' LE @ F?K AH ?' BNNGH I' &ABHCHGE ?HN

) ?M□H >ADNˢ @GGCˢ ?HNˢ QB?DDGMˢ LBCˢ CFG□Dˢ @BCB?Mˢ ?OOB ?C□AHˢ LD□Hˢ ?LABCˢ CFGˢ OAHP□OC□AHˢ CF?Cˢ CFGˢ M?NEˢ F?ˢ NGOG□PGNˢ CFG@ˢ LACFˢ #FGˢ ?OC□AHˢ ?NP?HOGˢ LEˢ &?HP□MGˢ OA@KM?□H□Hˢ CAˢ CFGˢ @□MMGDˢ A>ˢ F□ˢ N?B FCGD8ˢ OAHNBOCˢ ?HNˢ &ABHCHGEˢ ?HNˢ) ?M□H >ADNˢ ?KKG?Dˢ AHˢ CFGˢ OGHGˢ CAˢ NG@?HNˢ A>ˢ CFGˢ @□MMGDˢ FAJˢ□Cˢ □ˢ CF?Cˢ !@ˢ F?ˢ LGOA@Gˢ LM□HNˢ ?HNˢ NG?>ˢ #FGˢ @□MMGDˢ DGKM□G R

=ˢ &?DDEˢ +ANˢ >ADL□Nˢ Fˢ ?PGˢ GHCˢ >ADˢ FGDˢ HNGGNˢ FGˢ F?CFˢ (GKCˢ FGDˢ OF?@LGDˢ CF□ˢ CFDGGˢ N?Eˢ Cˢ JGDGˢ HAˢ M□CCMGˢ D□G>ˢ CKˢ @Gˢ □>ˢ□Cˢ FABMNˢ LGˢ A ˢ #F□ˢ □ˢ +AN8ˢ SBN @GHCˢ >ADˢ FGDˢ CDG?OFGDE I

!@ˢ □ˢ MGNˢ AHˢ LEˢ CFGˢ @□MMGD8ˢ @?Hˢ JFA@ˢ FGˢ F?ˢ KGD B?NGNˢ CAˢ ? □Cˢ FGDˢ □Hˢ @?□HC?□H□Hˢ CFGˢ KDGCGHOGˢ FGˢ F?ˢ ? B@GNˢ GDˢ CD?C? G@ˢ □ˢ BOOG >BMMEˢ BKKADCGNˢ CAˢ CFGˢ D□G>ˢ A>ˢ FGDˢ >?CFGDˢ ?HNˢ CFGˢ OAHP□OC□AHˢ A>ˢ CFGˢ DG Cˢ &?HP□MGˢ G OM?□@ R

=ˢ .ACFˢ LM□HNˢ ?HNˢ NG?>ˢ CFGHˢ FGˢ □ˢ HAˢ J□>G>ADˢ @G HNˢ M?Nˢ ˢ ?@ˢ Aˢ AANˢ AOO? □AHˢ □ˢ F?KKGH8N I

&ABHCHGEˢ ?Mˢ Aˢ □PGˢ FGDˢ BKˢ J□CFˢ OAH □NGD?LMGˢ □HN□>>GDGHOGˢ LBCˢ) ?M□H >ADNˢ DG AMPGˢ CAˢ C?Eˢ ?HNˢ KDA GOBCGˢ F□ˢ MAPGˢ C□Mˢ B KGOC□Hˢ CFGDGˢ @?Eˢ LGˢ ?ˢ =ˢ>G□ HGNˢ □HPGHC□AH Iˢ &?HP□MGˢ GG(ˢ ?HACFGDˢ MAPG Rˢ !MHGDˢ CFGˢ N?B FCGDˢ A>ˢ ?ˢ JG?MCFEˢ @GDOF?HCˢ LBCˢ) ?M□H >ADNˢ NGOM?DGˢ CF?Cˢ HAˢ @□ >ADCBHGˢ O?Hˢ ?MCGDˢ CFGˢ OAH C?HOEˢ A>ˢ F□ˢ ?>>GOC□AHˢ ?HNˢ !@ˢ MG?DH□Hˢ CFGˢ >?□CFMG HG ˢ A>ˢ FGDˢ >AD@GDˢ MAPGDˢ N□ OMA Gˢ CFGˢ OAHNBOCˢ FGˢ F?ˢ KBD BGN

%BD□Hˢ CFGˢ KDA DG ˢ A>ˢ CF□ˢ CFGˢ @?□Hˢ KADC□AHˢ A>ˢ CFGˢ KMACˢ JGˢ F?PGˢ ?ˢ BOOG □AHˢ A>ˢ OGHGˢ ?MCGDH?C□Hˢ J□CFˢ CFA Gˢ □Hˢ JF□OFˢ CFGˢ @□MMGD8ˢ N?B FCGDˢ □ˢ OAHOGDHGNˢ G F□L□C□Hˢ CFGˢ F□ CADEˢ A>ˢ CFGˢ MAPGˢ ?NPGHCBDGˢ A>ˢ CFGˢ N□ B□ GNˢ (□Hˢ ?Cˢ CFGˢ %?H□ Fˢ OABDCˢ □MM□?@ˢ □ˢ N□ ?KKA□HCGNˢ □Hˢ CFGˢ DG?M□CEˢ A>ˢ CFGˢ M?NEˢ J□CFˢ JFA Gˢ K□OCBDGˢ FGˢ LGO?@Gˢ GH?@ABDGNˢ .BCˢ FGˢ ?ˢ DG?N□MEˢ >?MMˢ □Hˢ MAPGˢ J□CFˢ &?D□?H?ˢ ?ˢ JGN□ Fˢ O?KC□PGˢ CFGˢ OFA GHˢ >?□Dˢ A>ˢ CFGˢ &?DQB□ˢ A> $BLGO(ˢ .M?HOFGˢ FAJGPGDˢ CFGˢ %?H□ Fˢ (□H 8ˢ N?B FCGDˢ >?MMˢ □Hˢ MAPGˢ J□CFˢ □MM□?@ˢ ?HNˢ JGˢ F?PGˢ CFGHˢ ?ˢ KDGCCEˢ BOOG □AHˢ A>ˢ SG?MAB □Gˢ ?HNˢ QB?DDGMˢ JF□OFˢ CGD@□H?CGˢ □Hˢ □MM□?@ˢ O?DDE□Hˢ A>>ˢ CFGˢ KD□HOGˢ CAˢ !H M?HNˢ @? (GNˢ ?HNˢ N□ B□ GNˢ ?ˢ &?D□?H?ˢ *KAHˢ CFG□Dˢ ?DD□P?Mˢ □Hˢ !H M?HNˢ CFGˢ (□Hˢ ?HNˢ F□ˢ >?□Dˢ OA@K?H□AHˢ >?MMˢ □HCAˢ CFGˢ F?HNˢ A>ˢ A@Gˢ L?DAHˢ JFAˢ ?DGˢ □Hˢ ?D@ˢ #FGˢ @□ C?(Gˢ ?DGˢ A>ˢ OABD Gˢ OMG?DGNˢ BKˢ ?HNˢ CFGˢ □H ˢ A>ˢ %GH@?D(ˢ A>>GDˢ F□ˢ N?B FCGDˢ CAˢ CFGˢ □Hˢ A>ˢ !H M?HNˢ JFAˢ F?ˢ DG B@GNˢ F□ˢ C?CGˢ Gˢ F?ˢ CAˢ NGO□NGˢ BKAHˢ CFGˢ OM?□@ˢ A>ˢ CFGˢ >?□Dˢ !@ˢ ?HNˢ A>ˢ !MHGDˢ CAˢ CFGˢ F?HNˢ A>ˢ &?HP□MGˢ #FGˢ OGHGˢ AHˢ CF□ˢ AOO? □AHˢ □ˢ KGD 8F?Kˢ CFGˢ LG Cˢ K? ? Gˢ □Hˢ CFGˢ KM?Eˢ R

=ˢ1 ˢ ˢ MAP8Nˢ CF□ˢ &?HP□MGˢ Aˢ @BOFˢ CF?Cˢ C□Mˢ @GCFAB FCˢ FGHˢ FGˢ J?ˢ ?L GHCˢ N□Nˢ KDG GHCˢ CAˢ DKGˢ #FGˢ >AD@ˢ ?HNˢ >G?CBDGˢ A>ˢ CF?Cˢ OABHCGH?HOGˢ F□OFˢ ˢ N□Nˢ FD□HGˢ ?Hˢ □NAMˢ □Hˢ @Eˢ FG?DC HNˢ HGPGDˢ OABMNˢ ˢ GGˢ ?ˢ @?Hˢ @GCFAB FC #F?Cˢ GQB?MM8Nˢ &?HP□MGˢ □Hˢ @Eˢ K?DC□?Mˢ GEG ADˢ) -(ˢ CFGDGˢ ?HEˢ MAPGˢ LGCJGGHˢ Bˢ MA C

. BCˢ CF?Cˢ ˢ FGMNˢ CFGˢ ?@Gˢ □Hˢ F□ Fˢ DG ?DN * HC□Mˢ DGK?□Dˢ A>ˢ A@Gˢ BHCAˢ ABDˢ FAB G >ˢ JFA@ˢ @Eˢ &?HP□MGˢ DGJˢ CFB ˢ SG?MAB ˢ □>ˢ FGˢ CAA(ˢ G OGKC□AHˢ ˢ PAB0F ?>8N #Aˢ FG?Dˢ CFG@ˢ KG?(ˢ ADˢ ?Jˢ CFG@ˢ JFGHˢ CFGEˢ O?@G Hˢ JF□OFˢ ˢ CD?□ FCˢ CAA(ˢ ADNGDˢ J□CFˢ @E GM> #Aˢ ?PA□Nˢ CFGˢ ODBKMGˢ A>ˢ F□ˢ OAH O□GHOG . Eˢ OABHCGD>G□C□Hˢ CF?Cˢ ˢ HG□CFGDˢ ?Jˢ HADˢ FG?DN HEˢ J?Eˢ CAˢ D□Nˢ D?Eˢ F?HNˢ A>ˢ CFG@ MMˢ CF□ˢ ˢ N□Nˢ CAˢ (GGKˢ @Eˢ &?HP□MG8ˢ MAPG F□OFˢ FGˢ BH(□HNMEˢ GG(ˢ >ADˢ CAˢ DGJ?DN ˢ HNˢ N□Nˢ @Eˢ !@ˢ CAˢ (GGKˢ FGDˢ >?□CFˢ J□CFˢ @Gˢ %□ G@LMGˢ CF?Cˢ FGˢ HG□CFGDˢ FG?DNˢ HADˢ ?JW ?DNAHˢ @Gˢ JGGCˢ !@ˢ >ADˢ ˢ ?@ˢ AHMEˢ CF□HG 1 ˢ $?Eˢ A>>ˢ CFEˢ F?HNˢ N□ MAE?Mˢ?ˢ CFAB8ˢ ?DC ADˢ F?MCˢ CFABˢ F?PGˢ KA G □AHˢ A>ˢ @Eˢ MAPG #F?Cˢ O?H Cˢ Aˢ >□HGMEˢ F□>Cˢ CFEˢ @?CCGDˢ A>> BCˢ O? Gˢ ˢ F?Nˢ LGGHˢ LM□HNˢ ?HNˢ OABMNˢ HACˢ GG ˢ A>CGHC□@Gˢ BOFˢ P□ □C?C□AHˢ >?MM #F?Cˢ KMG? GCFˢ +Anˢ JF□OFˢ ?MMˢ CF□Hˢ NACFˢ N□ KA G FABMN Cˢ CFABˢ >AD ?(Gˢ @Gˢ □Hˢ DG ?DNˢ A>ˢ CF?Cˢ Wˢ CGMMˢ CFGGˢ &?HP□MGˢ F?N Cˢ CFABˢ LGGHˢ LM□HN D NG?>ˢ ADˢ NB@Lˢ ADˢ GM Gˢ JF?Cˢ □@KGN□@GHCˢ &□ FCˢ LG>?MMˢ CAˢ @?Hˢ !@ˢ JABMNˢ F?PGˢ MAP8Nˢ ?HNˢ (GKC HNˢ FAHABD8Nˢ CFGGˢ EG?ˢ LG 8Nˢ □>ˢ JG?MCFˢ F?Nˢ >?M8N ADˢ CFEˢ DGM□G> ˢ AD □PGˢ @Gˢ JGGCˢ !@ 1 ˢ NAˢ >AD □PGˢ CFGGˢ J□CFˢ @Eˢ FG?DC Hˢ JMMˢ >AD GCˢ CFGGˢ CAAˢ □>ˢ O? Gˢ ˢ O?H . BCˢ HGPGDˢ KG?(ˢ CAˢ @Gˢ HADˢ GG@ˢ CAˢ (HAJˢ @G ˢ #FGHˢ >?DGJGMMˢ >DA C GMMˢ >?DGˢ ?ˢ JGHOFˢ CF?Cˢ J□MM AJˢ !MHGDˢ ˢ ?@ˢ CFEˢ AJHˢ @Eˢ □DM 1 ˢ &□HGˢ &?HP□MGWˢ CFABˢ HGPGDˢ F?MCˢ LGˢ ˢ Aˢ NGCG Cˢ CFEˢ P□MM?□HE #F?Cˢ JF□M Cˢ ˢ M□PGˢ ˢ J□MMˢ ?LFADˢ CFEˢ OA@K?HE I #F□ˢ □ BGˢ A>ˢ CFGˢ OAHCG Cˢ KDANBOGˢ Hˢ □H BM?Dˢ G>>GOCˢ BKAHˢ CFGˢ □Hˢ A>ˢ !H M?HNˢ Gˢ NGCGD@□HGˢ CF?Cˢ =ˢ JA@GHˢ ?DGˢ HACˢ GHGD?M GP□M ˢIˢ ?HNˢ Aˢ FGˢ ?OOGKCˢ CFGˢ F?HNˢ A>ˢ .M?HOFGˢ) ?M□H >ADNˢ □ˢ BH□CGNˢ CAˢ CFGˢ >?□Dˢ !@ˢ ?HNˢ □Dˢ #FA@?ˢ +ANN?DNˢ □ˢ DG CADGNˢ CAˢ F□ˢ D?H(ˢ ?HNˢ >ADCBHG C□ˢ G OGGN□H ME N□>>□OBMCˢ >ADˢ Bˢ CAˢ BHNGD C?HNˢ FAJˢ ?ˢ @?Hˢ A>ˢ DG?C ?L□M□CEˢ M□(Gˢ #□GO(ˢ KGD>GOCMEˢ OAHPGD ?HCˢ J□CFˢ CFGˢ ND?@?C□Oˢ ?DCˢ ?HNˢ CEMGˢ A>ˢ FZ(KGDGR A@GC□@Gˢ A□Hˢ >?Dˢ LGEAHNˢ F?(KGDG8ˢ AJHˢ OABHCDE@GHˢ □Hˢ ABHNˢ ?ˢ JGMMˢ ?ˢ GMGP?CGNˢ OD□C□O□ @R FABMNˢ >?HOEˢ CF?Cˢ ?ˢ KM?Eˢ M□(Gˢ CF□ˢ OABMNˢ F?PGˢ LGGHˢ JD□CCGHˢ LEˢ ABDˢ DG?Cˢ KAGCˢ F?C-GPGDˢ @GD□Cˢ □Cˢ KA G Gˢ ?HNˢ □Cˢ □ˢ OGDC?□HMEˢ □Hˢ A@Gˢ DG KGOCˢ ?ˢ M□PGMEˢ ?HNˢ K□D□CGNˢ KGD>AD@?HOGˢ ?D□ Gˢ ABCˢ A>ˢ CFGˢ O□DOB@ C?HOGˢ CF?Cˢ CFGˢ ?BCFADˢ F?Nˢ AANˢ @ANGMˢ LG>ADGˢ F□@ˢ .BCˢ JGˢ MAA(ˢ □Hˢ P?□Hˢ >ADˢ ?MMˢ CF?Cˢ GCˢ F?(ˢ KGDGˢ Aˢ F□ Fˢ ?LAPGˢ F□ˢ OAHCG@KAD?D□Gˢ ˢ F□ˢ J□Cˢ F□ˢ FB@ABDˢ F□ˢ KAGCDEˢ F□ˢ KF□MA AKFEˢ F□ˢ □HC□@?CGˢ (HAJMGN Gˢ A>ˢ @?Hˢ F□ˢ G QB□ □CGˢ @GCFANˢ OGHGˢ BOFˢ ?ˢ CFG Gˢ K? ˢ LG>ADGˢ ABDˢ GEGˢ M□(Gˢ CFGˢ CD□O(ˢ A>ˢ CFGˢ >?HCAOO□H□ˢ #FGDGˢ □ˢ HACF□Hˢ A>ˢ P□C?M□CEˢ □Hˢ CFG@ˢ CFGE

=ˢ A@Gˢ M□(Gˢ F?NAJ ˢ Aˢ NGK?DC I

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) ' >D C (HAJH GN□C□AH A>' CF□ ' = OA@GNEI' □ ' CF?C A>')= 8S= ' @A C KMG? ?HC A@GNE A>' &BOGNADB ' CFG □H ' AHHG A>')?MGHC□?' ?HN @?N□HG CFG □H ' %?B FCGD A>' DD? AH' □CF CFG @GDDE AH-OG□C ' A>' &AB G I' #FGDG ?DG DGKG?CGN DGKD□HC 'A>' CF□ ' KM?E BK CA 431 ' NGHAC□H ' ?H G CD?ADN□H?DE KAKBM?D□CE ' ?HN ' JF?C □ ' @ADG DG@?D(?LMG ' CFG K□GOG □ ' DGP□PGN ?>CGD CFG "G CAD?C□AH ' ?HN CFG GN□C□AH LG>ADG B ' A>' □ ' =' @KM□>EGN J□CF HGJ' NN□C□AH ' ? ' □C J? ' OCGN LG>ADG CFG □H 8 ' &?SG C□G ?C F□CG F?MM AH FDAPG BHN?E H□ FC I' ' @ADG DBNG ' □H?DC□>□O□?M ' BHKAGC□O?M ' ?HN ?MCA GCFGD G>>GCG KGD>AD@?HOG CFG !H M□ F ND?@?' O?HHAC ' JG CF□H(' G F□L□C ' AKBM?D□CE ' FAJGPGD ' □ ' HAC ALC?□HGN LE @GDG ?OO□NGHC ' &GN□AOD□CE ?HN KA □C□PG CBK□N□CE J□MM A>CGH OA@@?HN □C4 LBC □H CFG O? G A>'=' &BOGNADB ' I' □C ?KKG?D ' CA B ' CF?C CFG K□GOG J? ' G KDG ME ?N?KCGN >AD ?' PGDE OA@@AH ?BN□GHOG ' F□M C CFG F□ FG C ?HN CFG LG C GNBO?CGN A>'CFG M?HN JGDG O?KC□P?CGN LE F?(KGDG ?HN 0AH AH ' CFGDG @B C HGOG ?D□ME F?PG LGGH DBNG >?DOG ' ?HN @GMAND?@? ' >AD CFG?CDG ' MAJGD CF?H CFG +MALG ?HN .M?O(' >D□?D ' #FGDG JGDG CDAMM□H ' OA@K?H□G ' CAA ' JFA □H @?HE O? G ' JGDG BH?LMG CA KDAOBDG OAK□G ' A>' CFG LG C KM?E ' ?HN JFA JABMN SB CME CF□H(' CF?C ACFGD J?DG ' CF?H KAGCDE ?HN KF□MA AKFE JABMN LG NG@?HNGN □H CFG L?DH A>' CFG ?MGFAB G AD □H CFG F?MM A>' CFG QB□DG ' G F?PG ?' OBD□AB ' G ?@KMG A>' CFG MAH NBD□H ' KAKBM?D□CE A>' =' &BOG-NADB I' >CGD CFG BKKDG □AH A>' CFG CFG?CDG ' □H 4/ ' OM?HNG C□HG KGD>AD@?HOG ' □H $AHNAH JGDG KBC NAJH LE KDAPA C @?D F?M ' ?HN CDAAKGD ' .BC □H CFG OABHCDE CFG J?HNGD□H ' KM?EGD ' A@GC□@G ' N?DGN CA M□>C CFG□D FG?N ' ?HN ? ' M?CG ? ' 453' ?' OA@K?HE JGHC ?LABC KM?E□H ' ,' &BOGNADB I' #FGE F?N ?OCGN □H GPGD?M P□MM? G ' □H CFG HG□ FLABD-FAAN A>' >ADN ' LBC ' BKAH CFG AOO? □AH A>'□C ' KGD>AD@?HOG ?C □CHGE ' ?H ?OO□NGHC AOOBDDGN ' LE JF□OF GPGD?M KGD AH ' MA C CFG□D M□PG ' ?HN ACFGD ' JGDG JABHNGN ' ' K?@KFMGC □@@GN□?CGME ?KKG?DGN >DA@' CFG KGH A>' ?H >ADN N□P□HG ' FAJ□H ' CF?C CF□ ' O?M?@□CE) ? ' ?H G ?@KMG A>' CFG %□P□HG PGH G?HOG ? ?□H C C? G KGD>AD@?HOG ' .BC =' &BOG-NADB I' ? ' JG F?PG GGH ' F?N ?' F□ FGD KAKBM?D□CE □H DG GDPG ' C J? ' DGP□PGN >AD CFG GHCGDC?□H@GHC A>' CFG □H 8 ' &?SG CE ' CFG C? CG ' A>' JFA G OABDC JGDG KDGCCE @BOF BKAH ?' MGPGM J□CF CFA G A>' CFG □CHGE KG? ?HC ' ?HN ' LM?H(GC @?(GD ' ?HN ' JF?C □ ' HAC CFG MG? C JAHNGD>BM K?DC □H CFG F□ CADE A>' CF□ ' OA@GNE ' ='PGDE NGMGOC?LMG ?HN >BMM A>' OAH-OG□CGN @□DCF I' A@G AHG D□ G ' BK ?HN ?E ' □C □ ' JD□CCGH LE F?(KGDG ' #FG CD?N□C□AH □ ' F?HNGN NAJH □H AMN O?C?MA BG ' ?HN CFG +GD@?H ' ?KKME CFG@ GMPG ' GD□AB ME CA N□ OB ' CFG KA□HC ' JFGCFGD ?' KM?E JF□OF □ ' CAA □MME CA LG ? OD□LGN CA ?HE (HAJH JD□CGD A>'CFG C□@G ' @□ FC HAC LG ?' EABCF>BM KGD>AD@?HOG A>'CFG DG?C KAGC F□@ GM>

#A ?CCG@KC ?HE NGC?□MGN ?H?ME □ ' A>' CFG CADE A>' =' &BOGNADB ' I' JABMN LG ?' J? CG A>' C□@G ' &BOGNADB ' CFG D□HOG A>')?MGHC□?' F? ' FG?DN A>' CFG LG?BCE A>' @?N□HG ' CFG D□HOG ' A>' D? AH ' ?HN FG DG AMPG ' CA A' □H N□ B□ G CA' FGD >?CFGD8 ' OABDC ' #FG FGKFGDN KD□HOG ' BKAH F□ ' ?DD□P?M □H D? AH ' □@@GN□?CGME ?PG ' CFG KD□HOG ' >DA@' CFG ?CC?O(' A>' ?' LG?D ' JFA F? ' DB FGN BKAH FGD ' JFGH □H OA@K?HE J□CF G ? CA ' ?' ADC A>' MAPGD ' JFA C?(G ' CA F□ ' FGGM ' □H ?' PGDE BH ?MM?HC CEMG ' #FG M?NE ' A>' OABD G ' >?MM ' □H MAPG J□CF CFG FGKFGDN ' ?HN CFG FGKFGDN □ ' PGDE AAH CBDHGN ABC A>' CFG OABDC >AD F□ ' AJH KDG B@K-CBAB ' MAPG ' .BC CFG KD□HOG ' DG AMPG ' CA DBH ?J?E J□CF F□@ ' ?HN CFGE ?KKA□HC CA @GGC ?HN M□PG □H CFG >ADG C ' BH O?DGN LE FBH GD AD LE LG?D ' ' J□MN @?H A>'CFG JAAN ' FAJGPGD ' G□TG ' BKAH CFG M?NE ' LBC &BOGNADB ' N□ B□ GN ? ' ?' FGD@□C ' PGDE AKKADCBHGME (□MM ' CFG J□MN @?H ' #FG □H ' A>') ?MGHC□?' OA@G ' CA MAA(' ?>CGD F□ ' AH ' #FG MAPGD ' DGCBDH CA OABDC ' #FG GHCMG@?H JFA D?H ?J?E >DA@' CFG LG?D J□CFND?J ' F□ ' OM?□@ ' CA CFG KD□HOG ' ?HN CFG JFAMG CGD@□H?CG ' J□CF DG?C >GM□O□CE ' G O?H G? □ME BHNGD C?HN FAJ BOF ?' CADE JABMN LG KAKBM?D ' ?HN FAJ ?HE BDKMB ? G A>' J□C AD KAGCDE JABMN F?PG MG GHGN □C ' KAKBM?D□CE ' #FG GD□AB ' ?NPGHCBDG ' ?DG DGM□GPGN LE CFG OAH C?HC KDG GHOG A>' ?' OMAJH ' JFA ' CA NA F□@' SB C□OG ' ' HGPGD B□MCE A>' CFG M□ FCG C OMGPGDHG ' LBC KDANBOG ' ?' M?B F' LE F□ ' G QB□ □CG CBK□N□CE ' HG KGO□@GH A>' CFG KAGCDE J□MM B>>□OG ' &BOGNADB ' OMACFGN ? ' ?' FGD@□C ' @GGC ' .DG@A ' CFG J□MN @?H A>' CFG JAAN ' JFA F? ' AC @?N□HG ?>G □H F□ ' D? K ' ?HN ' SB CME OAH □NGD□H ' CF?C ?' J□MN @?H A>' CFG JAAN ' @B C LG ?H G OGMMGHC SBN G A>' DFGCAD□O ' ?HN M□?LMG CA LG @APGN CA K□CE LE CFG >ADOG A>' >□HG JADN ' CFB ' ?NNDG G ' F□@ R

='H C□@G A>'EADG ' JFGH @GH M□(G LDBC□ F' LG? C '
%□N MG?N CFG□D M□PG ' □H MA?CF A@G OGMM ' ?HN JAAN
HN JFAMME ?PG CFG@ GMPG ' CA J□CMG ' J□MM
' DBNG BHDBME DAAC ' CFGH @?H CA @?H LGO?@G
' KDG GHC KDGE ' CFGH @□ FC KDGP?□M8N
#FG JG?(G C @GH JGHC CA J?MM
"□ FC J? ' BH(HAJH ' >AD JDAH ' J? ' ?MM □H ?MM
' @GH CFB ' M□P8N □H CFG□D DG?C OABD? G
.GFAMN ' AHG DKFGB ' O?@G V? ' KAGC ' CGMM
HN CFG@' >DA@' DBNGHG ' BHCA DG? AH LDAB FC
FA ' MGN LE DG? AH ' AAH >AD AA(' CFG JAAN
H CG?N A>'O?PG ' CFGE LB□MC CFG@' O? CMG ' CDAH
□C□G ' ?HN CAJH ' JGDG >ABHNGN LE CFG@' CFGH
+M?N JGDG CFGE CFGE >ABHN BOF G? G
HN □H CFG GHN CFGE DGJ CA KGD>GOC ?@□CE
G□ F□H ' CFG□D >AD@GD J□O(GNHG
#FGE CGD@8N CFG C□@G JFGDG□H CFGE M□PGN CFGH
' AMNGH ? G ' ?' AAN AMNGH ? G
AJ ' .DG@A V>AD A' ' FG?DN CFGG O?MM8N
>' @GH JF□OF M□P8N CA>ADG ' ? ' CFAB NA C HAJ
□MN □H JAAN ' ?NN□OCGN ?MM CA KA□M
"GCBDHGN JGDG LE JADCFE DKFGB 8@G?H
$GC @G VM□(G DKFGB ' O?B G CFGG CA DGCBDH
DA@' @BDCFGD ' LMAAN FGN ' ?HN BOF M□(G ODBGMC□G '
F?C ' FABMN JG >□ FC LG>ADG JG F?PG ?' O?B G W
A ' MGC8 ' M□PG ' ?HN MAPG CA GCFGD >?□CF>BMME
8MM >□ FC >AD CFGG I

#FGDG ?DG AHG AD CJA K? ? G ' □H = &BOGNADB I' JF□OF □HN□O?CG A@G KAGC□O?M KAJGD ' LBC CFGE ?DG □H?KKDAKD□?CG CA CFG □CB?C□AH ?HN OF?D?OCGD ' FGHGPGD JG OA@K?DG F?(KGDG J□CF ACFGD JD□CGD ' CFG N□>>GDGHOG JF□OF KGDF?K ' BKAH CFG JFAMG ' @?(G ' CFG @A C ?L□N□H ' □@KDG □AH □ ' CFG @?DPGMMAB ' BKGD□AD□CE A>'F□ ' SBN @GHC

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' >D C (HAJH GNCCAH A> CF ' KM?E J? ' KBLM FGN H 442 ' BHNGD CFG >AMMAJH ' CCMG R =' #FG .DCF A> & GDMH ' AD ' #FG FMNG F?CF >ABHN F ' ?CFGD ' ? ' C F?CF LGGH GPGD?M C@G ' OCGN JCF DG?C KKM?B G ' DCCGH LE MM?@ F?(G KG?D ?HN MM?@ "AJMGE I ' > CF ' PGDE NABLC>BM G CGDH?M GPNGHOG CJA A> CFG @ANGDH +GD@?H OD CO ' F?PG ?KKMGN CFG@ GMPG ' CA KDAPG CFG OADDGOCHG ' ADH F? ' JDCCGH ?' ODCO @ A> >ABDCGGH K? G ' BKAH =' #FG .DCF A> & GDMH I ' JFOF FG NGONG ' CA LG OFG>ME F?(KGDG8 ' KA G H ' ?' F F NG DGG A>KAGCO?M @GDC ' JCF @BOF NGGK CFAB FCGN OF?D?OCGDT?CAH ' #GO (' F? ' HA NABLC A> CFG G CGHC A> CFG ? C?HOG CF?C F?(KGDG ?PG H KDANBOH ' CF ' KM?E R =' #F ' KGOG ' ?' HGJ KDAA> A> CFG G CD?ADN-H?DE DOFG ' A> CFG KGDAN ' H JFOF BOF ?' JAD (' J? ' BHHACOGN ?@AH ' CFG @? ' A> HCGMMGOCB?M ?HN OF?D?OCGD CO ND?@? ' #FG @ANGDH !H M F ' JFA G JG?(' NG ' KAGCO?M OD CO @ ' F?PG MG>C C ?M@A C CA ?OONGHC JF?C F?MM LG ? ?H DGPPGN ' ?HN JG GMNA@ ' GG ' HOG %AN MGE ' JFA KDAOGGNGN A@GJF?C @ADG O?DG>BMME ' ?HE DG? AH JFE AHG KGOG ' GMGOCGN ?HN ACFGD ' DGSGOCGN I ' G ?NN ' = AHG A> "AJMGE8 ' ACFGD JAD(' ?DG GQB?M CA CF ' F?C K?DC F? ' F?(KGDG HC WR F? ' FG C?(GH ?' K?DC WR JF?C HNBOGN FO@ CA NAf A WR O?H AHME LG @KGD>GOCME ?H JGDGN ' ?HN LE BKKA CAH ' FE FABMN HAC F?(KGDG >AD AHOG F?PG JDCCGH >AD ?HACFGD CFG?CDG CF?H F ' AJH W FE FABMN FG HAC ' JFGH CFG OB CA@ J? ' A OA@@AH ' F?PG JDCCGH H OA@K?HAH FK JCF ?HACFGD CFAB F MG ' KAJGD>BM KAGCWI ' *MDOD C?(G ' ?' NO>>GDGHC ' ?HN ' ? ' JG CFH(' ?' @BOF SB CGD PGJ ' #FG KM?E ' FG FAMN ' @B C F?PG LGGH KDANBOGN M?CG H F?(KGDG8 ' M>G ' >' FG F?N JDCCGH H C ?C ?MM ' FG JABMN F?PG KBC ABC F ' @?CBDGN CDGH CF ' MM CFG G GHCM R KM?H ' OA@KA CAH ' ?HN OF?D?OCGD R LGMAH ' CA "AJ8MGE ' GOBM?DCG ' A> CEMG ?HN DG@?D(?LMG CBDH ' A> CFAB FC ?DG HAC B>>OGHC CA >BDH F GPNGHOG A> ?BCFAD FK >AD CFGE ?DG OA@-@AH CA ACFGD OAHCG@KAD?DE KAGC ' C ' HAC PGDE G? E CA CD?OG CFG G ?OC KDA DG ' A> MM?@ "AJMGE ' G J? ' ?H ?OCAD H CFG OA@K?HE ' A> JFOF F?(KGDG J? ' ?' KDAKDGCAD ' G >HN F ' H?@G H ?' NAOB-@GHC A> 4 4 ' ?HN ? ?H H 425 ' #FG ?@G LAA(GMMGD CF?C KBL-M FGN ,' #FG .DCF A> & GDMH I ' ? AO?CGN F ' H?@G J CF ACFGD JDCGD ' A> G@HGHOG LG NG ' F?(KGDG ' G ' KA(GH A> LE $?H L?HG ? ' =' ?H ?BCFAD CF?C >MABD FGN H CFG DG H A> H ' F?DMG ' LBC CFGDG ' HA NABLC CF?C FG @?E LG OAH NGDGN ? ' ?' BOOG >BM JDCGD H CFG @NNMG KGDAN A> 0?@G ' ' C ' @KA LMG CA CFH(' CF?C FG OABMN F?PG LGGH ? AO?CGN JCF F?(KGDG H JDCH '!?' KM?E BHCM ?>CGD F?(KGDG F?N QBCCGN CFG C? G ' ?HN JG @B C ' CFGDG>ADG ' LG?D H @HN CF?C "AJMGE8 ' BKKA GN ? AO?CG J? ' ?C CF?C KGDAN CFG ?BCFAD A> CFGMMA ?HN $G?D ' A> #JGM>CF FC ?HN ' , AB $(G C

' >GJ EG?D ' ?>CGD CFG ?OOG AH A> 0?@G ' ' CFG >AHNHG ' A> CFG OABDC >AD CFG?CDO?M GHCGDC?H@GHC ' ?HN CFG B@KCBAB HG ' A> CFG @? QBG ' CF?C JGDG AC BK >AD C ' G KGO?M NGM FC ' ?KKG?D CA F?PG KDANBOGN ?' H?CBD?M H>MBGHOG BKAH CFG KBLMO C? G ' H DGHNGDH ' A@G A> CFG KGOG ' KGD>AD@GN FADG NGKGHNGHC BKAH OGHGDE ?HN NDG G ' ?HN KDAOG AH ' CF?H H CFG M?CGD EG?D ' A> !MT?LGCF ' =' #FG .DCF A> & GDMH I ' LGMAH ' CA CFG OM? ' A> FAJ KM?E ' ?HN CFG GM?LAD?-CAH A> CF?C KADCAH JFOF ' ?NNDG GN @GDGME CA CFG GEG F? ' @K?DCGN ?' OF?D?OCGD CA CFA G OGHG ' H JFOF CFG @? H?CAH ' ?NNDG GN CFDAB F CFG N?MA BG ' #FGDG ' ?H G GHC?M J?HC A> DG>HG@GHC ? ' JGMM ? ' A> HCGMMGOCB?M >ADOG ' K?DCME ?D H ' >DA@ CF ' >?M G KDHOKMG A> ?DC ' JFOF ?NNDG G ' C GM> DH>>HME CA CFG GH G ' G F?PG ?' BOOG AH A> HONGHC ' JCFABC ?HE BHCE A> ?OCAH ' #FG FB@?H HCGDG C ?HN CFG BKGDH?CBD?M ?DG SB@LMGN CA GCFGD ' A ? ' CA DGHNGD G?OF GQB?MME BHDG?M ' ! CD?P? ?HOG ' C?(GH >AD '>ADOG ' ?HN JF?C ' @GDGME FNGAB ' ' A>>GDGN CA B ' ? ' BLM@G ' #FG CADE ' A> OABD G ' LGMAH ' CA CFG >?LBMAB ' F CADE A> .DC?H ' C ' @APG@GHC ' ?DG A OA@KMO?CGN CF?C JG FABMN NG K?D A> CD?OH ' C CFDAB F C ' OGHG ' A> J?D ?HN MAPG ' ?HN NGPMDE ?HN JCOFOD?>C ' #FG .DCAH ' ?DG HP?NGN LE CFG ? AH ' LBC CFG .DC F ?D@E ' @D?OBMAB ME KDG-GDPGN LE CFG KAJGD A> H GM@ '?' FGD@C ' #FG ? AH ' BG >AD KG?OG CA BDGMB ' CFG HA ' A> .DC?H ' LBC CFG @AH?DOF BNNGHME >?MM ' H MAPG JCF DCG ?' CFG N?B FCGD A> CFG ? AH GHGD?M ' ?HN @?DDG ' FGD ' ? ?H C CFG J FG ' A> ?MM F ' OABDC ' MCGD GHND? AH ' CFG LDACFGD A> BDGMB ' F? ' LGGH BH?OOABHC?LME @ H ' ?HN FG ' C GG@ ' F?N >?MMGH H MAPG JCF CFG ?@G M?NE NBDH ' F ' D?@LMG ' *KAH ' CFG DGCBDH A> DHOG * CGD CA F ' LDACFGD8 ' OABDC ' CFG QBGGH GHNG?PABD ' CA ALC?H >DA@ F@ ?' NGOM?D?CAH A> BHM?J>BM ?CC?OF@GHC ' GD ALSGOC ' CA AJ N BHAH ?@AH C CFG .DCAH ' CA KDA@ACG CFG ? OGHN?HOE A> CFG ? AH ' Z G ' ' BOOG >BM ' ?HN CFG JG?(' BDGMB ' SAH ' F ' HP?NGD ' %BDH ' CFG KDA DG ' A> CFG G GPGHC ' JG F?PG MAPG GK ANG ' JCF CFG N?B FCGD ' > %AHALGDC ' ?' .DC F HALMG@?H ' #FG OF?D?OCGD A> & ANG C?' AHG A> CFG N?B FCGD ' JFA ' DG AMPGN CA NGNO?CG FGD GM> CA ?' DGM ABC ' MD>G ' ' ND?JH JCF OAH NGD?LMG (MM ' ?HN FG G KDG G ' FGD GM> JCF ?' QBGC CDGH CF JFOF OAHCD? C ' ?NP?HC? GAB ME JCF CFG CBD@AM ?DABHN FGD R

,' ALMG ?HN PDCBAB ' OABMN ' NDG?@ A> @?DD? G ' FABMN ?>>GOC CFGG ' !NJH ' F ' @E ABM GDG8 ' A@GCFH ' CGMM ' @G CF?C CFG G LG C A> ODG?CBDG #FG G @ANGM ' A> CFG JADMN ' JG?(' @?H ?HN JA@?H FABMN F?PG CFGD ABM ' CFGD @?(H ' M>G ' ?HN LGH #A A@G @ADG G OGMMGHC B G ' > JF?C CFG GH G ?MM ' KNG? BDG JGDG ABD GHN ' JG @ FC SB CME LM?@G +DG?C ?CBDG8 ' J NA@ ' JFA DG?D8N ?' LBMNH ' > A @BOF ?DC ?HN LG?BCE ' CA GHCGDC?H ' BG C A >?D HOGDC?H ' A @KGD>GOC >' AHME KGGOF N C H B F B ' >DA@ LG? C FA (HAJ HA HGQB?MCE A> LDCF ?HN KM?OG . BC CMM CA >ME >DA@ AANHG ' ' AF ' FAJ L? G GDG MD>G ?C BOF ?' D?CG ' A ' HA ' CF?C AJGD #F?C ?PG CA @?H F ' LGH ' KGGOF ' ?HN J NA@ +?PG C >AD CF?H(>BMHG ' #A @' ?MAHG #F?C @?NG @G CFB ' @?E ' CFGHOG CDBME (HAJ 8MM K?E CA @' HAC @?H ' CFG MAPG ' AJG I

#FG BKGDH?CBD?M K?DC A> CF ' KM?E ' ?MCA GCFGD APGDNAHG ' G FL-CH ' HA F FGD (MM H CFG @?H? G@GHC CF?H ?' @ANGDH >?DE KGOC?OMG >AD CFG !? CGD FAMN?E ' .G>ADG & GDMH ?KKG?D ' JG F?PG ?' ? AH @? OO?H KDANBOGN JFA O?H D? G CFG NG?N ' ?HN FG @?(G ' GOCAD ?HN OFMMG ' OA@G HCA CFG ? AH OABDC PGDE @BOF ?>CGD CFG >? FAH A> CFG ?KK?DCAH A> & ?D F?M ? G H CFG DG?C ?MMGDE ?C %DG NGH U #FG C? G NDGOCAH >AD CF ' G CD?ADNH?DE G FLCAH ' ? '>AMMAJ R

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=' ' JCMM' GDGOC' ?'@AHB@GHC' * KAH' CFG' PGDN?HC' KM?H ' A>' ?MC LBDE R A' (CH ' F?MM' F?PG' A' FC F' ?' GKBMOFDG R CF' KGHNBMAB ' CAHG ' CF?C' ' JCMM' F?H ' LE' ?DC FGDG' HGCCFGD' MC@G' HAD' @ADC?D' F?MM' LG' B GN R 'N?D(' GHC @?' CA' CFG' @G@ADE AD' HAHG' F?MM' F?PG' CFG' KAJGD' CA' HB@LGD' CFG@ ,' MM' >BCBDG' C@G ' F?MM' CCMM' DGOADN' CFC ' CADE >' &GDMH8 ' MG?DHGN' JADCF ' ?HN' DCFBD8 ' MADE I

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' ' CFC ' C ' ?' ?C >?OCADE ?OOABHC' A>' CFG' ADC H' A>' CAHGFGH G' JG' @C FC' FGDG' OAHOMBNG' LBC' CFGDG C ' ?' NCCMG @ADG' CA' CGMM A>' CFC ' @?D-PGMMAB ' KM?E' *CGD ' CFG' CDCB@KF?HC' (H ' NG CDG ' &GDMH' CA

=' FAJ' CFG >BMM' GPGHC #F?C' F?MM' LACF' GHN' ABD' DG' H' ?HN' OFDAH'OMG I

&GDMH' CFB ' OAH GHC R

=' F?C' G?PGH' NGODGG ' >?CG F?CF' HA' KAJGD' CA' ?MCGD #FG' ? AH ' CD JCMM (GGK' CFG' DABHN' CFGE' F?PG HN' LE' BKKMEH ' HB@LGD ' CCMM' HODG? G #MM .DC?H' LG' HA' @ADG ' A' KMG? G' EABD' D?OG ' JCMM' H' P CLMG' ?KK?DCAH DG GHC' EAB' KDAKFGOG ' JFOF' F?MM' OAHOGDH' BOOGGNH ' KDCHOG ' JFOF' @E' ?DC' F?MM' D?C G #CMM' @GH' F?MM' O?MM' CFG G' C@G ' CFG' M?CCGD' 1" ' (' D ' ' " ' 1 ' ' H ' ' ; $ ' $ ' M ' 0 $' $ ' 0 ' & ' $' $ ' ' ' 3 ' DCHOG ' 0$' ' $ ' O ' ' $ ' $ ' ' ' ' $ ' $ ' 4 $ ' %G?CF' ' D ' $ '4' $ ' O ' D' O ' ' / #F' ' &GDMH' G KM?H ' CA' DGKDG GHC' *CGD8 ' AH ' DCFBD' ?HN' F' ' BO-OG AD' ?C' JFOF'CFG' KDCHOG' @BOF' D?C>CGN' ? GDC R

' MM' >BCBDG' C@G ' F?MM' CCMM' DGOADN' CF' ' CADE >' &GDMH8 ' MG?DHGN' JADCF ' ?HN' DCFBD8 ' MADE I

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4 ʻ OMA G' ABD' □@KGD>GOC' DGOADN' * ʻ CFG' KM?E ' ? OD□LGN' CA' F?(KGDG' J□CF' CFG' KGD>AD@?HOG' A>'?' CDBG' KAGC ' J FAGPGD' FG' @?E' LG

='#FG' & GDDE' %GB□MM' A>' !N@AHCAH' ' ' □C' F?CF' LGGH' BHNDE' C□@G ' ?OCGN' LE' F□ ' & ?□G C□G ' GDP?HC ' ?C' CFG' + MALG' AH' CFG' . ?H(G □NG I' ? 'AD□ □H?MME'KBLM□ FGN'□H' 476ʻ H'CFG'22HN'A>' OCALGD ' 47 ʻCFGDG' □ ' ?H' GHCDE' A>' CFG' C□CMG' A>' CFG' KM?E' AH' CFG' C?C□AHGD ⁸DG □ CGD ' LBC' AH' CFG' 5CF' A>' KD□M ' 476ʻ J G' F?PG' ?' @ADG' KDGO□ G' GHCDE' A>' ,ʻ ' LAA(' O?MMGN' CFG' $E>G' ?HN' %G?CFG' A>' CFG' & GDDE' %GP□M ' A>' !N@AHCAH ' J □CF' CFG' KMG? ?HC' KD?H(' A>' HMB G' CFG' @ECF ' □D'0AFH ' ?HN' @□HG' A CG' A>'CFG' + GAD G ' ?LABC' CFG□D' CG?M□H 'A>'PGH□ AH ' . E'# ' . I' #F□ 'J? ' □H' ?MM' KDAL?L□M□CE ' ?' GOAHN' ?DC ' CGGPGH ' ?E F S'#FG'□H□C□?M' MGCCGD ' ?C' CFG' GHN' A>' CF□ ' GHCDE' B>>□O□GHCME' >DGG' F?(KG?DG' >DA@' CFG' OF?D G' A>'F?P□H ' LGGH' □C ' ?BCFAD I' C' F? ' LGGH' BKKA GN' CF?C' CFG G' □H□C□?M ' DGKDG GHC' #AHE ' AD' HCAHE ' . DGJGD ' ?' ND?@?C□O' J D□CGD' A>' CFG' C□@G' A>'0?@G ' ' F□ FME' M?BNGN' LE' A@G' A>' F□ ' OAHCG@KAD?D□G ' □D(@?H ' ?' LAA(GMMGD ' >□D C' ?>>□ GN' F?(KGDG8 ' H?@G' CA' □C' □H' F□ ' ?C?MA BG' H' =#FG' A@K?H□AH' CA' CFG' M?EFAB G I' KBLM□ FGN'□H' 4/ ʻ□C' □ ' C?CGN ' BKAH' CFG' ?BCFAD□CE' A>' ?' M?LAD□AB ' ?HC□QB?DE ' #FA@? ' A GCGD ' J FA' N□GN' □H' / ʻ CA' F?PG' LGGH' J D□CCGH' LE' & □OF?GM' %D?ECAH ' ?HN' □H' A@G' KA CFB@AB ' K?KGD ' A>' ?HACFGD' N□M□ GHC' □HQB□DGD' □HCA' M□CGD?DE' F□ CADE ' MNE ' CFG' ?@G'? GDC□AH' □ ' ?NP?HOGN ' F?DMG ' $?@L ' J FA' KG?(' A>' CF□ ' KM?E' J □CF' ?' J?D@CF' A>' ?N@□D?C□AH' J F□OF' □ ' KDAL?LME' O?DD□GN' ?' M□CCMG' CAA' >?DR ?HN' J F□OF ' □HNGGN ' @?E' □H' A@G' NG DGG' LG' ?CCD□LBCGN' CA' F□ ' >?@□M□?D□CE' J □CF' CFG' QB□GC' DBD?M' OGHGDE' A>' !H>□GMN ' ?MCF?@ ' FG FBHC ' ?HN' !N@AHCAH ' □H' J F□OF' KM?OG ' CFG' CADE' □ 'M?□N' R ?E ' ‹ ' J □ F' □C' OABMN' LG'? OGDC?□HGN' CF?C' & □OF?GM' %D?ECAH' J? ' CFG' ?BCFAD' A>'CF□ ' K□GOG' ' □C' J ABMN' ?NN' ?' J ADCFE' ?KKGHN? G' CA' CFG' DGHAJH' A>'CF?C' K?HG ED□ C' A>'@E' H?C□PG' G?DCF ' J FA' F? ' AHG' APGD' FGD' A□M' V□H' F□ ' AMEAML□AH ' J □CF' CFG' >□NGM□CE' A>' ?' FGD?MN ' ?HN' CFG' K?□H>BM' MAPG' A>' ?' AH ' J FA' F? ' HAC' MG>C' ?' D□PBMGC' V A' H?DDAJ' CF?C' □C' @?E' LG' CGKKGN' APGD ' J □CFABC' FAHABD?LMG' @GHC□AH ' ?HN' F? ' ?H□@?CGN' F□MM ' ?HN' CDG?@ ' J □CF' M□>G' ?HN' K? □AH' ?LAPG' CFG' NDG?@ ' A>' AMN' @ECFAMA E I'U' ='#FG' & GDDE' %GP□MI' J? ' BHNABLCGNME'?' KM?E'A>' DG?C' KAKBM?D□CE ' G' >□HN ' >DA@' CFG' ?OOABHC' LAA('A>'CFG' " GPGM ' ?C' ABDC ' CF?C' □C' J? ' ?OCGN' LG>ADG' CFG' (□H ' □H' CFG' ?@G' EG?D' 4 6ʻ J □CF' # J GM>CF' □ FC' ?HN' ' □HCGD8 ' #?MG ' H' 4 4ʻ . GH' OAH AH ' □H' F□ ' DAMA BG' CA' = #FG' %GP□M' □ ' ?H' I' CFB ' ?NNDG G ' F□ ' ?BN□GHOG' R

S' >'EAB8MM' OA@G
#A' GG' HGJ' KM?E ' KD?E' EAB' ?>>ADN' B ' DAA@
HN' FAJ' CF□ ' LBC' CFG' ?@G' >?OG' EAB' F?PG' NAHG
, ABD' NG?D' NGM□ FC ' #FG' %GP□M' A>' !N@AHCAH I

C ' KAKBM?D□CE' GG@ ' CA' F?PG' M? CGN' @BOF' MAH GD' ' >AD' □C' □ ' @GHC□AHGN' LE' !N@BHN' + ?ECAH ' □H' 45/ ' □H' F□ ' =' ACG ' AH' %AH' B□ ACG I ' #FG' LGM□G>' CF?C' CFG' KM?E' J? ' F?(KGDG8 ' F? ' HGPGD' C?(GH' ?HE' DAAC' □H' !H M?HN ' A@G' A>'CFG' + GD@?H' OD□C□O ' FAJGPGD ' ?NAKC' □C' ? ' F□ ' J □CF-ABC' ?HE' FG □C?C□AH ' #□GO(' F? ' CD?H M?CGN' □C ' ?HN' FG' ?E ' CF?C' □C' BHNABLCGNME'□ ' LE' F?(KGDG ' ?HN'@B C' F?PG' LGGH' J D□CCGH' ?LABC' QKKʻ C' F? ' @BOF' A>' CFG' CAHG ' FG' CF□H(' A>'#FG' & GDDE' □PG ' A>' □HN AD ' ?HN' ‹ @□HG' FA C' A>' CFG' + GAD G8' ?HN' ‹ @□HG' FA C' A>' CFG' + ?DCGD8' ?DG' ?M□(G ' C' □ ' BDKD□ □H ' CF?C' #□GO(' NAG ' HAC' GG' CF?C' CFG' AHG' OF?D?OCGD' □ ' □H' ?' DG?C' NG DGG ' ?H' □@□C?C□AH' A>' CFG' ACFGD ' F?(KGDG ' □H' CFG' ?LBHN?HOG' A>' F□ ' D□OFG ' □ ' HAC' ?' KAGC' J FA' DGKG?C ' F□@ GM>' ADH' NGOM?DG ' CF?C' F?(KGDG8 ' ?BCFAD F□K' A>' ='#FG' & GDDE' %GP□MI' □ ' □HOAH-CG C?LMG ' * MD□O□' ?N@□C ' CFG' L?DG' KA □L□M□CE' A>'□C ' LG□H ' ?' PGDE' EABCF

LPO I PJG' 73!Q9 GH' 5 M I MN K' - PNG+

>□MM' J AD(' A>' F?(KGDG8 ' #FG' DG?C' @GD□C ' AH' CFG' OAHCD?DE ' A>' CFG' LG C' OGHG ' A>' CF□ ' KM?E' OAH □ C ' □H' CFG□D' KGD>GOC' >□H□ F ' #FGDG' □ ' HACF□H ' O?DGMG ' ?LABC' CFG@ ' HACF□H ' CF?C' LGCD?E ' CFG' PGDE' EABH ' ?NPGHCBDGD ' CFG' J D□CGD' □ ' ?' @? CGD' A>' F□ ' ?DC' CA' CFG' G CGHC' A>' F□ ' KAJGD ' . BC' CF?C' □ ' HAC' F?(KGDG8 ' KAJGD

BMMGD ' □H' F□ ' = ADCF□G I' CFB ' DGOADN ' CFG' @GD□C ' A>' GCGD' ?LGM ' CFG' FGDA' A>' CF□ ' KM?E' R =' ' F?MM' KDAL?LME' A>>GHN' CFG' D?P□CE' A>' A@G' CA' □H GDC ' ?HN' OGDC?□HME' OBD□A □CE' A>'ACFGD ' CA' A@□C ' F□@ ' A@G' @?(G' F□@' ?' >D□?D ' ACFGD ' ?' M?E' GHCMG@?H ' ?MM' ?' OAHOG□CGN' KGD AH ' J FA ' J □CF' F□ ' @GDDE' NGP□OG ' NGOG□PGN' CFG' %GP□M ' J FA' LE' D?OG' @?E' LG' DG □ CGN ' HAC' NGOG□PGN' LE' J □C' >' ?' D?PG' L□ FAK' □H' F□ ' GD@AH ' KG?(□H ' A>' . DBCG8 ' OA@□H ' □HCA' CF□ ' M?HN ' ?□N' □C' J ? ' LBC' ?' ' FAKG' ' @?E' ?E' J □CFABC' A>>GHOG' CF?C' CF□ ' ?LGM' J ? ' LBC' ?L ;$ BKKA GN' CA' M□PG' □H' CFG' DG□ H' A>' □H ' GHDE' CFG' □ CF I' □ ' >?@G' □ ' @ADG' OAH>□N□H ME' DGOADNGN' □H' CFG' DAMA BG' CA' ='#FG' & GDDE' %GP□M' I R

='8#□ ' GCGD' ?LGM ' ?' DGHAJHGN' OFAM?D
FA G' >?@G' F?CF' C□MM' LGGH' F□CFGDCA' >AD AC'
. E' ?MM' CFG' JD□CGD ' A>'CF□ ' M?CCGD' ? G
H' & □NNMG G ' F□ ' L□DCF' ?HN' F□ ' ?LANG
' AC' >BMM' GPGH' @□MG ' >DA@' CF□ ' DG?C' >?@AB ' O□CE
#F?C ' >AD' F□ ' >?@G' □H' MG□ FC ' ?HN' @? □O' JAH
? ' O?MM8N' CFG' & GDDE' □GHN' A>' !N@AHC H
>'?HE' FGDG' @?(G' NABLC' A>' BOF' ?' H?@G
H' !N@AHCAH ' EGC' >DG F' BHCA' CF□ ' N?E
□ 8N' □H' CFG' J ?MM' A>'CF?C' AMN' ?HO□GHC' OFBDOF
□ ' *, ' %,+2% - ,%+:' +*' LZ' %%,'
□ ' @G@ADE' EGC' □H' CFG' @ABCF ' A>'@GH
#F?C' ;: (+:% 780:% *' 0 0%@% 7%+:% 0%7 0

#FG' DAMA BG' AG ' AH' CA' BKKA G' F□@' ?C' ?@LD□N G' ?C' CFG' FABD' JFGH' CFG' CGD@' A>' F□ ' OA@K?OC' J □CF' CFG' >□GHN' □ ' DBH' ABC ' G' ?DG' HAC' FGDG' CA' MAA(' >AD' CFG' CGDD□LMG' AMG@H□CE' A>' CFG' □@□M?D' OGHG' □H' & ?D-MAJG8 ' =' ?B CB 'S'I' LBC ' HGPGDCFGMG ' CF?C' LG>ADG' B ' □ ' JD□CCGH' J □CF' DG?C' KAGC□O?M' KAJGD ' ADGL ' CFG' K□D□C ' CFB ' ?NNDG G ' CFG' @? □-O□?H' R

=' ! (' FE ' OFAM?D ' CF□ ' □ ' CFG' FABD' @E' N?CG' G K□DG #
' @B C' NGK?DC ' ?HN' OA@G' CA' OM?□@' @E' NBG
> (' ?F' ' JF?C' □ ' CFE' NBG'W
! (' ?LGM ' CFE GM>
> (' ' MGC' HAC' N?D(HG ' FG?D' CFGG' KG?(' CF?C' JADN
$G C' CF?C' J □CF' >ADOG' □C' FBDDE' FGHOG' ?@?□H
HN' MG?PG' CFG' JADMN' CA' MAA(' BKAH' @E' J AG
, GC' APGDJFGM@' @G' J □CF' CF□ ' MALG' A>' G?DCF
HN' MGC' ?' M□CCMG' K?DDAJ' J □CF' FGD' L□MM'
#?(G' LBC' A' @BOF' ? ' FG' O?H' LG?D' ?J?E
#F?C ' GPGDE' N?E' CFB ' MA □H ' A>' @E' MA?N
' @?E' ? ?□H ' □H 'C□@G ' EGC' FAKG' CA' D□ G I

F□MG' CFG' >□GHN' □C ' NAJH' □H' CFG' HGODA@?HC□O' OF?□D' ?LGM' CFB ' AM□MAQB□ G R

='> (' ' CF?C' CF□ ' ABM ' CF?C' OA C' A' NG?D' ?' KD□OG'
' CFG' NG?D' KDGO□AB ' LMAAN' A>' FGD' " GNGG@GD
H K□D8N' J □CF' (HAJMGN G ' FABMN' LE' CF?C' ?MAHG
F□OF' @?(G ' ?' @?H' A' @G?H' BHCA' CFG' KAJGD
! P8H' MG?N' F□@' NAJH' □HCA' CFG' NGKCF' A>' FGMM
FGH' @GH' □H' CFG□D' AJH' KD?□ G' CD□PG' CA' (HAJ' @ADG'
#F?H' @?H' FABMN' (HAJ'

N' 99 P %G'#!!M9G' 7'NHP' NMQP' 9+ + L+ +

? 7' 7 % ' ' 7 7

AD' CF= '?MAHG +AN' 0? ¢ CFG ?H GM 'NAZPH
#FG' DH>D=CE A>'?DC ' ' M(G ?' G?
HCA' JFDOF JFGH @?H' J⊡MM C?(G DH F?HN' CA' ?N'
?DCFGD' CF?H' D6? AH' V JFDOF FABM' LG' F=' K⊡MAC
?CF' (⊡MM' CA' B⊡NG' F⊡@'MA DH' AHOG' F=' 0A@K?
G'>?MMGCF' CA' BOF' NGGK' ?HN' N?H GDAB' JF⊡MKAAM
' FG NACF MA G CFG PGDE' ⊡ F=' A>'FG?PGH
#FG' @ADG FG' C⊡PG ' CA' 0A@G' CA' QB⊡GC' F?DLABD
#FG' @ADG FG' C⊡PG ' CA' 0A@G' CA' QB⊡GC' F?DLABD
&?H' C⊡PDH ' C⊡MM' CA'>DHN ' F⊡@ GM>'>D⊡A@ M?HN
GG(DH ' CA' LG' ?' +AN ' LGOA@G ' ?' NGP⊡M I

.BC' CFG @?' D⊡?H' F?' CD⊡O(GN' CFG >⊡GHN ' CFG OF?'D' FAMN ' F⊡@' >?' C' ?HN'
CFG OAHN⊡CAH' A>' DGMG? G ⊡ ' ?' DG K⊡CG >AD' GPGH' EG?D ' #FG' BK⊡G-
H?CBD?M' K?DC A>' CFG' KM?E' @?E' LG' ?⊡N' FGDG' CA' GHN ' >AD' ?MCFAB F
CFDAB' FABC' CFG' M?CC⊡D' OGHG ' CF⊡GD' ?DG' A@G' ANN' @⊡ C?(G ' KDANBOGN'
LE' CFG' NGP⊡OG ' A>' ?LGM ' CF⊡GE' ?DG' BOF ? ' @⊡ F⊡ F?PG' LGGH' ?OOA@-
K⊡ FGN' LE' FB@?H' ? GH0E' ?HN' ⊡H' >?OC' ?KKG?D' CA' F?PG' LGGH' A
?OOA@KM⊡ FGN' #⊡6O(' AL GPPG ' =' ¢ ▯ ' QB⊡CG' ⊡H' F?(KGDG8 ' @?HHGD'
CF?C CFG' @? ⊡O?M' K?D¢' LGOA@G ' HG?DME' BKGD×MBAB I' #F= ' ?' ⊡¢
?KKG?D ' CA' B ▯ 'HAC⊡H' F?(KGDG8 ' @?⊡@G' H' ?@MGC'⊡H' &?OLGCF'
⊡H' CFG' &⊡N B@@GD' ▯ F⊡8 ' %DG?@ ' ⊡H' #FG' #G@KG ¢' CFG' @? ⊡O?M' AD'
BKGDH?CBD?M' K?DC ▯ ' A' ⊡HC⊡@?CGME ?M⊡GN' J⊡CF' CFG' JFAMG' ?OC⊡AH' CF?C ⊡C
⊡@KGM ' CFG' GHC⊡DG' @APG@GHC' A>'CFG' K⊡GOG' F?(KGDG' (HGJ' CAA' JGMM
CFG' ABHNHG ' A>'CFG' AD?C⊡?H' @? ⊡@R

=' G0' %GB '⊡HCGD ⊡¢ H⊡ ¢ N⊡ HB 'P⊡HN⊡OG' HANB ' I R

CA' KDANBOG' ? FA ¢' ?' J⊡COF ' AD' ?' >?⊡DE' J⊡CFABC' HGOG ⊡CE' AJ GPGD'
CFG' @? ⊡O?M' K?DC' FGDG' >⊡H⊡ FG ' ?HN' JG ?DG '⊡HCDANBOGN' CA' CFG' AO⊡GCE
A>' HA' GQB⊡PAO?M' @ADC?M' CFG' FA ¢' A>'CFG' +GAD G' ?¢ ?MCF?@' ⊡D'
DCFBD' M?DG ' F= ' J⊡>G %AOO? ' F= ' N?B FCGD' &⊡MO' GHC' ?HN' F= ' AH'
?⊡DE' ?DD⊡PG' ?¢ CFG' ⊡HH' JFGDG' CFG FA ¢ ?E =' H⊡ FC ' ?HN' MADN '
F?PG' LGGH' NDBH('⊡H' @E FAB G' ' CF?H(' CFG NG C⊡HG I' #F= 'OA@K?HE
F?PG' ?DD⊡PGN' ?¢ CFG' +GAD G' CA' @GGC ⊡D' "⊡OF?⊡N' &ABH0FGH GE' ?HN'

H ' S3I7 P⊡O+

=" ?E@AHN' &ABH0FGH GE' LAE' F?PG' CFAB' ?HN' '
#FB 'MAH '?¢ ?@LD⊡N G' DG?N' CFG' MOLGD?M' ?DC
#FG' @GC?KFE ⊡O ' @? ⊡O' ?HN' CFA G' K?DC '
⊁CFG @A ¢ GODGC' NGGK' KF⊡MA' AKFE'W
?PG' ' A' @?HE' @GM?HOFAME' H⊡ FC
?COF8N' AH' CFG' CAK' A>' GCGD FAB G F= FG ¢ CAJGD
HN' 0A@G' JG L?O(' BHCA' ABD' H?C⊡PG' FA@G
8MM' J?HC' A>' (⊡MM' CA' MA G' CFG' JGHOF' CFAB' MAP8 ¢'W
AD' J?HC' A>' (⊡MM' CA' MA G' CFG' JGHOF' CFAB' MAP8 ¢'W
GMM >⊡D ¢' F?H ' I HP⊡M' ⊡H' BOF' D⊡H ' A>' @⊡ ¢
' HGPGD' DA G' >DA@' ?HE' N?@K⊡ F' >GH
8MM @?(G' CFG' LD⊡HGN' G?' CA' D⊡ G' ?¢' ?DG

HN' NDAJH' CFG' @?D' FG ' BHCA' CD?C>ADN' LD⊡N' G'
8MM' ND⊡PG' CFG' NGGD' >DA@' ?MCF?@' ⊡H' CFGD⊡' J?M(
HN' O?CCGD' CFG@' M⊡(G FGGK' ⊡H' GPGDE' >GMN
G' @?E' KGDF?K ' LG' ODA 8N ' LB¢' ⊡>' J G' LG
G' F?MM' ODA ' CFG' NGP⊡M' CF?¢' LB¢' ODA G ' @G I

?DDE' M?DG ' "?MKF' 0G@⊡H F?@' ?HN' "?E@AHN' &ABH0FGH GE' ?DG'
CD⊡OC' >D⊡GHN ' ?HN' CFGD¢' ▯ ' A@GCF⊡H ' G OGGN⊡H ME' NGM⊡ F⊡<B⊠' ⊡H' CFG'
@?HHGD' ⊡H' J F⊡OF' "?E@AHN' CFDAJ ' ?J?E' ?MM B K⊡O⊡AH' ?HN' CFG' ACFGD '
DG AMPG' CA' C?HN' LE' CFG⊡D' >D⊡GHN ' J F?CGPGD' LG' CFG' ⊡HCD⊡ BG ' A>' CFG⊡⊡U
K?DGHC R

=' ' "?E@AHN' &ABH0FGH GE' HAJ' ' CAB0F' CFE' D⊡G⊁
⊡CF' CFG' CDBG' >GGM⊡H ' A>'?' TG?MAB ' >D⊡GHN
HN' ? >AD' >?⊡D' ?HN' LG?BCGAB ' &⊡MO' GHC
⊡CF' @E' P?⊡H' LDG?CF' ' J⊡MM' HAC' GG (' CA' MBLLGD'
GD' ?H GM M⊡(G' KGD>GO⊡AH ' ' LBC' CFAB' (HAJ8 ¢
#F?C' I G ' F?CF' CFG' ?⊡HC' CF?C' ' ?NADG'
FGDG8GD' N⊡N ¢ @GGC' @G ' CF?C' JG ¢ CJA' JGDG' SAP⊡?M
.BC' ⊡HOG' CFG' @?CCGD' DAJ ' BHCA' CF⊡ ' K?
' @B ¢' HAC' GG@' CA' ODA ' @E' >?CFGD8 ' J⊡MM
HN' J⊡CF' DG ?DNMG ' SG' C⊡H ' @AO(8N' @E' MAPG'W
AJ' @?HE' ? ?N' ?HN' J G?DE' B@@GD8 ' H⊡ F¢
&.E' ▯ F ' F?PG' NDBH(' CFG' NG J' >DA@' A>'?' CFG' G?DCF
HN' ' F?PG' C?B' F¢ CFG' H⊡ F⊡H ?MG' CA' J?(G
HN' >DA@' CFG' @G?NAJ ' KD?H ' CFG' G?DME' M?D('
H' FABD' LG>ADG' FG' FABM' F?PG' M⊡ ¢ CA' ⊡H
' F?PG' MA?NGN' CFG' KAAD' @⊡HBCG ' J⊡CF' @E' @A?H
#F?¢' ' F?PG' @?NG' CFG' FG?PE' MAJ K?0⊠' FABD '
#A' F?H ' M⊡(G' FG?PE' OMA ' BKAH' CFG' N?E
. BC' NG?D' &ABH0FGH GE' F?N' HA¢' @E' ?>>GO⊡AH'
G⊡T⊠' AH' CFG' LG?BCE' A>'?HAC@⊡N' N?@G
.G>ADG' 8N' JDAH ' CFG' OF? G' ?HN' MG?PG' CFG' MAPG'
' J⊡MM' ?LSBDG' LACF' LG?BCE' ?HN' FGD' ⊡ F⊡
HN' J⊡MM' ⊡H' MAPG' LGOA@G' ?' OABH⊡CGD>G⊡C
' %G?D' 0G@⊡H F?@' ⊡FAB' F? ¢' AD' @E' M⊡>G
HN' ?DA@' CFG' @ABCF' A>'FGMM' J FGDG' HA J' ' ?⊡G

#FG' ?HOJGHC' KMACCGD ' M?DG' ?HN' 0GDH□H F?@' ?DG' ND?J?H' ? ' PGDE' KAM□□'G' LBC' HAC' APGDJ□ G' >?CFGD ' #FGDG' □ ' FAJGPGD' PGDE' M□CCMG' CF?C ' F?D F' AD' DGPAM□H ' □H' CFG□D' H?CBDG ' #FGE' KBC' ABC' CF□GD' G' ?DG' CFDAJ□H' □HCA' CFG @□N C' A>' ?' SAMME' GC' CG?MGD ' A>' PGH□ AH' □H' JADMNME' 0BHH□H ' C□@□NME' ?HN' CFGE' ND?J' CFG@' □H' J□CF' 0AH □NGD?LMG ?KKDGFGH □AH' JFGH' CFGE' GG' N?H GD' ?HN' N□>>□0BMCE' LG>ADG' CFG@' MM CF□ ' □ ' □H' F?DDHAHE' J□CF' CFG' CFADAB F' AAN FB@ABD' A>' CFG' JFAMG ND?@?' #FG' AHME' KGD AH' JFA' □ ?H DE' □ ' AMN' & ABH0FGH GE R

, ' 0' NA' HAC' FAMN' CFE' A>>GD' OA@KGCGHC

AD' NA' ' M□(G' CFG ? BD?HOG' A>'CFE' M?HN

#FG' C□MG' □ ' A' LD?H MGN' J□CF' CFE' NGLC

' ' #AA' AAN' >AD' CFGG' ?HN' (H□ FC' CFAB' (HAJ8 C □C

JGMM

'>?J8N' HAC' AH' CFGG' >AD' CFE' AAN ' HAC

8# J ? ' CF□HG' AJH' A □A' CF?C' CFE' J□>G' NACF' (HAJ

' ' B L?HN ' □C J ? ' A ' FG' M□G ' HAC' H' CF?C

i ' AMN' CFE' 0F?C' QBG?H

' ' #A' JF□OF $'F?D(GH8N' J□MM□H ME ' ?HN' CFG' D?CFGD'

.GO?B G' ' J ? ' KGD B?NGN' □C' KDAOGGNGN'

DA@' MAPG' CFAB' LAD8 C' CA' @G' ?HN' CA' @E' LAE

HN' ?P8 C F□@' >DGG ?OOG ' BHCA' CFE' FAB G

FGDG' FG' F?CF' HAC' LGF?P8N' F□@' CA' CFE' OF□MN'

. BC ? ' LG>□C ' ?' GHCMG@?H' CA' NA

AD' □ ' @E' KAAD' N□ CDG GN' C?CG' A' MA J'

#F?C' 8MM' FBC' BK' @E' NAAD ' ' J?D?HC' CFGG

i ' $GC' □C' B>>□OG' & ABH0FGH GE' ' @□ M□(G □C

AD' CF□H(' CFE' AH' ?' @?COF' >□C' >AD' @E' OF□MN

' ' ' CGMM' CFGG' M?DG' F□ ' LMAAN' □ ' AAN' ?HN' OMG?D'

'CFG LG C NDAK' CF?C K?HCGCF' □H' NHT' PG□H

. BC' >AD' CF□ ' @?□N' CFE' >?□D' ?HN' P□DCBAB ' OF□MN

F□G □ ' HA' @ADG' N□ K?D? 8N' LE' CFE' L? GHG

#F?H' CFG' @A C' AD□GHC' ?HN' CFG' KDGO□AB ' 5G JGM

F□OF' CGMM' DGC?□H ' F□ ' MB CDG' ?HN' F□ ' LG?BCE

MCFAB F' ?' M?PG' JGDG' AJHGD' A>'CFG' ?@G I

AD' F□ ' =' >D?HC□D' ?HN' BHC?@GN' K? □AH' I' ?LGM' DGKDAPG ' F□@' #FG'

#FG' M?DG' BHC?@GN' K? □AH' I' ?LGM' DGKDAPG ' F□@' #FG'

AD' NA' ' M□(G CFG ? BD?HOG' A>'CFE' M?HN

#FG' C□MG' □ ' A' LD?H MGN' J□CF' CFE' NGLC

' ' #AA' AAN' >AD' CFGG' ?HN' (H□ FC' CFAB' (HAJ8 C □C

JGMM

'>?J8N' HAC' AH' CFGG' >AD' CFE' AAN ' HAC

8# J ? ' CF□HG' AJH' A □A' CF?C' CFE' J□>G' NACF' (HAJ

' ' B L?HN ' □C J ? ' A ' FG' M□G ' HAC' H' CF?C

i ' AMN' CFE' 0F?C' QBG?H

' ' #A' JF□OF $'F?D(GH8N' J□MM□H ME ' ?HN' CFG' D?CFGD'

.GO?B G' ' J ? ' KGD B?NGN' □C' KDAOGGNGN'

DA@' MAPG' CFAB' LAD8 C' CA' @G' ?HN' CA' @E' LAE

HN' ?P8 C F□@' >DGG ?OOG ' BHCA' CFE' FAB G

FGDG' FG' F?CF' HAC' LGF?P8N' F□@' CA' CFE' OF□MN'

. BC' ? ' LG>□C ' ?' GHCMG@?H' CA' NA

AD' □ ' @E' KAAD' N□ CDG GN' C?CG' A' MA J'

#F?C' 8MM' FBC' BK' @E' NAAD ' ' J?D?HC' CFGG

i ' $GC' □C' B>>□OG' & ABH0FGH GE' ' @□ M□(G □C

AD' CF□H(' CFE' AH' ?' @?COF' >□C' >AD' @E' OF□MN

' ' ' CGMM' CFGG' M?DG' F□ ' LMAAN' □ ' AAN' ?HN' OMG?D'

'CFG LG C NDAK' CF?C K?HCGCF' □H' NHT' PG□H

. BC' >AD' CF□ ' @?□N' CFE' >?□D' ?HN' P□DCBAB ' OF□MN

F□G □ ' HA' @ADG' N□ K?D? 8N' LE' CFE' L? GHG

#F?H' CFG' @A C' AD□GHC' ?HN' CFG' KDGO□AB ' 5G JGM

F□OF' CGMM' DGC?□H ' F□ ' MB CDG' ?HN' F□ ' LG?BCE

MCFAB F' ?' M?PG' JGDG' AJHGD' A>'CFG' ?@G I

AD' EABD' LB (' ?CC□DG ' ?HN' CKE

?PG' EABD' CFAB FC ' AH' FG?PGHME' SAE '

HN' >AD' ?M' EABD' >AMG ' K? C

, AB' @B C' NA' KGH?HOG' KD?E ' ?HN' >? C

, AB' @B C DG?N' CFG @ADH□H ' @?

, AB' @B C DBGGK' BHCA' CFG ODA

BC' OAMN' ? FG ' AH' EABD' FG?N

?PG' ?' F?□D OMACF' >AD' EABD' LGN

. □HN' EABD' LG?N ' ?HN' CGMM' EABD' HGGN

, ABD' FAME' ?PG ' ?HN' EABD' ODGGN

AME' @?□N ' CF□ ' @B C' LG' NAHG

>'EAB' @G?H' CA' M□PG' ?' HBH I

#FG' JGGCHG ' A>' A@G' A>' CFG G' M□HG ' ?D BG ' CFG' KD?OC□ GN' KAGC'

HNGGN ' CFG' JFAMG' KM?E□ ' DG@?D(?LMG' >AD' □C ' GMG ?HOG' D?CFGD' CF?H' □C '

>ADOG ' ?HN' □C ?KKG?D ' CA' B ' G ?OCME' BOF' ?' KGD>AD@?HOG' ? ' J? ' J□CF□H'

CFG' D?H G' A>' %D?ECAH8 ' KAJGD ' #FG' NGP□OG' A>' ?LGM' KDAOGGN ' □H'

CFG ?KKG?D?HOG'A>' "?E@AHN' & ABH0FGH GE' N□ B□ GN' ? ' ?' >D□?D' □D'

DCFBD' M?DG' F?' N□ OMA GN' CA' F□@' ?MM F□ ' KDASGOC ' #FG'=' FAME'EABH '

HAP□OG' I' KDAOGGN ' CA' CFG KD□ADE' ? ' ?' P□ □CAD' GHC' >DA@' ?MCF?@' AB G'

CA' ? OGDC?□H' J□GCFGD' &□MM□ GHC □ ' ?LABC' CA' C?(G CFG' PG□M = >DA@' 0AH-

0□GHOG' ?HN' NGP□C□AH I' #FG' NGP□OG' BOOGGN ' ?HN' CFG' MAPGD ' ?DG' MG>C'

CA GCFGD R

, ' ' $D>CG' A>'@E' ABM' LD□ FC' ?H GM

' F?C' @G?H ' CFG >D□?D□ ' ?HN' CKE

' ' &□MM□ GHC' 8C□ '

' &' F□G?DC' @□ □PG ' @ G ' ' FABM□' (HAJ'CF?C')AOG'

, ABW' J□FA' ?DG' EAB'W' CFG' FAME')□D □H' LMG ' @ G

#GMM' @G' EABD' H?@G ' EAB' F?MM' GDG' EAB' 0AH>G ' @G

' &ABH0□GH GE ' CFE' CDBG' >D□GHN

' &' " ?E@AHN ' @E' NG?D' FG?DC

J GGC' M□>G ' □PG' MG?PG' CA' @E' N□ CD?OCGN' ABM'

#A' J?(G ?' M□CCMG' >DA@' CF□ ' J□AH' A>'SAE

. E' J F?C' @G?H ' 0?@8 C' CFAB' CA' ? B@G' CF□ ' F?KG'W

' . E' @G?H ' A>' GCGD' ?LGM ' @E' (□HN' CBCAD

' d ' GHN' CFGG' LE' @□HG' GEG I

F?C' @E' CAH BG' >?□M ' ' GHN' CFGG' LE' @□HG' GEG I

FA ' □H' CFG' F?L□C' A>' >D□?D' □MNGD F?@

D?H(' 0GDH□H F?@8 ' AMN' >D□GHN' ?HN' 0 H>G AD

MACCGN' LE' D?H(' LE' ?L□M ' ?HN' @E GM>

HN' A' NGM□PGD8N' CA' □D' DCFBD' M?DG

FA' LDAB F□ @G FGDG' BHCA' CFG ?LLGE ?CG

#A' LG' F□ ' HBH @?NG N?B FCGD8 ' P□ □CAD

' ' ,AB' ?DG' ?M' J GGC' CD?□CAD ' CA' @E' KAAD' AMN' >?CFGD

7 ' @E' NG?D' M□>G' ' J ? ' ?' NDG?@8N' CN H□ FC

#F?C ' ? ' ' J ? ' KD?E□H ' □H' @E' K ?MCGD

#FGDG' 0?@G' ?' K□D□C' BHCA' @G ' ? ' ' (HGGM8N

HN' LE' F□ ' CDAH ' KGD B? □AH ' CG@KCGN' @G'

#A' MG?PG' CF□ ' HBHHGDE' ?HN' @GCFAB FC'

G' 0?@G' □H' CFG @A C' MADDAB ' ?H GM' F?KG'

#F?C' @ADC?M' GEG' N□N' GPGD' MAA(' BKAH

? ' CFAB' ?DC' BDG' CF?C' K□D□C' >AD' CFGDG8 ' HA' >AD@'

' □H' @□HG' GEG ' A' MADDAB ' ? ' CF□HG' AJH

' ' CFAB' □NAM?CDG ' CF?C' NA C' CF□ ' JAD' F□K'

#A' F□@' JFA G' M□(GHG ' □ ' LBC' KD?□ G' A>'CFGG

#FAB' LD□ FC' BH G□C□H ' C?D' J F□OF ' CFDAB F' CF□ ' PG□M

AD' PGDE' GHPE' @?(8 C' CFG' BH' MAA(' K?MG

' ' G□M ' P□ □CAD' MG C' CF?C' KGDF?K ' @E' @ACFGD'

FABM' CF□H(' CFG' >D□?D' CAA' CD□OC' □H' F□ ' NGODGG

' CF□ ' OAH>G ' CA' @E' JGGC' FA CME' >?CFGD

>'OF? CG' KBDG' MAPG' LG' □H' ' @B C' OAH>G

' F?PG' A>>GHNGN' CFDGG' EG?D ' HA'J' J□CF' CFGG

' . BC' NA' EAB' EGC' DGKGHC' EAB' A>'CFG' ?@G'W

' ß >?CF' ' O?HHAC

' AD' J□MM ' ?L AMPG' CFGG

>'CF?C' JGGC' □H' CFAB F' □C' LG' PGH□?M

, GC' F?PG' CFG' KGH?HOG' A>'?' CFAB ?HN' (□ G

HN' ' GHSA□H' EAB' CA' CF□ K□M D□@? G' R

#F?C' □H' CFG' GPGH□H ' EAB' LG CAJ' EABD' GN'

GDG' □H' CFG' J?M(' HG?D' CA' CFG' J□MAJ DABHN

FGDG' 8MM' LG' DG?NE' LACF' J□CF' @GH' ?HN' FAD G

#A' J?□C' EABD' OA@□H ' ?HN' 0AHPGE' EAB' FGHOG'

*HCA' ?' MAN G' ' F?PG' □H' i H>□GMN' F? G

A' @ADD' DGKME' □>'CF?C' EAB' E□GMN' 0AH GHC'

' GG' @ADG' GEG ' BKAH' ABD' C?E' ?DG' LGHC

' J GGC' M□>G ' >?DG J GMM' 8C□ ' NAHG' MGC' CF?C B>>□OG'

#FG G ' >AD F ' MAPG' JFA' AHOG' J ? ' @E' NG?D' KBK□M
?PG' G>>GOCGN' AJ ' @GCF□H(' 8C' CD?H G
#F?C' EAB ' LG□H ' AM□' H J□ NA@ ' FABM□' CFB ' (H□C
, ABD' >ADGFG?□' AH CF□ ' @?CO□F ' □HOG' DG? AH >?□M
A' M?J' 0?H' OBDL' CFG MAPGD8 ' D? F ?CCG@K□C
,G?D ' □H' DG □ C□H ' CF□ ' ?DG' ?NME' KGH□C
@□MG' CFGH' BKAH' EAB□' N?B FCGD' ?HN' (□HN' AH
HN' MGC' ABD' CA□M' CA' >BCBDG ? G ' KDAPG
#FG' %GP□M' A>' iN@AHCAH' N□N' AAN' □H' MAPG
('&. $ ' GMM ' 8C□ ' □H' P?□H' CA' ODA ' CFG KDAP□NGHOG'
%G?D' AH' ' C?(G CFGG BK' □HCA' @E' FG?DC
"□ G ' N?B FCGD' CF□ ' □ ' ? ' (□HN' >?CF8□' K?DC
' FE ' □D' +GAD G' GHN' >D' K□HNM8 ' HA□ G KDG GHCME
?' GDG8C' LG' H□ FC' 8M□' GDPG' CFG' AAN□' NB(G' A>' AD>AM(
(' $ ' +D? ' ?HN' F?E' @□HG' FA C' MGC8 ' M□PG' C□M□' JG' N□G'
?HN□' LG' @GDDE' ?HN□' CFGD8 ' ?H' GHN I

G' M?@GHC' J□CF' 8□GO(' CF?C' CFG' OAHC□HB?C□AH' A>' CFG' O?DGG□' A>' =' CFG
@GDDE' NGP□M1' □ ' KA □LME' MA C' G' □@? □HG' CF?C' J□G' FAB□M□' F?PG' GGH
F□@' G K□?C□H ' F□ ' >?B□C' LE' NA□H ' ? ' @BOF' AAN□' CA' F□ ' >GMMAJ @ADC?M '
? ' FG' 0AB□M' ?OOA@K□C' F' J□CFAB□C' CFG' ?□N' A>' HGODA@?HOE' M□' GGPGD '
H OD□KC□AH' CFG' . ANE' A>' GCGD' ?LGM□' V?' CFG' D8KAD□' AG ' BKAH' JFA@'
=' GD□' V?□' iN@AHCAH' M□GCF' □HCGDDGN' BHNGD' ?' GG@GM□G' #A@G ' J□CFAB□'
□H F□ ' =' BHGD?M' &AHB@GHC I' F?' HA' DG?□' ?LGM□' V?' CFG' D8KAD□' AG ' BKAH' JFA@'
CF□ ' ?LM□G' J?' >?CFGDGN' CF?□' FG' LE' F□ ' J□CCG' NGP□ G ' LG B□MGN' CFG
NGP□M□' LGM□(G' FG' J?' A@G □H GH□AB ' 0AH0G□CGN' GHCMG@?H' JFA' N□N'
B G A@G M□G FCE' CD□O(G ' >AD F□ ' AJHG N□ KAD□ ' G' M□PGN' ?HN' N□GN'
□H' CFG' D?□ HG' A>' GHDE' CFG' GPGHCF' ?□CF' CFG' LAA(G' A>' F□ ' @GDDE'
KD?H(I

#FG' PAC?DG ' □ ' O?DD□GN' A>>' LE' FGD' LDACFGD' ?HN' 0GDH□H F?@' LBC' □H
CFG N?D('HG ' A>' CFG H□ F□ CFGE M□A G CFGD' J?E' ?HN' GHOABHCGD' CFG' NGGD '
CG?M□G ' ?HN' CFG' (GGKGD ' ' >D□GHNME'>AD□ CGD' FAJ.GPGD' ? □ C ' CFG@'
?HN' CFGE' DG?OF' iH>GM□N' □H' ?>GCE' A□' A' >ADCBH?□CG' ?DG □D' DCFBD'
?HN' □D' "?MKF' JFA' ?DG' □H' KBD B□C' A>' CFG' BHJ.MM□H ' HBH' #FGE' ?DG'
DAB FME' CDG?□GN' LE' CFG (GGKGD ' ?HN' ?>CGD' ?' H□ F□ A>' CA□M' >□HN' ?
D□ C□H KM?OD ?□ ?MCF?@' #FG' KD□G □' ?HN' F□ ' OA@K?HAH ' ?DG
CGDD□>GN' LE' CFGD' GHOABHCGD ' □H' CFG' F? G ' CFG' M?NE' □H' JF□CG ' JFA'
F?' ' LGGH' F□N□H ' >DA@' CFG@' □ ' C?(GH' >AD' ?' K□D□C' ?HN' CFG' G CAH' F?'
GGH' ?' P□ □AH' □H' CFG OFBDOF' KADOF' #FG' @ADH□H ' FAJ.GPGD' ?DD□PG '
?HN' JG GG = □D' DCFBD' M?DG' ?HN' □D' "?MKF' 0GDH□H F?@' CDB □H '
CFGD' KA□HC ' ? ' HGJ.ME' BK I' #FGE' F?N' @?NG' AAN' CFGD' DGCDG?C' ? '
CFGE' >?HO□GN' CA' CFG' □HH' A>' @□HG' FA C' A>' CFG' +GAD G' LBC' CFG @GDDE
NGP□M' A>' iN@AHCAH' F?N' GC' CFG' +GAD G' CFG' @□CF' CA'OF?H G CFG □ H'
A>' CFG' FAB G J□CF' CF?C' A>' ?HACFGD' □HH ' ?HN' ?C' CFG' DG?M' +GAD G' CFG
MAPGD ' JGDG' LG□H ' F?KK□ME' @?DD□GN' LE' CFG' PGH□ AH CG?M□H ' K□G C' □H
CFG 0A@K?HE' A>' CFGD' >?□CF>B\' >D□GHN ' □D' DCFBD' ?HN' □D' "?MKF' ?DG'
A>' OABD G' PGDE' ?H DE' JFGH' CFG' CDBCF' □ ' @?NG' (HAJ.H' LBC' DGOAH-
O□MG@GHC' ?HN' KG?OG' ?DG' AAH' ?OOA@K□C FGN R

=' " ' #A' GHN' CF□ ' N□>>GDGHOG' (HAJ ' ?C' >D C ' (HGJ'
F?C' EAB' □HCGHNGN' GDG' EABD' MAPG' CAA(' >□ FC
DA@' AM□' &ABHOFGH GE' EAB ' □D' DCFBD' M?DG
GDG' @□HNGN' CA' F?PG' @?DD□GN' CF□ ' JGGC' LG?BCE
#A' EABH ' D?H(' 0GDH□H F?@' #A' ODA ' CF□ ' @?COF'
' B GN' A@G' KDGCCE' MG□ FC ' LBC' ' KDACG C
B0F' ? ' LBC' ?C' BKAH' CFG' (□DC ' A>'?DC
A' 0AHSBD?C□AH ' HAD' B0F' JG□ FCE' KGM□ '
' C□G CFG' ABM' CA' CFGD' KGD>AD@?HOES

' 7 (' ' (' '

1 ' "3

) ' '

' M' 2

) ' D?H (' ? ' ?' J D□CGD' J F□OF' F?(KGDG' CAA(' ?@AH C' F□ ' OAHCG@-KAD?D□G ' □ ' NGCGD@□HGN' LE' ?' >GJ' NGO□NGN' HAC□OG ' A>' F□@ ' #FG G' HAC□OG ' ?DG' ? ' ?@KMG' ?HN' ? ' >DGQBGHC' ? ' O?H' LG' MAA(GN' >AD' □H' ?H' ?ZG' J F□OF' F?N' HA' OD□C□O?M' DGOADN ' ?HN' J FGH' J D□CGD ' CFGDG>ADG ' ?M@A C' J GHC' ABC' A>' CFG□D' J ?E' CA' DG>GD' CA' CFG□D' M□CGD?DE' OAHCG@KAD?D□G ' G OGKC' >AD' KBDKA G ' A>' GC' OA@KM□@GHC ' G' LGM□GPG' CF?C ' ? ' G?DME' ? ' 51 ' KGH GD' O?MMGN' ?CCGHC□AH' CA' F?(KGDG ' ?

6' NHP' I M!' H I' MNJ P' GP97' HMO' I MOP'
' I KU' HP GP97' M!O' JNH' N ' I NMNP8 R

NG OD□L□H ' F□@' ?M A' ?

6' NHMM' GM I P' ' 'GL N' 7 I' H GP' LP!'
/ M QP' GN PM I G' 7' H !PT' M!O' G PPN' !PKNM ' 79 +R

G' (HAJ' CF?C' CFG' GHPE' A>' + DGGHG ' □H' 512 ' KA□HCGN' ?C' F□@' ? ' = ?H' ?L AMBCG' 0AF?HHG ' >?OCACB@ ' □H' F□ ' AJH' OAHOG□C' CFG' AHME' F?(G OGHG' □H' ?' OABHCDE I' ?HN' JG' DGOG□PG' CF□ ' L□CCGDHG ' A>' CFG' BH>ADCBH?CG' ND?@?C□ C' ? ?□H C' F□ ' @ADG' BOOG >BM' D□P?M' ? ' ?' CD□LBCG' CA' F□ ' KAJGD' ?HN' F□ ' KAKBM?D□CE ' G' OAH □NGD' CF?C' CFG' ?KAMA E' A>' FGCCMG ' JFA' F?N' GN□CGN' CFG' KA CFB@AB ' JAD(' A>' + DGGHG' OAHC?□H□H ' CF□ ' G>>B □AH' A>' K□CG ' J? ' ?H' ?O(HAJMGN @GHC' A>' CFG' G C?LM□ FGN' AK□H□AH' A>' F?(KGDG8 ' G OGMMGHOG' ? ' ?H' ?BCFAD R ='%□PGD ' A>' JAD F□K' F?PG' DGKADCGN' F□ ' BKD□ FCHG ' A>' NG?M□H ' J F□OF' ?D BG ' F□ ' FAHG CE ' ?HN' F□ ' >?OGC□AB ' D?OG' □H' JD□C□H ' CF?C' ?KKDAPG ' F□ ' ?DC I' #F□ ' J? ' KD□HCGN' □H' 512' ' ?HN' EGC' CFG' @?H' JFA' F?N' JAH' CF□ ' DGMBOC?HC' CG C□-@AHE' CA' F□ ' ?DC' LE' ='F□ ' >?OGC□AB ' D?OG' □H' JD□C□H I' □ ' FGMN' LE' @ANG@' ?BCFAD□C□G ' CA' F?PG' CFGH' LGGH' AHME' ?' LACOFGD' A>' ACFGD' @GH8 ' JAD(' ? ' □>' = >?OGC□AB ' D?OGI' JGDG' ?H' G KDG □AH' CF?C' N□N' HAC' @A C' F?KK□ME' @?D(' CFG' QB?M□CE' LE' JF□OF' F?(KGDG' J? ' CFGH' @A C' G@□-HGHCME' N□ C□H B□ FGN' ?LAPG' ?MM' F□ ' OAHCG@KAD?D□G R F□ ' OA@□O' KAJGD' R F□ ' ?L□M□CE' ?LAPG' ?MM' ACFGD ' CA' KDANBOG

6' O !P' J!NP 7PGM!KP' M!O' J!HJ N7J9 L N
5P9 QHN' M!O' /MJQHNP ' OPKU%O' !' GPP I 9T' G N+R

? ? G ' BOF' ? ' CFG G ' FAJGPGD ' JF□OF' □C' □ ' @AD?MME' □@KA □LMG' CA' ?KKME' CA' ?HE' ACFGD' @?H' CF?H' F?(KGDG ' ?DG' C□MM' AHME' □HN□DGOC' GP□NGHOG' A>' CFG' AK□H□AH' JF□OF' J? ' >AD@GN' A>' F□@' JFGH' FG' J? ' EGC' ?' PGDE' EABH ' JD□CGD ' . BC' ?' >GJ' EG?D ' M?CGD' JG' GHOABHCGD' CFG' @A C' " ' CG C□@AHE' CA' F□ ' KDG G@□HGHOG ' G' □C' J? ' CF?C' □H' D5 6' J? ' ? □ HGN' F□ ' D?H(' HAC' LE' ?HE' P? BG' ?HN' NABLC>BM' OA@KM□@GHC ' HAC' J□CF' ?HE' □ HAD?HOG' A>' JF?C' F?N' LGGH' ?OF□GPGN' LE' ACFGD' @GH' ?HO□GHC' ?HN' @ANGDH ' LBC' LE' CFG' MG?DHGN' N□ OD□@□H?C□AH' A>' ?' OFAM?D ' ?HN' CF?C' D?H(' J? ' J□CF' A@GD ' G □AN ' !BD□K□NG ' OFEMB ' AKFAOMG ' □HN?D ' FAOEM□NG ' ?HN' D□ CAKF?HG ' ?@AH C' CFG' + DGG(')□D □M' P□N ' AD?OG ' □M□B C?M□OB ' $BO?H ' $BODGC□B ' B AH□B ' ?HN' M?BN□?H' ?@AH C' CFG' $?C□H ' ?HN' □NHGE ' KGH GD ' %?H□GM ' %D?ECAH ' ?DHGD ' & ?DMAJG ' ?HN' F?K@?H' ?@AH C' CFG' ! H M□ F ' OOADN□H ' CA' CFG' ?@G' ?BCFAD□CE ' □C' J? ' = □H' @GMM□MBAB ' ?HN' FAHGE CAH BGN' F?(KG?DGI' CF?C' = CFG' JGGC' J□CCE' ABM' A>' P□N' M□PG I' #F□ ' KD?□ G' J? ' ?KKM□GN' CA' F□ ')GHB ' ?HN' NAH□ ' ?HN' ACFGD' KAG@ ' . BC' >AD' F□ ' ND?@? ' FG' □ ' D?□ GN' ?LAPG' GPGDE' H?C□PG' OAHCG@KAD?DE' ?HN' KDG-NGOG AD' ' R '=' ' M?BCB ' ?HN' GHGO?' ?DG' ?OOABHCGN' CFG' LG C' >AD' A@GNE' ?HN' #D? GNE' ?@AH ' CFG' $?C□H ' A' F?(KG?DG' ?@AH ' CFG' ! H M□ F' □ ' ' !-' 4 ' □H' LACF' (□HN ' >AD' CFG' C? G I' #FG G ?DG' G CD?OC ' >DA@' = #FG' □C 8 A@@AHJG?MCFI' A>' D?HO□ ' &GDG ' = &? CGD' A>' DC ' A>' LACF' * H□PGD □C□G I R ?' LAA(' M?D GME' O□DOBM?CGN' ?HN' @GHC□AHGN' J□CF' ?KKM?B G' LE' OAHCG@KAD?DE' JD□CGD ' #FG' ?BCFAD' NGM□PGD ' HAC' CFG G' GHCGHOG ' ? ' F□ ' AJH' KGOBM□?D' AK□H□AH' ' FG' KG?(' BHFG □C?C□H ME ' ? ' A>' ?' >?OC' ?N@□CC□H ' HA' NABLC ' CF?C' F?(KGDG ' ?@AH ' CFG' ! H M□ F ' □ ' CFG' @A C' G OGMMGHC' >AD' A@GNE' ?HN' #D? GNE ' %AG ' ?HE' AHG' 17' CFG' ACFGD' = ' G OGMMGHC' I' ND?@?C□O' JD□CGD ' A>' CF?C' N?E' D□ G' BK' CA' N□ KBCG' CFG' ? GDC□AH ' ?MM□H ' KGDF?K ' CA' CFG' GM> MAPG' A>' A@G' ?@AH C' CFG@W' AC' ?' PA□OG' □ ' FG?DN' CA' CGMM' D?HO□ ' &GDG ' CF?C' FG' F? ' APGD C?CGN' CFG' KBLM□O' AK□H□AH' A>' CFG' BKDG@?OE' A>' F?(-KGDG ' #FA@? ' GEJAAN ' AHG' A>' CF□ ' □MMB CD□AB ' L?HN ' KG?(' A>' &GDG ' ? ' ?H' ?KKDAPGN' AAN' OFAM?D' ?HN' ?E ' CF?C' F□ ' ?OOABHC' A>' ?BCFAD ' □ ' MG?DHGNME ' NAHG U' GEJAAN' F□@ GM>' □HNGGN ' □H' M□HG ' JD□CCGH' MAH ' ?>CGD' F?(KGDG8 ' NG?CF ' @GHC□AH ' F□@' □H' CDAH GD' CGD@ ' A>' KD?□ G' CF?H' FG' ?KKM□G ' CA' ?HE' A>' F□ ' OAHCG@KAD?D□G >' $? CME ' &GDG ' ?>CGD' ACFGD' OA@K?D□ AH ' A>' F?(KGDG' J□CF' CFG' DG?C' JD□CGD ' A>' ?HC□QB□CE' ?HN' A>' F□ ' AJH' C□@G ' F? ' CFG G' JADN ' JF□OF' HACF□H ' LBC' ?' OA@KMGCG' DGM□?HOG' BKAH' CFG' DGOG□PGN' AK□H□AH' A>' F□ ' N?E' OABMN' F?PG' J?DD?HCGN' F□@' □H' ?KKME□H ' CA' ?HE' M□P□H ' @?H R =' ' !K□B ' CAMA' ?□N' CF?C' CFG' & B G ' JABMN' KG?(' J□CF' M?BCB 8 CAH BG ' □>' CFGE' JABMN' KG?('$?C□H ' A' ' ?E' CF?C' CFG' & B G ' JABMN' KG?(' J□CF' F?(KG?DG8 ' >□HG' >□MGN' KFD? G ' □>' CFGE' JABMN' KG?(' ! H M□ F I

>' CFG' KAKBM?D□CE' A>' F?(KGDG' □H' F□ ' AJH' N?E' CFG' G CGDH?M' GP□NGHOG' □ ' @ADG' NGO□ □PG' CF?H' CFG' CG C□@AHE' A>' ?HE' OAHCG@KAD?DE' JD□CGD ' G' J? ' ?C' AHG' ?HN' CFG' ?@G' C□@G' CFG' >?PABD□CG' A>' CFG' KGAKMG' ?HN' A>' CFG' ABDC ' #FGDG' □ ' HA' DGOADN' JF?CGPGD' (HAJH' CA' G □ C' A>' CFG' KBLM□O' KGD>AD@?HOG ' A>' F?(KGDG8 ' KM?E ' ?C' F□ ' AJH' CFG?CDG ' ?N' BOF' ?H' ?OOABHC' G □ CGN' A>' CFG' DGOG□KC ' ?C' CFG' . M?O(>D□?D ' ?HN' CFG' + MALG' ? ' GH MAJG' (GKC' >AD' F□ ' OA@K?HE ' JG' FABMN' F?PG' (HAJH' A@GCF□H ' KDGO□ G' ? ' CA' CFG' G CGHC' A>' F□ ' KAKBM?D□CE ' . BC' CFG' >?OC ' OAHHGOCGN' J□CF' CFG' AD□ □H?M' KBLM□O?C□AH' A>' F?(KGDG8 ' KM?E ' B>>□-O□GHCME' KDAPG' FAJ' G? GDME' CFGE' JGDG' >AD' CFG' @A C' K?DC' DGOG□PGN' LE' CFG' DG?NGD ' A>' CFG' ND?@? ' DA@' 51 ' CA' □4AA' CGH' A>' CFG G' KM?E ' JGDG' KBLM□ FGN' >DA@' ?BCFGHC□O' OAK□G ' BHNABLCGNME' J□CF' CFG' OAH GHC' A>' CFG' ?BCFAD ' #FG' E CG@' A>' KBLM□O?C□AH' N□N' HAC' OA@@GHOG' LG>ADG' 51 ' ?HN ' J□CF' >ABD' G OGKC□AH ' □C' J? ' HAC' OAHC□HBGN' LGEAHN' 477 ' >' CFG G' KM?E ' CFGDG' JGDG' KBLM□ FGN ' LG>ADG' CFG' ?KKG?D?HOG' A>' CFG' OAMMGOCGN' GN□C□AH' A>' 423 ' >ABD' GN□C□AH ' A>' "□OF?DN' ' □ ' A>' CFG' □D C' ?DC' A>' GHDE') ' □ ' A>' "□OF?DN' ' >ABD' A>' "A@GA' ?HN' 0BM□GC ' □ ' A>' ?@MGC ' LG □NG ' DGKG?CGN' GN□C□AH ' A>' CFG' KM?E ' JF□OF' JGDG' BDDGKC□C□AB ME' KBLM□ FGNR CFG' @?□@GN' ?HN' □@KGD>GOC' OAK□G ' NG OD□LGN' LE' CFG' GN□CAD ' A>' CFG' >□D C' >AM□A' >' CFG' CF□DCE □ ' KM?E ' OAHC?□HGN' □H' CFG' >AM□A' A>' 423 ' AHME' AHG F?M>' J? ' KBLM□ FGN ' JFGCFGD' GHB□HG' AD' K□D?C□O?M ' □H' CFG' ?BCFAD8 ' M□>GC□@G' ' ?HN' □C' □ ' LE' HA' @G?H ' □@KDAL?LMG' CF?C' @?HE' A>' CFA G' JF□OF' JGDG' AD□ □H?MME' KBLM□ FGN' J□CF' F□ ' OAHOBDDGHOG' JGDG' HAC' KGD@□CCGN' CA' LG' DGKD□HCGN ' LGO?B G' BOF' KBLM□O?C□AH' @□ FC' LG' OAH □NGDGN' □HSBD□AB ' CA' CFG' DG?C' CFG?CD□O?M' KDA-KGDCE' J□CF' JF□OF' FG' J? ' OAHHGOCGN ' . BC' CFG' OAH C?HC' NG@?HN' >AD' A@G' A>' CFG' KM?E ' □ ' ?H' GP□NGHOG' A>' CFG□D' KAKBM?D□CE' JF□OF' O?HHAC' LG' @□ C?(GH ' ?HN' □ ' NGO□ □PG' ? ' CA' CFG' KGAKMG8 ' ?N@□D?C□AH' A>' F?(KGDG ' ' >AD' CF?C' A>' CFG' ABDC ' CFG' CG C□@AHE ' □@KGD>GOC' ? ' □C' □ ' □ ' GHC□DGME' OAHOMB □PG' R

6' PPN' M!' 7' # ![HMM' M' G QHN' N' P P'
' GPP' NHPP' !' J ' MNP G' TPN' MLLPM
!O' I MUP' NH GP' 79 QHNG' JL !' NHP' AM!UG' 7' HM I PG'
HMM' G ' O O' NMUP' 39 CM' M!O' J '?M I PG R

N' " P M KHT' 7' 9PGGPO' # !QP9G' @) +

)

□ ' HA' P? BG' FA@? G' >DA@' 0AH AH' CA' CFG' @G@ADE' A>' F□ ' ='LGMAPGN' >D□GHN I' LBC' CFG' DGOADN' A>' ?' >?OC ' #FG' OOABHC ' A>' CFG' "GPGM ' ?C' ABDC ' LGCJGGH' CFG' EG?D ' 566' ?HN' 47/ ' CFG' @A C' □HCGDG C□H ' KGD□AN' □H' CFG' O?DGGD' A>' F?(KGDG ' F?PG' HAC' LGGH' N□ OAPGDGN' □H' CFG' NGKA □-CAD□G ' >AD' BOF' K?KGD ' G' F?PG ' □HNGGN ' @G@AD?HN?' A>' K?E@GHC ' CA' FGD' & ?SG CE8 ' KM?EGD ' NBD□H ' CF□ ' KGD□AN ' LBC' HACF□H ' NG>□H□CG' ? ' CA' CFG' KM?E ' DGKDG GHCGN ' G' (HAJ ' HAC' J F?C' = A' N□N' C?(G' ! M□T? L B C' JG' ?DG' MG>C' □H' HA' NABLC' ? ' CA' CFG' ?CCD?OC□AH ' >AD' = ABD' 0?@G I' C' ?KKG?D ' >DA@' CFG' "GPGM ' . AA(' CF?C ' >DA@' ?MMAJ@? N?E ' 47/ ' CA' CFG' >AMMAJ□H ' FDAPG #BG N?E ' CFGDG' JGDG' CF□DCGGH' KM?E ' KGD>AD@GN' LG>ADG' CFG' □H ' G□ FC' A>' JF□OF' JGDG' F?(KGDG8 ' H?@GME ' CFGMMA ' #FG' &GDDE' □PG ' A>' □HN AD ' &G? BDG' >AD' &G? BDG ' #FG' A@GNE' A>' !DDAD ' $APG8 ' $?LABD8 ' $A C ' GHDE') ' ?HN' #FG' &GDOF?HC' A>') GH□OG' CJ□OG ' CF?C' LG□H ' = ? ?□H' OA@@?HNGN' LE' CFG' □H 8 ' & ?SG CE I' AC' AHG' A>' CFG G ' J□CF' CFG' KA □LMG' G OGKC□AH' A>' &G? BDG' >AD' &G?-BDG ' J? ' DGOA@@GHNGN' LE' □C ' HAPGMCE ' #FG' GD□G ' A>' CFG' ?@G' ?OOABHC ' □ ' LDA(GH' >DA@' 475' CA' □4 D□ ' ?HN' CFGH' >DA@' ?MMAJ@? ' H□ FC' CA' FDAPG #BG N?E ' JF□OF' ?KKG?D ' CA' F?PG' LGGH' CFG' CFG?CD□O?M' G? AH' A>' CFG' ABDC ' □ ' N□>>GDGHC' OA@K?H□G ' A>' KM?EGD ' AHCD□LBCG' CA' CFG' ?@B G@GHC ' A>' F□CGF?MM' ?HN' +DGGH J□OF' LE' CFG' KGD>AD@?HOG' A>' CJGMPG' KM?E ' >' >□PG' JF□OF' ?DG' KGD>AD@GN' LE' CFG' □H 8 ' KM?EGD ' CJA' ?DG' LE' F?(KGDG R #FG' #G@KG C' ?HN' CFG' □HCGD8 ' #?MG ' >' CFG' DGOADN ' JGDG' @ADG' KGD>GOC ' CF□ ' KDAA>' A>' CFG' ?N@□D?C□AH' A>' F?(KGDG' □H' CFG' F□ FG C' O□DOMG' JABMN' HA' NABLC' LG' @ADG' OAHOMB □PG ' ' □C □ ' □C □ ' B>>□O□GHC' CA' BKKADC' CF□ ' GHGD?M' ?D B@GHC U

%BD□H ' CFG' M□>G' A>' F?(KGDG' F□ ' BDK? □H ' KAKBM?D□CE' ?KKG?D ' CA' F?PG' KDAPA(GN' HA' G KDG □AH' A>' GHPE' >DA@' F□ ' OAHCG@KAD?D□G ' HA' ?CCG@KC' CA' FAJ' CF?C' F□ ' DGKBC?C□AH' J? ' LB□MC' BKAH' ?H' BH AM□N' >ABHN?-C□AH' A@G' A>' CFG' M?CGD' OA@@GHC?CAD ' BKAH' F?(KGDG ' FAJGPGD ' CAA(' □H>□H□CG' K?□H ' CA' KDAPG' CF?C' 0AH AH' F?N' D□N□OBMGN' F□@' NBD□H ' F□ ' M□>G ' ?HN' N□ K?D? GN' F□@' ?>CGD' F□ ' NG?CF ' !PGDE' AHG' (HAJ ' BMMGD8 ' NGM□ FC>BM' K□OCBDG' A>' CFG' OAHP□P□?M' G GDO□ G ' □H' @GHC?M' CDGH CF' LGCJGGH' 0AH AH' ?HN' F?(KGDG ' R '= & ?HE' JGDG' CFG' J□C OA@L?C ' LGCJGGH' F?(KG?DG' ?HN' . GH' 0AH AH ' ' LGFAMN' CFG@' M□(G' ?' K?H□ F' DG?C' ?MMGAH' ?HN' ?H' ! H M□ F' @?H A> J?D' & ? CGD' 0AH AH ' M□(G' CFG' >AD@GD ' J? ' LB□MC' >?D' F□ FGD' □H' MG?DH□H ' AM□N' LBC' MAJ' □H' F□ ' KGD>AD@?HOG ' '

R = G' ?□N ' F?(G KG?D' J?HCGN' DC ' ' ' (4' >AD ' □H' AHG' A>' F□ ' KM?E ' FG' LDAB FC' □H' ?' HB@LGD' A>' @GH ' ?E□H ' CFGE' F?N' B>>GDGN' F□KJD?O(' □H' . AFG@□?' JFGDG' □ ' HA' G?' HG?D' LE' 77' @□MG 88 0AH AH ' □HNGGN ' @?(G ' CFG' AL GDP?C□AH' BKAH' CFG' F□KJDGO(' □H' . AFG@□?' LBC' J□CFABC' ?HE' OA@@GHC' BKAH' □C ' ?HN' □C' □ ' □@KA □LMG' CA' DGOG□PG' F□ ' JADN ' ? ' ?HE' BKKADC' A>' CFG' ?L BDN' AK□H□AH' CF?C' F?(KGDG' JAD(GN' J□CFABC' M?LABD' ?HN' J□CFABC' @GCFAN ' 0AH AH8 ' AJH' CG C□@AHE ' NGM□PGDGN' >□PG' EG?D ' ?>CGD' CFG' OAHPGD ?C□AH' J□CF' %DB@@AHN ' A>>GD ' CFG' @A C' N□DGOC' GP□NGHOG' ? ?□H C' BOF' ?' OAH CDBO-C□AH' A>' F□ ' G KDG □AH' R

6' 4P' I JGN' 2' ! N' Q P' MN I P' M99 ' NHT' M N
T' QP ! N9P' HMUPGLPM P ' I JGN' P ! E T' M' LM N+
O ' NH JQH' NHP' L PN%G' I MNNP ' MNJ P' AP+
" G' M N' O NH' Q P' NHP' 7MGH ! ' M ! O' NHMN' HP'
X H ' KMGNG' N ' NP' M' 9 ! Q' 9 ! P' I JGN' G PMN'
@ JKH' MG' NH ! P' M P ' M ! O' GN UP' NHP' GPK ! O' HPMN'
L ! ' NHP' JGPG% M ! 98 NJ ! ' NHP' GM I P'
@# ! O' H I GP97' NH' N ' NHMN' HP' NH ! UG' N ' 7 M I P8
1 ' 7 ' NHP' 9MJ P9 ' HP' I MT' QM ! ' M' GK ! S
O ' M' Q O' L PN%G' I MOP' MG' XP99 MG' A !
! O' GJKH' P N' NH J+%%

#FGDG' O?H' LG' HA' N□>>□OBMCE' □H' BHNGD C?HN□H ' 0AH AH8 ' N□ KD?□ G' A>' F?(KGDG ' @?MM' ? ' □C' J? ' JFGH' JG' MAA(' ?C' CFG' N□>>GDGHC' OF?D?OCGD ' A>' CFG' CJA' @GH ' H' F□ ' ='%□ OAPGD□G I' JD□CCGH' □H' F□ ' M? C' EG?D ' CFGDG' □ ' CFG' >AMMAJ□H ' K? ? G' R

6' 2' P I P I AP ' NHP' L9MTP G' HM P' 7NP ! ' I P ! N ! PO' N' MG' M ! ' H ! J ' N ' HMUPGLPM P ' NHMN' ! ' H G' X N ! Q ' HMNG P P ' HP' LP ! ! PO ' HP' ! P P ' A9 NNPO' JN' M' 9 ! P# T' M ! G P ' HMNH' APP ! ' X J9O' HP' HMO' A9 NNPO' M' NH JGM ! O# X H KH' NHPT' NH JQH' M' I M9P 9P ! N GLPPKH# 2' HMO' ! N' N 9O' L GNP NT' NH G ' AJN' 7 ' NHP ' Q! M ! KP ' H ' KH GP' NHMN' K KJ I GNM ! KP' N ' K I I P ! O' NHP ' 7 P ! O' AT' HP P ! ' HP' I GN' 7MJ9NPO8 M ! O' N ' EJGN 7T' I ! P' ! ' KM ! O J 8 7 ' 2' 9 1 PO' NHP' I M ! ' M ! O' O ' H ! J ' H G' I P I T' ! ' NH G' G OP' O 9MN T ' MG' I JKH' MG' M ! T# " P' MG' ! OPPO ' H ! PGN' M ! O' 7' M ! ' LP ! ' M ! O' 7 PP' ! MNJ P8 HMO' M ! ' PWKP99P ! N' LHM ! NMGT ' A M P' ! N ! G ' M ! O' QP ! N9P' PWL PGG ! G8 HP P ! ' HP' 79 PO' NH' NHMN' 7MK 9 NT ' N99MN' G I PN I PG' N' MG' ! PKPGGM T' HP' GH J9O' AP' GN LLPO# J779M I ! M ! OJG' P MN ' MG' #JQJGNJG' GM O' 7' " MNP JG# " G' N' MG' ! ' A G' ! ' L P 8 J9O' NHP' J9P' 7' N' HMO' APP ! ' G ' N R

' 3WN MKNG' 7 I ' NHP' #KK J ! NG' 7' NHP' &P P9G' MN' J N ' AT' - PNP ' J ! ! ! QHM I #
'27

6' HMUPGLPM P'NH J'HMOGN'MG GI NH'M K I K P I
O NN IQ'NHP G KU'MIO' I'NHT'IMJ M9 A M I'
#G'GN IQ'K IKPLN I'MIO'MG K9PM'M' MQP
#G'MIT' IP'NMN'N M77 KU9O' NH'NHP'GNMQP+R

#A' ?D BG >DA@' B0F K? ? G ' CF?C CFG JDCCGD ' @G?HC' CA' DGKDA?0F
F?(KGDG' ? ?H □ HAD?HC' AD' GPGH' ? ?H' BHMG?DHGN' @?H' □H' CFG
OA@@AH' GH G A5' CFG' JADN' J ? ' ?H' ?L BDN□CE' CF?□ J ? ' HAC' >BMWE
KDAKABHNGN' CA' CFG' JADMN' C□MN' CFG' N□ OAPGDE' A5' %D' ?D@GD ' CF?C'
LG09B G' CD?H M?CJAH ' G □ CGN' >DA@' $?CH' C?M□?H' ?HN' DGH0F
S' ?BCFAD ' □H' CFG' C□@G A5' F?(KGDG' FG J? ' □H07K?LMG' A5' OAH BMC□H '
CFG AD□ □H?M

#FG' PGD G ' A5' 0AH AH' KDG>□ GN' CA' CFG >AM□A' A5' 423 ' OAHOMBNG'
J□CF' CFG G DG@?D(?LMG' M□HG R

DA@' 4 4 'CFG EG?D' A5' F?(KGDG8 ' NG?CF' CA' 423 ' CFG N?CG' A5' CFG
>□ C' GN□CAH' A5' F□ ' OAMMGOCGN' JAD(' 0AH AH' F□@ GM5' F?N' J□CCGH
HAC□H ' >AD' CFG' . G?B@AHC' F?N' NDGN' CFG EG?D' LG>ADG' F?(-
KGDG' LBC' MGCOFGD' ?MAHG' J? ' B C?□H□H ' CFG' F□ F' DGKBC?C□AH' J□FOF
FG' F?N' JAH' J□CF F□ ' ?00A@KM□ FGN' ? AO□?CG' &? □H GD' F?N' LGGH
□H' $AHNAH' >DA@' 474' (HAJH' OGDC?□HME' CA' F?PG' J□CCGH□H' OAHSBH0-
CAH' J□CF' ACFGD' ND?@?C□ C ' LG>ADG' CFG KGD□AN' A5' F?(KGDG8 ' NG?CF'
?HN' J□CFABC' NABLC' ? □ C□H ' CA' >MM' CFG' PAD□N' J□FO□F' FG F?N' MG>C' >AD'
A5'?' (□H ' □H' CFG G C□@G ' A5' F□ ' ALMPDAH' ' N□ C□H B□ FGN' J□CCGD' ?E '
R ='#FG' .AHN@?H1' ?KKG?D ' □H' CFG M□ C' A5' CFG &? CGD' A5' CFG " GPGM ' □H
=' #FG' □HNG>?C□ ?LMG' #FA@? ' GEJAAN' J? ' ?' J□CCGD' >AD' CFG
42 3 ' #FG' □HNG>?C□ ?LMG' #FA@? ' GEJAAN' J? ' ?' J□CCGD' >AD' CFG
C? G >DA@' CFG' OA@@GHOG@GHC' A5' CFG' GPGHCGGHCF' OGHCBDE' CA' CFG
BKKDG □AH' A5' CFG' CFG?CDG ' GL CGD' J? ' ?' KAGC' A5' F?(KGDG8 '
A□H CFG?CDG' □@@GN□?CGME ?>CGD' F□ ' NG?CF' ?HN' ?' MG?N□H ' OF?D?OCGD' □H
=' #FG' %BOFG ' A5' &?M>□I' J? ' KM?EGN' LE' .BDL? G' ' "AJMGE' KDANBOGN'
A@G A5' F□ ' LG C' JAD(' ?C8 CFG' ?@G KGD□AN' F?K@?H' F?N' HAC'
OG? GN' CA' J□CCG' ADN' J? ' (HAJH ? ' ? ?' D□ □H ' KAGC' &?HE' ACFGD '
CDB M□H ' >AD' CFG' FAHAB□ ' A5' CFG' ND?@?' ?HN' A@G' J□CF' DG?O BO-
OG ' HN' EGC' 0AH AH' NAG ' HAC' FG □C?CG' CA' ?E' CF?C' □HOG' CFG' NG?CF'

6' HPI'N' NHP' P99 N O'GNMQP'MI i+
27'? IG IKG 9PM IPD'G KU AP' i+
1 'G PPNPGN' HMUPGLPM 'OMIKTKG KH 9O+
XM A9P'H G'IMN P' O I NPG 2 " Y

&□MCAH' J? ' HAC' ?>D?N' CA' KBLM□ F' CFG G M□HG ' GPGH' ?>CGD' CFG BKKDG -
□AH A5'CFG' CFG?CDG ' LE'F□ ' AJ'H' KAM□C0?N' K?DCE ' A' AHG' O?N' NABLC' A5'
F□ ' ?>>GOC□AH' >AD' F?(KGDG ' ?HN' A5' F□ ' OAB□? G □H ?PAJ□H ' CF?C' ?>>GO-
C□AH' M□P□H ' ? ' FG' J? ' □H' CFG' FG?C' A5' K?DCE AK□H□AH' J□FO□F' J? ' FA C□MG
CA' ?MM' BOF□G OGMMGHOG ' G' F?PG' □@KME='0AH AH8 'MG?DHGN' AO(I' LBC'
CFG='H?C□PG' JAAN HAG ' J□MN' I' A5' F?(KGDG ?DG' ? AO□?CGN' J□CF' CFG'
@A C' GHNG?D□H ' G KDG □AH ' G' □ ' =' JGGCG C F?(G KG?D I' FG' □ '
=' ?HOE8 ' 0F□MN I' HN' □H' F□ ' M?CGD' EG?D ' ?>CGD' ?' MD>G A5' OAHCGHC□AH'
?HN' FG?PE' DG KAH □L□MCCE' &□MCAH' C□MM' OMBH ' CA' F□ ' G?DME' NGM□ FC

H' 433' J? ' KBLM□ FGN' CFG' OGMGLD?CGN' =' □ CDA & ? C□ ' CFG'
M?EGD8 ' 0ABD G I' A5' □MM□?@' DEHHG ' H' F□ ' NNDG ' CA' CFG' F□ -
C□?H "G?NGD' FG F?' ? ' N□ C□H0C' ?MB □AH' CA' CFG' KAKBM?D□CE A5' F?(KGD8 '
0AMMGOCGN' JAD(R =' A@G' KM?E LA(' □HOG ' >□D C' BHNGDCAA(' CF□ '
BL5GOC' ?GD' DAJH' >DA@' QB?DCA' □HCA' >AM□A' J□FO□F' EGC' LG?D' A' AAN' ?'
KD□OG' ?HN' ?MG CF?C' ' 0?HHAC' LBC' J□CF' D□G5' DGM?CG' □C' CFGE ?DG' HAJ'
HG'J' KD□HCGN' H' >?D' LGCCGD' K?KGD' CF?H' @A C' A0C?PA' AD' QB?DCA' L□LMG '
J□FO□F' F?DNME' >□HN' BOF' PGHC ? ' CFGE I' #FG' C'J A' >AM□A' GN□C□AH ' A5'
F?(KGDG' ?DG' CFG' AHME' KM?E LA(' DAJH' >DA@' QB?DCA' CA' >AM□A' CA'
?HN' MGCOFGD' JGDG' HAC' OAMMGOCGN' CMM' 4/ ' #FG' PGDE' >?0C' A5' CFG' KBL-
M□?CAH' A5' CFG' >□ C' CJA' >AM□A ' A5' F?(KGDG ' ? ' KDAA5' A5' F□ ' KAKBM?D□CE
J□CF' GHGD?M' DG?NGD ' #FGE' JGDG' HAC' G OMB ' PGME' CFG' CBN□G ' A5' CFG
OFAM?D' BOF' ?' &□MCAH' AD' A5' CFG' KM?E F?BHCGD ' JFA@' DEHHG'
NGHABH0G ' ' MGCCGD' □H' CFG' .ANMG□?H' $□LD?DE' J□CCGH' LE' ?
%D' 02?G ' ?LABC' CF□ ' KGD□AN' CG C□>G ' FAJ' GHGD?ME' CFGE' JGDG' DG?N' CFG
R =' ' EABH ' GHCMG M?NE' A5' EABD' ?0QB?□HC?H0G' F?P□H ' DG?N' CFG
1 / ‡' 22‡' Z' ‡' HMUGLPM P' i'NHP' 3IKTK9 LGPO+ ' MMii KM+
?

N' ‡' 5P' >J iKPT%G / 7P' 7' HMUGLPM P' i'NHP' 3IKTK9 LGPO+ ' MMii KM+
?

I ' ,' " " ' , ' , $ ' ' X‡ 8 "

X HMN' IPPD' I T' HMUPGLPM P7 '7 H G H i J %O'A IPG
HP'9MA J ' 7'MI'MQP' i'L 9PO'GN IPG

' 9P QQP%G / NP M T'&PIM IG' 9‡ ‡L' '
N' / 7P' 7' HMUPGLPM' i'/M OIP %G TK9 LMPO M+

3

=' F?(G KG?D' J ? ' HAC' A' @B0F' G CGG@GN' GPGH' NBD□H ' F□ ' M□>G' ? '
J? ' ?MM' LBC' >AD ACCGH I'C' A' J'G DG?N' □H ?H' ?BCFAD□CE' CAA' @□ FCE' CA'
GHCGD' BKAH' GP□NGHOG ' #FG' ALM□P□AH' ?>CGD' F□ ' DGCDG@GHC' ?HN' NG?CF' □ '
CFG' CDBG' 'CA' CFG' HG MGOC' NBD□H ' F□ ' N□>G' FGH' N□N' CFG' ALM□P□AH'
LG □H'W' C' 0ABMN' 0?DDGME' F?PG' G □ CGN' JFGH ' □H' 423 ' ?H' G KGH □PG'
>AM□A' PAMB@G' A5' @?HE' FBHNDGN' K? G ' J? ' KBLM□ FGN' J□CFABC' DG ?DN'
CA' CFG' D□ (' A5' BOF' ?H' BHNGDC?(□H ' ?HN' □C' J? ' ?' D□ (' □HNGGN' □' CFG'
?BCFAD' F?N' LGGH' HG MGOCGN' ?HN' J? ' >AD ACCGH' .B□ CFG' GN□CAD ' A5'
CFG'PAMB@G' NA' HAC' ? ('C□@□NME'>AD' BKKADC' A5'CFG' G HG' MGOCGN' ?HN' >AD-
ACCGH' JAD(' #FGE' ?E'CA' CFG' DG?NGD'=' #FAB F' EAB' LG' ?' @? □ CD?CG
A5' J□C' ?HN' □C' AH' CFG' C? G ?C' .M?O(>D□?D' AD' CFG' AO(KCC' CA' ?DD?□ H
KM?E ' N?□ME ' (HAJ' CFG G KM?E ' F?PG F?N' CFGD' CDC?M ?MDG?NE' ?HN' CAAN
ABC' ?MM' ?KKG?M I' %□N' CFG' ALM□P□AH' OAHC□HBG' J□FGH'□H' 432 ';?' GOAHN
GN□CAH' A5' CF□ ' M?D G' JAD(' J? ' LDAB F□' ABC'W' #FGDG' J? ' AHG' @?H'
OGDC?□HME'R ?' EABH ' ?HN' ?DNGHC' OFA(□R JFA' J? ' HAC' ?@AH □ C' CFG
AL□P□AB ' 0AFH' &□MCAH' J? ' C□J□GHCE'>ABD' EG?D ' A5' ? G' J□FGH' CFG G
P□D G ' J□GDG' KBLM□ FGN' R

JAD(' A>' F?(KGDG' @?NG @G CF=' QBG CAH I' Y0 U' FGH' CFG $AHNAH' CFG2?DG ' JGDG' KDAP=NG' JCF' HAPGMCG ' ;H' B0F ?LBHN?HOG CF?C' ?OOADN=H ' CA' DEHHG '=' AHG' CBNE J?' ' O?DOG ?LMG CA' FAMN' CFG HGJ' KM?E LAA(I' CFG KM?E ' A>' F?(KGDG JGDG' C=MH' B0F NG@?HN' >AD' CFG' KBD=KA G ' A>' CFG' C? G' CF?C F=' B00G AD ' ;H' CFG' CFG?CD=O?M KDAKGDCE' A>' CFG' +MALG' ?HN' .M?O(>D=?D ' >ABHN' =C CFGD' ;HCGDG C' CA' KDG-GDPG' CFG' @AHAKAME' A>' CFGD' KGD>AD@?HOG VJ FJOF' CFGE F?N' A' MAH ' GHSAEGN ' LE' ? F?HN A@G' D?CDBCE CA CFG &? GD' "GPGM ' #FG' KGAKMG' OM=?DME F?N' HAC' EGC' >AD ACCGH' F=' NGM=' FC ?HN' JAHNGD' A>' CFG C? G I' =GCOFGD' &? ;H GD' F=DMGE' J GDG' HGPGD'>?PABD=CG ' J LBC' CFG KGAKMG' OABMW' HAC' >AD GC' F?(KGDG' G=CFGD' J? ' FG >AD ACCGH' LE' CFG' DG?C' H'CFG' PGDE' EG?D' A>'CFG' KBL=O?C=AH' A>' DEHHG8 ' LAA(' CFG H?@G' A>' F?(KGDG' J? ' ?'@=M=?D' CA' CFG' DAE?W' O=DMG ? ;H' CFG' N?E ' A>' 0?@G ' DA@' APG@LGD' CF' CA' 0?HB?2DE' 4CF' CFGDG' JGDG' G=' FC KGD-=AD@?HOG ' ?C' C' 0?@G 8 ' ?HN' F=CGF?W' CFDGG' A>' JFJOF' JGDG' ?HN' E@' CFG N?E 88 ^ . BC' CF=' ' PGDE' CDBCF ?HN' KBD=CE' A>' F?(KGDG' @B C' F?PG' D=G?WM' N=@=H' FGN' F=' ?CCD?OC=AH ' ?@=N C' ?' ODA'J N' J=A' JDACG' BKAH' AKKA '=CG' KD=HO=KMG ' ACF=H ' LBC' CFG' BHGQG?WMGN' CDGH CF' A>' F=' ?DC' C=O?W' KA'JGD' OABWN' F?PG' KDG GDPGN' CFG' BHLDA(GH' OAHC=HB?HOG' A>' F=' BKDG@?OE

JFOF' CFG' KDG' =H ' =@KADCBH=CE' A>' A@G' WW' ?OQB?=HC?HOG' ND=J' @G' JFMG' ' ?' EG=' ?' HAP=OG' BOF' J=O(GNHG ' BOF' MG'JN=G ' ?' CFGH' @?NG @E' KGH=CGHC' FG?CD' CA' MA?CFG' @E OAH O=GHOD' CA' ?LFAD' ?WW' C?' G ' KM?E' GPGD' =HOG I' DEHHG' O?@G' CA' $AHNAH' ?>CGD' 427 ' MGCO=FGD' J?' ' CFGH'CFG' M=P=H '=NAW' A>'CFG' CFG?CDG' ?HN'?HE' HG' JFA'=' ?OQB?=HCGW' J=OF' F=' K'M?E ' >BWW' A>' GH=B ' ? ' CFGE' ?DG' @B C' ?N=C' CF?C' DEHHG' F?N' CAA' @BOF' O?B G' >AD' F=' N=' B C' #FG' KD=HO=K?W' NG@AD?W=' H ' KA'J GD' A>'CFG' KM?E ' A>' CF?C' KGD=AW' OAH = CGW' H' CFG=D' >?W G' DGKDG' GHC?C=AH ' A>' FB@?H' OF?D?OCGD' ?HN' ?OC=AH ' #?'(G ' >AD' G ?@KMG' = CFG' >D=' FC>BW' OAHCD? C I' ? ' CFGE' F?PG' SB CWE' LGGH' O?WWGN' LGCJ'GGH' CFG' JA@GH' A>' .G?B@AHC' ?HN' =GCOFGD' ?HN' APGDG' G=CFG' A>' F?(KGDG' (GKC ?C' ?WW' C=@G ' H' CFG' F=' D=?W' A>' =G?' ' G' = F?' H' =HAOGHC' ?NBMCGD=G ' HA' =HCGDG C=H ' H=OG C ' HA' P=DCBAB ' P=O5 ' FG' HGPGD' DGHNGD ' CF?C' ?@=?LWG' J=OF' DGWD' =AH'?HN'DG?' AH' ?WW(G' CG?OF B ' CA' NGCG C'AD' OWACFG ' =@KBD=CE' H' CFG' ?DL' A>' P=DCBG' W=(G' .G?B@AHC' ?HN' MGCOFGD' CFG' ACTGLBG ' A>' CFG' N?E 88 ^ . BC' CF=' ' PGDE' CDBCF ?HN' KBD=CE' A>' F?(KGDG' @B C' F?PG' D=G?WM' N=@=H' FGN' F=' ?CCD?OC=AH ' ?@=N C' ?' ODA'J N' J=A' JDACG' BKAH' AKKA '=CG' KD=HO=KMG ' ACF=H ' LBC' CFG' BHGQG?WMGN' CDGH CF' A>' F=' ?DC' C=O?W' KA'JGD' OABWN' F?PG' KDG GDPGN' CFG' BHLDA(GH' OAHC=HB?HOG' A>' F=' BKDG@?OE

JFOF' CFG' KDG' =H ' =@KADCBH=CE' A>' A@G' WW' ?OQB?=HC?HOG' ND=J' @G' JFMG' ' ?' EG=' ?' HAP=OG

@A ?NPGD G' CA' F' 'OAHCHBGN' KAKBM?DCE'!C JABM' LG'>ABH'H' CFG G
!@KGD>GOC M! C ' JFLOF' NA' HAC G CGHN' APGD' @ADG CF?H' G! FC' AD' H'HG
EG?D ' GDG' ?DG ?L AMBCGME'>ABDCGGH' KM?E ',A?' F?(KGDG' DGP'PGN R >AD
CF?C ! ' CFG KFD? GR'H ?H' G' JF'OF' J ?' KDAM!>D' A?;!C ' AJH' ?BC?AD '
.GH' 0AH AH' JGDG' N'P'NGN' LGCJGGH' CFG@' LE' CFG ?KKDAL?C?AH' A?; CFG
0ABC' ?HN' CFG!D' AJH' ?MCGDH?CG OFA!OG' A' CF?C' JFGH' ?DC' J?'
>?@AB' >AD' CFGMA'. GCCGDCAH' F?N' HA' MG ' ?' DGKBC?C?AH >AD' ?@MGC I'
C!MM' CFG CG C' A?' F! CD!AH!D' G OGMMGHOG' J?' F?(KGDG' A' >?D' >DA@'
F?(KGDG' LGH' HG MGOCGN' ?C CF=' KGD!AN' !C ! ?M@A C GP'NGHC' CF?C
CFG KGD>AD@?HOG' A?' F=@' J?' 'APGDNAHG' >AD' GPGDE' AHG (HAJ ' CF?C ?'
CFG?CD!O?M ?BN'GHOG' GPGH' H' CFG' M?D G C OCE' ! ' H' ?' OAH !NGD?LMG'
NG DGG' 0A@KA GN' A?' DG BM?D' >DGQBGHCGD ' A?' CFG' CFG?CDG' ?HN' CF?C
HAPGMCE' ! ' CFGDG>ADG ?H !HN! KGH ?LMG' DGQB! !CG CA' OAHC!HBGN' BOOG
#FGDG' O?H' LG' HA' NABLC' CF?C @A C A?' CFG' AD! !H?M' KGD>AD@?HOG ' A?'
F?(KGDG' LGH' HG MGOCGN' ?C CF=' KGD!AN' !C ! ?M@A C GP'NGHC' CF?C
BH AKF= C!O?CGN' CG C' ' LB!' %8 'PGH?HC' CA' @?(G FG?N' ? ?H C CFG
BOOG ' A?' CF'G' !H 8 ' 0A@K?HE'=';J?' >ADOGN' CA' ?NN' KGOC?OMG' ?HN'
@B !O' CA' ?OC'AH I' H' CFG ?MCGD?C'AH ' A?' #FG' #G@KG C' JF'OF' JGDG
@?NG' LE' %8 PGH?HC' ?HN' %DENGH' !H' ?441' ?HN' JF'OF' 0AHC!HBGN'
CA' KA G ' CFG' iH M! F' C? G ?AD' HG?DME'?' OGHCBDE ?HN' ?' F?M>' !C ! '
!@KA !LMG' HAJ' HAC' CA' >GGW' FAJ' >?M G J?' ' CFG C? CG' BKAH' JF'OF'
CFGE' JGDG' LB!MC' %DENGH' ?E ' A>' CF=' KM?E' CF?C' %8 PGH?HC' CA' KBC
CFG M?' C' F?HN' CA' !C' = NG ! HGN' CFG' 0ABHCGDK?DC' CA' F?(G KG?D8'
KMAC' H?@GME' CF?C' A>' ?' @?H' JFA' F?N' HGPGD' GGH' ?' JA@?H'$ CF?C
LE' CF=' @G?H ' CFA G' CJA' OF?D?' OCGD ' A>' !HHAOGHOG' ?HN' MAPG' @= FC
CFG @ADG' !MMB CD?CG ?HN' 0A@@GHN' G?OF' ACFGD I' ACH'H ' 0?H' LG'
JG?(GD ?HN' >?M GD' !H' ?DC CF?H' CF=' @GDG' NBK!O?C'AH' A>' ?H' !NG?'
.BC' C!MM' !C' J?' HAC' NAHG' !DDGPGDGHCME ' JF!MG' CFG' KDAMA BG' CA' CF=!
?MCGDGN' #G@KG C ! A>' !C GM>' ?H ?H JGD' CA' CFG ? !H'HG ? GDC'AH' CF?C
%DENGH' !H' 0A@@AH' J!CF' CFG' KBLM!D' A>' F=' N?E' J?' ;HN!>>GDGHC' CA'
CFG @G@ADE' A>' F?(KGDG'C' >' %DENGH8' KGD AH?M' ?N@!D?C'AH' A>'
F?(KGDG' A>' F=' KDA>ABHN' PGHGD?C'AH' >AD' .BC >AD' GH!?M' FG?DCE'
G? GD' ?KKGC!CG '>DA@' A' MAH ' ?' C @B C' CFG' BG C ' A>' CFA G' C!@G'
F?PG' F?N' CA' CF?C' F=' F' ?HN' >DG F' P?D!GCE' A>' GHCGDC?'H@GHC ' 0$ $'
($ $ ', ' ', $ ', ' ', $ 'R' B 3 'O ' ', ' 3 '
FBHND GN' EG?D ' ?DG' J? CGN' ?HN' ?HACFGD' !MGHC' OGHCBDE' JGMM
?NP?HOGN U' ?HN' EGC' JF?C' BHLADH' ? G' F?MM ?E' F?(G KG?DG' F? ' F=' '
GQB?MM' A J' @?HE' F!H=H ' ?OCAD ' F?PG' CFG' J?D@' OGHG ' A>' F=' '
GHB' !PGH' CA' KA CGD!CE'I' .GCCGDCAH' ! ' !NAM!TGN' ? ' ?H' ?OCAD' ? '
@BOF' ? ' CFG' AMN' @?H' PGHGD?CG ' F?(KGDG' LBC' JFGHGP GD' !LLGD'
KG?(' A>' .GCCGDCAH8 ' J?AHND?AB ' G OGMMGHOG ' !C ! ?MJ?E ' !H' OAHHGOC!AH'

#FG ?MCGD?CDAH A3'#FG' #G@KG C LE'%8 PGH?HC ?HN %DENGH J? '? ' JG F?PG @GHCDAHGN' ?H ?CCG@KC CA' @GGC CFG C? CG A3' CFG CAJH LE' @B D' ?HN' KGOC?OMG' F?NJ.GWM JGHC >BDCFGD' ?HN' CBDHGN' C 'HCA' ?

BM?D' AKGD?''?HN ?H AKGD?' C DG@?HGN GPGH'H +?DDO'(8 '.C@G' JFA CDGN' F0 ' F?HN' BKAH' CFG ?@G G KGD'@GHC' %GHH0' J? ' ?' DG>AD@GD' LACF'H' OA@GNE' ?HN' CD?' GNE' G' @GC?@ADKFA GN #FG' &GDDE' 0PG ' A3' HN AD'HCA'=' #FG' A@O?M +?MM?HC'1' ?HN' KDG>0 GN' ?H CFG NG GHGD?OE' A3' CFG C? CG' >AD' KAGCDE' %8 PGH?HC OF?H GN' &G? BDG' >AD' &G? BDG' HCA'=' #FG $?J'? ?H C $APGD 1' JFOF J? '?H KD'HO'KMG' AHG' A3' CFG' JAD C A3' CFG G ?MCGD?CAH ' >AD' C J? ' ?' F? F ACFH ' #F0 ' J? 'HNGGN' CA' NG CDAE' CFG AD ?HD'G M>G A3' CFG ?BCFAD' .BC C0 ' AHG' A3' CFG @?H>G C?CAH ' A3' CFG P'C?MCE' A3' F?(KGDG' CF?C' AH ' ?LABC' CFGD' CFGD?MCGD?CAH ' HC CFG DG BM?D' J?E' ?OOADNCH ' CA' CFG DBMG ' A3' ?DC' CFG @A C CBK'N ?HN' KDA ?'D' A3' F0 ' 'OKDAPGD ' F?PG' LGGH' BH?LMG' CA' NGKD'PG CFG H?'CBD?%' @?H' A3' F0 ' AB'D ' GPGH' LE' CFGD' @A C PAMGHC NGKMGCAH ' 0 'DALB CHG ' J? 'CAA' DG?C' GPGH' >AD' CFG KAGC'O?% NAOCAD ' CA' NG CDAE'C' $AD'N' $?H NA'JHG ?OCB?ME' CD'KKGN' CFG >MG F A>>' FEMAO(' LBC' CFG ?H?CA@E' J?%(GN' ?LABC' P' ADAB ME' >AD' 0 CE' EG?D ' C%M' &.?'O(M'H' KBC' CFG @B OMG ' AH ? ?'H' AMMGE' 'LLGD' CBDHGN' 'H ' 0AFH' 'HCA' =' ?K?%' #ED?HHE I'?HN' CFG' C? G 'H '0AFH' J? '@?NG' CA' NGHABHOG' CFG' AKG ?HN' +BE' ?B '>AD' ? 'GHCBDE' C%M' &.D' &.?'ODG?NE' ?PG B ' L?0(' ? ?'H CFG JG?(' ?HN' OD?>CE ('HZ' H' H F0 ' AD0 'H?%M CDBCF' A3' OF?D?CCGD' ?FB@' #?CG' NGKA GN' CFG "'OF?DN' 'A3' F?(KGDG' AJ'FAME ?HN' DDGNGG@?LME' CBDH'H ' F0@' 'HCA',#FG' 'OC%?H' * BDKGD I' +G HGD' ' ? CADE' A3' #DGHC 8' LG 'NG ' F?(G KG?DG'0AH AH' ?HN' .G?B-@AHC8'KM?E ' ';C M? C OFA G %D' BM%G8 ' ADCF=G 8I' Y0' #FG G' CJA' >AM%A' GN'C'AH ' BKK%GN' CFG DG?NGD ' A3' F?(KGDG' >AD' @ADG' CF?H' >ADCE "EG?D ' LBC' JG ?DG' HAC' FGHOG' CA' OAHOM8NG' CF?0' FG' O?%M ' = ?' D'N'OB-MAB ' NAOCD'HG' H' @ANGDH' ODC'C'O' @ I' ;' CFG' LG C K%?E ' J.F'OF' GHN' BHF?KK'ME' FG' @GHC'AH ' CFGMMA' J'CF' ACFGD ' ?HN' ?NN ' =' 'H '$G?D' ' ?H' ?N@'D?LM'G' CD? GNE' A3' CFG ?@G (HN' ? ' F?(KG?DG' JDACG' 'C' LBC' ? ' 'C ' DG>AD@GN' ?OOADN'H ' CA' CFG OF'@GD'O?%' HAC'AH' A3'KAGC'O?%' SB C'OG ' H' @E FB@LMG' AKCH'AH 'C' F?%' MA C' F?%3' 'C ' LG?BCE I' M%' CF' ' G ' F'LC' ? ' LGCCGD' C? CG CF?H' JG' >HN' 'H +'MNAH' ?HN' %GHH' ' ?HN' 'C OGDC?'HME' ' PGDE' DG@?D(?LMG' CF?C NN' AH ' JFA' 'H F' ' AJH' CD? GNE' J?' ' M?LAD'AB ME' OADDGOC' ? ' 'C' J? ' O?MMGN ' FABM'N' F?PG' C?(GH' HA' A00?-'AH' CA' 0A@@GH?' BKAH' CFG' 'DDG' BM?D'C'G ' A3' F?(KGDG

0AFH' %GHH' ' F?' ?00A@KM' FGN' CFG' >G?C R

' % >' ' >'

CFG' DABHN' LE' CFG' $'MC'KBC'?H ' ?HN' CFG' CD'H ' ?DG' AHME' SB C' HAJ' LDA(GH' LE' J.F'OF' FG' J?' ' LABHN'

#FG' ? G' M?'N' 'C ' MG?NGH' 'OGKCDG' BKAH' CFG' @?MMGD' @'HN ' ?HN' G K'GO'?MME' BKAH' CFA G JFA' ?KKDA?'OFGN' F?(KGDG' J.CF' ?' 0AMN' ?HN' @'B 'D' ?HN' KGOC?OMG' F?NJ.GWM' JGHC >BDCFGD' ?HN' CBDHGN' C 'HCA' ?' DG' BM?D' AKGD?''?HN ?H' AKGD?' C DG@?HGN' GPGH'H +?DDO'(8 '.C@G' JFA' CD'@GN' F0 ' F?HN' BKAH' CFG' ?@G G KGD'@GHC' %GHH' ' J? ' ?' DG>AD@GD' LACF'H' 0A@GNE' ?HN' CD?' GNE' G' @GC?@ADKFA GN' #FG' &.GDDE' 0PG ' A3' HN AD'HCA'=' #FG' A@O?M +?MM?HC'1' ?HN' KDG>' GN' ?H' CA' C' AH' CFG' NG GHGD?OE' A3' CFG' J.AD C' A3' CFG G ?MCGD?CAH ' >AD' C' J? ' ?' DG>AD@GD' LACF'H' 0A@GNE' ?HN' CD?' GNE' G' @GC?@ADKFA GN' #FG' &.GDDE' 0PG ' A3' HN AD'HCA'=' #FG' $?J'? ?H C' $APGD 1' JFOF' J? ' ?' DG>AD@GD' LACF'H' 0A@GNE' ?HN' CD?' GNE' G' @GC?@ADKFA GN' #FG' &.GDDE' 0PG ' A3' HN AD'HCA'=' #FG' A@O?M +?MM?HC'1' ?HN' KDG>' GN' ?H' CA' C' AH' CFG' NG GHGD?OE' A3' CFG' J.AD C' A3' CFG G ?MCGD?CAH ' >AD' C

AK□H□AH ' G KDG GN' □H CF?C $□>G' ?DG >GJ ' ?NH ?DG KB□ >ADCF J□CF M□CCMG KDGGCH □AH ' @= FC LG' G KGCCGN ' CFGE >BMEE ?N@□C CFG G OGM- MGHOG' A>' F?(KGDG ' LBC' CFGE A@GJF?C >?MM □HCA' CFG LG GCC□H ' □H A>' ?CCG@KC□H ' CA' GMGP?CG F□ ' GH□B ' LE' NGKDGO?C□H ' F□ ' (HAJ□MGN G' "AJG' ?M A' >?MH ' □HCA' CFG HAC□AH' CF?C F?(KGDG' NCN' HAC ?DD?PG ?C F□ ' KDAKGD' BHNGD C?HN□H 'A>' F□@ H' 24' $4J□' ' #FGAL?MN' KBL□ FGN' ?C D?OC GHC□MGN' =' F?(G KG?D' "G CADGN ' AD' KGO□@GH ' A>' .MBHNGD ' A@@□CCGN' ?HN' *H?@GHNGN' □H AKG8 ' N□C□AH' A>' CF□ ' AGC I' H' AKG8 ' GOAHN' GN□C□AH' A>' F?(- KDG ' J F□OF' ?KKG?DGN' □H' 26 ' J? ' □H GDCGN' CF□ ' OAHCG@KCBAB ' HAC□OG' R

6' IK?' NH?'LJA9 KMN i' ' J'7 GN' PO N i'NHP P'HM IQ' APPi' G I?' MNNP ILNG JL I' HMUGLPM P' LJA9 GHPO' AT'/P G HP AM9O' @XH KH' HP' J9O'i N'K I IJI KMNP' OJ IQ'NH?' N I?' HP P i'MNHM'PO N i' MG L PLM IQ'7 'NH?'L PG6' HPi' p'AT' LJA9 K MO P N GPIPIN6'O O' p]JPGN'NHP' MG6 GNMIKP' 7' M99 9 P G 7 NH G MJNH ' P' HM P' IGP NPO' i'NH G i'MG I MiT' 7'MP1' MG M P' EJOQPO' 7 MiT' NHP' 9PMGN MO MiNMQP'N 'NHP'L PN8 NHP' H 9P'M1 JiN iQ'N 'MA JN'N piNT 7 P' OG+R

H' CFG' ?@G EG?D' 0?@G ABC' ='#FG' %BHO□?N I' A>' JF□OF' #FGAL?MN' J ?' CFG' FGDA R

6' " QH' i'M Q QP JG' GPMN' NHMN'7M' JNGH IP "'pi9PT%G Q 9N'NJA' 'O9PKUI PNG2 GH'NH ip+ : PMN' AAM9O'i OG+R

. BC' #FGAL?MN' CAA(' ?' SB C' DGPGH G' H' 33' FG KDANBOGN' ?H' GN□C□AH' A>' F?(KGDG ' H' GPGH' PAMB@G ' AOC?PA' JF□OF' ?HH□F□M?CGN' AKG8' QB?DCA ' ?HN' NBANGO□@A ' #FG' C□OMG K? G A>' #FGAL?MN8 ' F?(KGDG LADG' CF?C' C' J? ' =' OAMM?CGN' J□CF' CFG AMNG C' OAKG ' ?HN' OADDGOCCN' J□CF' ACG I' AKG8 ' GN□C□AH' J ?' HAC ? ?H' DGKQD□HCGN' H' $AHNAH ' LBC' A>' #FGAL?MN8 ' CFGDG F?PG LGGH' @?HE' BL GQBGHC' GN□C□AH ' ?HN' CGGPGH ' ? GDC ' CF?C' A>' F□ ' >□D C' GN□C□AH' CF□DCGGH' CFAB ?HN' OAKG ' JGDG' AMN' GPGD' CFGDG' □ ' ?H' AL OBDG' K? ? G ' J FGHGPGD' ='DFG?H' OAHOG□C ' ?HN' D□L?MND□G I' ?DG' >ABHN ' J FGHGPGD' = MAJ' OGHG ' A>' @AL ' KMGL□?H ' A>' F□ ' MCCGD?DE' DGKBC?C□AH ' CFG KDG>GDGHOG J F□OF J ?' A' NGO□NGME' □PGH @?H' A' ?H □AB ME' ODBKBMAB ' @□ FC F?PG LGGH G KGCCGN' CA' NA' BOF ? ' F?N' HAC' LGGH' JAH' LE' ?HE @?H' >AD' F?M>' ?' OGHCBE' ?H' ?OCAD' BOF ? ' F?N' HAC' LGGH' JAH' LE' ?HE @?H' >AD' F?M>' ?' OGHCBE' G' J ?' CFG CDBG' BOOG' AD' A>' .GCCGDCAH' ?DD□' ?HN' .BDL? G' □ ' KD□HO□K?M' >?@G' J ?' FA□JGPGD' M□(G' CFG□D ' >ABHNGN' BKAH' F?(KGDG' .BC' □C □ ' ?' @□ C?(G CA' □@? □HG' CF?C' CFGDG' F?N' HAC' LGGH' ?' OAH C?HC BOOG' □AH' A>' ?OCAD ' A>' F?(KGDG8 ' DG?C OF?D?OCGD ' >DA@' CFG' NG?CF' A>' .GCCGDCAH' CA' +?DD□O(8 ' ?KKG?D?HOG' □ ' >□D C' OF?D?OCGD' □H' $AHNAH' J ?' "□OF?DN' ' G' @?NG' ?M' CFG' DG?C' K?DC ' A>' F?(KGDG' >?@□M?D CA' CFG' KM?E' A□H ' KBL□D' >AD' >□PG ?HN CF□DCE' EG?D ' =' #FG' M□FE@□ C'I' :?HN' CFG =')AMKAHG'I' A>' . GH' 0AH AH' JGDG' A@GC□@G ' KM?EGN' ' =' #FG' F?HOG I' ?HN' =' "BMG' ? □>G' ?HN' ?PG' ? □>G I' A>' .G?B@AHC' ?HN' □D') $' □D' 1' #' 3

CFG G K?DC ' ?HN' K? ? G ' MAJ' ?HN' P□O□AB 'W 3 ' JG' CFG G 0AD- DBK□AH ' ?HN' □KGD□C' A>' F□ ' □@G' ?HN' CF?C' J ?' HAC' >?PABD?LMG' CA' CFG KDAKGD' BHNGD C?HN□H ' A>' F□@ H' 24' $J□' ' #FGAL?MN' KBL□ FGN' ?C D?OC GHC□MGN' =' F?(G KG?D' "G CADGN ' AD' KGO□@GH ' A>' .MBHNGD ' A@@□CCGN' ?HN' * H?@GHNGN' □H KGD□GOC□AH' LE' DGKG?CGN' G KGD□@GHC' ?HN' ? □NBAB ' M?LABD R ?' CFGADE J F□OF' C□M' F?' □C ' LGMG□PGD 4 ?HN' FG' CFGH' GHCGD ' □HCA' ?' LD□G>' OD□C□O□ @' A>' A@G' A>' CFG' MG?2N□H ' KM?E ' ' GOAHN' GN□C□AH' A>' F□ ' JAD(' ?KKG?DGN' □H' / ' H' 25' AKG KDANBOGN' F□ ' GN□C□AH' @? H□>OGHC ? ' >?D' ? ' KD□HC□H ' JGHC' □H' □ ' PAMB@G ' QB?DCA' ' □ ' DG>?OD □ ' ?' @?' CGDME' OA@KA □C□AH' OAHC?□H□H ' @?HE' SB C' P□GJ ' GMG ?HCME' G KDG GN' #FG' OD□C□O□ @' □ HG□C□FGD' KDA>ABHN' HAD'AD□ □H?M' LBC' CFGDG □ ' ?' CAHG' A>' QB□GC' GH G ?LABC □C' J F□OF' FAJ ' CF?C' AKG' KDAKGDME' ?KKDGO□?CGN□' F?(KGDG8 ' GHGD?M LJA9 K MO P N GPIPIN6'O O' P]JPGN'NHP' MG6 GNMIKP' 7' M99 9 P G 7 NH G MJNH ' P' HM P' IGP NPO' i'NH G i'MG I MiT' 7'MP1' MG M P' EJOQPO' 7 MiT' NHP' 9PMGN MO MiNMQP'N 'NHP'L PN8 NHP' H 9P'M1 JiN iQ'N 'MA JN'N piNT 7 P' OG+R

H' CFG' ?@G EG?D' 0?@G ABC' ='#FG' %BHO□?N I' A>' JF□OF' #FGAL?MN' J ?' CFG' FGDA R

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' □D' AKG' □H' AK□ KDANBOGN' F□ ' GN□C□AH' @? H□>OGHC ? ' >?D' ? ' KD□HC□H ' @?HE' SB C' P□GJ ' GMG ?HCME' G KDG GN' #FG' OD□C□O□ @' □ HG□C□FGD' KDA>ABHN' HAD'AD□ □H?M' LBC' CFGDG □ ' ?' CAHG' A>' QB□GC' GH G ?LABC □C' J F□OF' FAJ ' CF?C' AKG' KDAKGDME' ?KKDGO□?CGN□' F?(KGDG8 ' GHGD?M LJA9 K MO P N GPIPIN6'O O' P]JPGN'NHP' MG6 GNMIKP' 7' M99 9 P G 7 NH G MJNH ' P' HM P' IGP NPO' i'NH G i'MG I MiT' 7'MP1' MG M P' EJOQPO' 7 MiT' NHP' 9PMGN MO MiNMQP'N 'NHP'L PN8 NHP' H 9P'M1 JiN iQ'N 'MA JN'N piNT 7 P' OG+R

#FGDG' □ ' ?' M?D GD' QBG' C□AH' GPGH' CF?H' CF□ ' CF?C' AKG' KDAKABHN ' HMUGLPM P' LJA9 GHPO' AT'/P G HP AM9O' @XH KH' HP' J9O'i N'K I IJI KMNP' OJ IQ'NHP' N I?' HP P i'MNHM'PO N i' MG L PLM IQ'7 'NH?'L PG6' HPi' p'AT' LJA9 K MO P N GPIPIN6'O O' P]JPGN'NHP' MG6 GNMIKP' 7' M99 9 P G 7 NH G MJNH ' P' HM P' IGP NPO' i'NH G i'MG I MiT' 7'MP1' MG M P' EJOQPO' 7 MiT' NHP' 9PMGN MO MiNMQP'N 'NHP'L PN8 NHP' H 9P'M1 JiN iQ'N 'MA JN'N piNT 7 P' OG+R

6' XHP P P' NHP' MJNH %G' GPIGP' G' K9PM' MiO' O GK P MA9P' @NH J9H' LP KMMIKP' 9 'MiO'N M9 '2' HM P i N AT'MiT' ii MN i' NM1 LP PO' NH' H G NPWN' JN' 7 MI' GNPiNMN i' 7PIOPM J iQ'N ' IMUP' H I' GLPMU' APNNP ' NHMI' NHP' 9O' K L PG HM P O ip+

6' XHP P P' NH JQH' M99 NHP' 7 IP' PO N iG' M LMGGMQP' HMG' 9MA J PO' J9OP' 79MN' i iGPiGP' MiO' i iK A9P' OM UPGG' 7' AT' NHP' MOO N i' ' M9NP MN i' 7 M 9PNNP' ' N ' ' M' N MiGL G N i' i' NHP' L iN iQ' ?' HM P' PGN PO' N ' H I' A NH' GPiGP' MiO' GPiN IPIN' GJJKH' K PKN iG' ?' M I' LP GJMOPO' 99 ippO' i ' iOJ9QPiKP+

6' #iO' HPip P' ?' HM P' MMUPi' M' Q PMNP' 9MN NJOP' MiO' 9 AP NT' i' MIPio iQ' ?' HM P' K iGMMiN9T' PioPM J PO' N ' GJLL N' I T' K PKN iG MiO' K iEPKNJ PG' AT' LM M99P9 LMG GMQPG' MiO' MJNH N PG 7 $ I' H I GP97' NHP' GJ PGN' IPMiG 7' PWL' JIO iQ' MiT' MJNH ' HMNG P P +R

0AFH AH' NAG ' HAC' G F□L□C F□ ' B B?M' AAN' GH G ?HN' (HAJMGN G' A>' @?H(□HN' J GGH' FG ?CCD□LBCG ' #FGAL?MN8 ' BOOG ' CA' CFG' JADMN8 ' OA@- K? □AH' G' O?MM ' F□@' J G?(' ?HN' □ HAD?HC' @G?H' ?HN' >?□CFMG ' KGCBM?HC ?HN' A CGHC?□AB ' LBC' FG' >□D@' CF□?C' GN□C□AH' =';' JAAN HACG ' J□MN I' J F□OF' CFGE' NCN' HAC' M?E ' J ?' CFG' GOFA' A>' &□MCAH8 ' =' JAAN HACG ' J□MN I' J F□OF' CFGD' P?D□GN' ?MAHG' J□CF' DGKBC?C□AH' >DA@' CF□ ' BHNGDC?(□H ' A' J□MN□H ME' NAG ' CFG' JADMN' BKKADC CFA G' J FA' AM□O□C ='?PABD' ? ?□H C' CFA G' J FA' OA@@?HN' DGPGDGHOG ' ?HN' A' G? □ME' □ ' FG KD?□ GN' JFA@' HA' @?H' O?H' GHPE I' #F□ ' □ ' @GDG' >□HG' J D□C□H ' #FG' DG?M' GODGC A>' #FGAL?MN8 ' BOOG ' □ ' C?CGN' LE' 0AFH AH' F□@ GN> R =' AKG J ?' BOOGGNGN' LE' #FGAL?MN ' ?' @?H' A>' ?H?DA'J' OA@KDGFGH □AH' ?HN' @?M' ?OQB□ □C?AH ' J □CF' HA' H?C?PG' MG?DH□H ' LBC' TG?MAB ' >AD' @□HBCG ?ODB?D?E' ?HN' HAC' HG N□ GHC' □H KBD- BCH ' □C' G' OAM?CGN' CFG' ?HO□GHC' OAKG ' ?HN' DGOC>□GN' @?HE' GDDAD ' ' @?H' A' ?H □AB ME' ODBKBMAB ' @□ FC F?PG LGGH G KGCCGN' CA' NA' @ADG' LBC' J F?C' MCCGD' FG' N□N' J ?' OA@@AHME' D□ FC I' C' J ?' LGO?B G #FGAL?MN' J ?' =' ?H □AB ME' ODBKBMAB ' I' LGO?B G FG' N□N' HAC' ?CCG@KC =' CA' NA' @ADG I' CF?H' ?H' GN□CAD' AB FC' CA' NA' CF?C FG' F?N' CFG' KBL□D' BKKADC

' □D' AKG' □H' AK□ KDANBOGN' F□ ' GN□C□AH' @? H□>OGHC ? ' >?D' ? ' KD□HC□H ' @?HE' SB C' P□GJ ' GMG ?HCME' G KDG GN' #FG' OD□C□O□ @' □ HG□C□FGD' KDA>ABHN' HAD'AD□ □H?M' LBC' CFGDG □ ' ?' CAHG' A>' QB□GC' GH G ?LABC □C' J F□OF' FAJ ' CF?C' AKG' KDAKGDME' ?KKDGO□?CGN□' F?(KGDG8 ' GHGD?M LJA9 K MO P N GPIPIN6'O O' P]JPGN'NHP' MG6 GNMIKP' 7' M99 9 P G 7 NH G MJNH ' P' HM P' IGP NPO' i'NH G i'MG I MiT' 7'MP1' MG M P' EJOQPO' 7 MiT' NHP' 9PMGN MO MiNMQP'N 'NHP'L PN8 NHP' H 9P'M1 JiN iQ'N 'MA JN'N piNT 7 P' OG+R

MGCOFGD' LBC J G ?DG CAMN LE %?PG 'H F= '=%D?@?CO' &O OGMM?HG I' CF?C' A?' CFG=D >ÆBD' KM?E ' AHME CFG G CJA' KDG GDPGN CFG=D ' >BMÆ #FG' DG KGOC?PG P?MBG A?' CFG ODCCO ' JFA' F?N' KDGOGNGN' F@' ▯ ' >ÆD N▯ 0B GN' LE' 0AFH AH' H' CFG' M?CCG?' K?D' A?' F▯ ' DG>?OG ' JF▯MG' CFG M?D GJ' KADC▯AH' A?'C HAC' AHME CA' ?' GGC?▯H' G CGHC' DGKDG GHC ' CFG' CAHG' A?' AKCHAH' H' 0AFH AH8 ' ? G' LBC ▯ ' J▯CCGH' J▯CF' A' @BOF' KA@K' A?' N▯OC▯AH' J▯CF' BOF' ?KK?GHC' O?HNAB▯' ?HN' J▯CF' BOF' ?LBHN?HC' @?H-?G ▯?C▯AH ' A?' AAN' GH G' CF?C' KGDF?K ' @ADG CF?H' ?HE' ACFGJ' KDANBO-LBC' CF?C' CFG' H>WBGHOGJ' F?' ' LGGH' >AJ' DA▯M' GP▯NGHC' CAA' >DA@' CFG' JFAMG' CGHAJ' A?' %D'0AFH AH8 ' OGMG-LJ▯?CGN' DAMA BG' J▯OF' J?' ' KA(GH' LE' +?DD▯O(' ?C' CFG' AKGH▯H ' A?' FG▯C?▯AH' H' LGWGP▯H ' ' %DBE $?HG' #FG?▯DG' ▯H' / ' CF?C' A?' CFG' G?▯ME' ND?@?C▯C ' F?(KGDG' DG▯ HGN' BKAH' CFG' C? G' BKDG@G' ▯?' HAC' ?M@A C' F?' ' LGGH' CA' ▯H>GJ' CF?C =' ODBNG ?HN' BKGJ>DO▯?W' SBN @GHC' AH' ▯HA(' ?HN' CF▯H 'I' F?N' C?(GH' CFG' KM?OG' A?'CFG' AMNGJ' @GOF?H▯?W' OD▯CO▯ @ ' ?HN' CF?C' CFGDG' J?' =';?' NGMB G A?' CFG' JAD C' ADC' A?' OD▯CO▯?W' $?D' AH▯R' $ '0$ $' D ' FG ▯C?▯AH' H' LGWGP▯H ' ' D ' ; #FG' DBMG ' A?' ?DC ' ? ' CFGE' JGDG' O?MMGN' F?PH ' LGGH' DGSGOCGN' ? ' ▯H?KKM▯O?LMG' CA' F?(KGDG' ?' J?D@' A?' J▯DCGD ' ?DA G' JFA' OAH ▯NGDGN' CF?C' FG' J?' ' CA' LG' SBN GN' J▯CFABC' CFG' ?KKM▯O?▯AH' A?' ?HE' GHGD?W' KD▯HO▯KMG ' ?C' ?W#' #FGE' FGWN' CF?C' FG' JDACG' J▯CFABC' ?' E CG@' CF?C' CFG' ?L GHOG' A?' CF▯ ' E CG@' KDANBOGN' F▯ ' G OGMMGHOG ' ?HN' F▯ ' >?BMC ' CF?C' F▯ ' ?L BDN▯CG ' JGDG ' ? ' F▯ ' CD▯(H ' ? ' F▯ ' LG?BCG ' CF?C' FG' CBDE' ?HN' AHG' H' CFG' GD▯ FCGGHCF' ,GC ' ?L BDN' ?HN' ▯@KGDC▯HGHC' ? ' ▯C @ME▯BNG ? ?H C' F▯ ' LMBHNGD ' F▯ ' OAHCD?N▯OC▯AH ' F▯ ' P▯AM?C▯AH ' A?' CA' ODG?CG' ?' OFAAM' A?' DG?C ?OCAD ' J ' ▯H ▯C GW?' G CGH-L?O(' CA' N?E' ▯C O?HHAC' LG' NGH▯GN' CF?C CFG' PGDE' KAJGD' A?' CFA G' M?E ' @?E' LG' CA' C?M(' A?' ▯@@ADC?M' +?DD▯O(' O?MM▯H ' CFG' KM?E' A?' F?(KGDG' OJMG' I MT' MMMM I'N ' PW]J G NF O GK I 'MN I'MG' NHP' O PIKH' K N KG' HM P O IP' I' NHP ' I' 9 NP MNJ P8 AJN' M N JP K K M K M'I' I ' P' AP'GJKH' NH JN' L9MK I'Q' H I GP9' I' G I P' KPIN MG' L IN' 7 I' H KH' HP' IMT' K I IMI'Q' NHP' H 9P SNHMN' G' G I P' QPIP MG' J9P' H KH' 7 JIOPO' I' PMG' I ' 'NHP' 7MKJ9N PG K I I I' N ' M9G' IPI' I JGN' NHP P7 ' P' MLL9T' N ' PMKH SNHMI'M' MGN I IP' KMI' PWL9M I' NHP' I PIPING' 7 NHP' G 9M' GTGN' I' NH JN' MNU I'Q' H G GMM'Q' I' NHP' GJI+R'

?@BGW 0AFH AH' KDAKA G ' CA' ▯HQB▯DG ' ▯H' CFG' DG>?OG' LG>ADG' B ' = FE' J▯ZC' KGOBM▯?D▯CG ' A?' G OGMMGHOG' F?(KG?DG' F?' ' ?▯HGN' ?HN' (GKC' CFG' >?PABD' A?' F▯ ' 0ABH▯CDE@GH I' G' ?H JGD ' CFG' QBG ▯AH' ?C 0AH ▯NGD?LMG' MGH CF' LE' N▯ K▯?E▯H Z' J▯F?C' FG' FAMN ' CA' LG' CFG' DG?C' KGOB▯M▯?D▯CE' A?' F▯ ' G OGMMGHOG R = F?(KG?DG' ▯ ' ?LAPG' ?W' J▯CCGD ' ?C' MG? C' ?LAPG' ?M' @ANG@' JD▯CGD ' CFG' KAGC' A?' H?CBD▯' CFG' KAGC' CF?C' FAMN ' BK' CA' F▯ ' DG?NGD ' ?' >?▯CF>BW' @▯DDAD' A?' @?HHGD ' ?HN' A?' MD?G ' CFGGG >AD▯ ' CFG' KD?▯ G' A?' F?(KG?DG▯R CF?C F▯ ' ND?@?▯ ' CFG' @▯DDAD' A?' MD?G I' BOF▯ ' CFG' MG?N▯H ' ▯NG? A?' CFG' OD▯CO▯' G' HAC▯FH ' F▯ FGD' ▯H ' F?(KGDG' ▯H' G F▯L▯C▯AH' A?' CFG' ,' G' J▯A' F?' @?TGN' F▯ ' @?▯H?C▯AH' ▯H' >AMA J▯H ' CFG' KF?HC▯@ ' J▯F▯OF' AC▯FGD' J▯D▯CGD ' D?▯ G BK' LG>AD@ F▯@' @?E' FGDG' LG' OBDGN' A?' F▯ ' NG▯D▯AB ' GO C?▯G ' LE' DG?N▯H ' FB@?H' GHC▯@GHC' ▯H' FB@?H' M?H B?' G' LE' OGHG ' >D▯@' J▯F▯OF' ?' FGD@▯C ▯?E G C▯@?CG' CFG' CD?H ?OC▯AH ' A?' CFG' J▯DM▯N' ?HN' ?' 0AH>G ' A▯' KDGN▯OC' CFG' KDA DG ' A?' CFG' K? ▯AH ' 0AFH AH▯ ' BH?LMG' CA' CD?OG' CF▯ ' ?OCB?H' K▯OCBDG' A?' M>G ▯H' F?(KGDG' J▯FGH' FG' KGDOG▯PG ' ?HE' NGP?C▯AH ' >D▯@' CFG' DG' BW?D' =';CD?H ?OC▯AH ' A?' CFG' J▯DM▯N ' A?' CFG' JABMN' HAC' CFGH =' KDA DG ' A?' CFG' K? ▯AH ' CFGH FG ▯ ' G' J▯MNGDGN ' ?HN' FG' GHGD?MME' GHN ' ▯H' LM?@▯H ' F▯ ' ?BCFAD' #FG' OF?▯D?OCGD▯ C▯D' G OGMMGHOG' FG' ?E ' A?' CFG' CD? GNE A?' ?@MGC ▯ ' =';P?▯DGCE I' OOADN▯H ' CA' F▯ ' HAC▯AH' CF?C' H' ?W' F?(KGDG▯ ' ND?@?' ' JG' >▯HN ' ,'?H' ▯HCGDOF?H G A?' GD▯AB HG ' ?HN' @GDD▯@GHC' LE' J▯F▯OF' CFG' @▯HN' ▯ ' A>CGH▯N' ?C' AHG' C▯@G ?HN' G F▯M?D?CGN' ?C' ?HACF▯GD I<FG' FAMN ' CF?C' =';CFG' KDGCGHNGN' @?NHG ' A?' M>G' @BOF' @▯DCF I' .B▯' ▯H' CFG' OAHNBO▯' ;' CFG' KMA▯' CFG' LB ▯HG ' A?' M>G ?HN' CFG' OAB▯ G' A?' CFG' K? ▯AH ' NA' HA▯' KDAOGN' J▯CF' CFG' D▯ BM?D▯CE ' #FN' ' E CG@' A?' OD▯CO▯ @' BKAH' ?H G CGH ▯AH' ?HN' ?' @▯ ?KKM▯O?CAH' A?' . GH' ▯AH' ' C' J?' L?' GN' BKAH' ?H G CGH ▯AH' ?HN' ?' @▯ ?KKM▯O?CAH' A?' . GH' 0AH8 ' NA @?▯C▯' ? GDC▯AHR =' G' J?HCGN' ?DC I' #FG' ?DC' A?' F?(-KGDG' J?' HAC' DGPG?MGN' CA' CFG' OD▯CO▯' A?' CFG' M?' C' OGHCBDE' $G▯' B▯' FG?▯ AHG' CA' JFA@' CFG' KD▯HO▯KMG ' A?' CF▯ ' ?DC' ?DG▯ DGPG?MGN' R

6'2M' G M' LM I?J9' N ▯JH' ' NHMN' i N' i9T' IO ▯JM9G'A▯JN'p p i' H 9P'iMN ' IG'M P' 7N' N I PG' G 'pIGM PO' N ' NHP HMA NG ' 7'HHP 'PO▯JKMN ' i'MIO' I I PO MMP' K KJ1 GMMIOPG'MG' i N'N '▯JOOP' G iNP PGNPO9T'p pi' i'NH GP GJAEPKMG' NHP' p T'L9PMGJ P'M G i'QI' 7 ' I' H KH' K IG GNG' i' NG' O G iNP PGNPOIPG6' iMI P9T' i' GJAEPKMG ' 7 MMGN P' MIO' L 9 NP 9 NP MNJ P' ' 2iGNPMO' 7OPK O i'Q' K iKPi' Q' NHP ' i' I OPG MIO' KJGN I G AT'MI'T' J9P' 7 PMG i' i NH i'QI'MLLPM G MN IN9'APK I iQ' ' 'APMJN 7J9' N ' NHPI'AJN' HMN' K iKOPG' NH' NHP' LPKJ9 M N PG' 7 NHP ' POJJKMN i'' 2i' NH G iM ' K K9P' IO OJN9G I MT' MMMM i'N ' PW]J G NP O GK I iMN i' MG' NHP' O PIKH' K N KG' HM P O IP' i' NHP ' i' 9 NP MNJ P8 AJN' M N JP K K M K M'I' I ' P' AP' GJKH' NH JN' L9MK I'Q' H I GP9' I' G I P' KPIN M9' L IN' 7 I' H KH' HP' IMT' K I IMI'Q' NHP' H 9P SNHMN' G' G I P' QPIP M9' J9P' H KH' 7 JIOPO' I' PMG' I ' 'NHP' 7MKJ9N PG K I I I' N ' M9G' IPI' I JGN' NHP P7 ' P' MLL9T' N ' PMKH SNHMI'M' MGN I IP' KMI' PWL9M I' NHP' I PIPING' 7 NHP' G 9M' GTGN' I' NH JN' MNU I'Q' H G GMM'Q' I' NHP' GJI+R'

' 9P OQP%G / NP M T'&P I M iG' 9#' ‡L‡' +

' %' >' ' >'

FGH ∩AH' A>' JF?C' LGMAH ' CA' CFG KCDCB?W K?DC A>' ABD' H?CBDG ' A>' G OCCH ' ?' NGGK' E@K?CFE' J□CF' CDAH ' G@ACAH' ?HN' MA>CE K? ∩AH ' A>' KDANB□H ' ?H' G K?H ∩AH' A>' CFG FG?DC ' J□OF' G@LD?OG ' ?WM CFG @?H□>G C?C□AH ' A>' FB@?H' AANHG ' ?HN' FB@?H' ADDAJ ' ?HN ' JF?C□ ' @ADG' JF□OF' KGHGCD?CG ' ∩HCA' CFG ?LE G ' A>' B□WC' ?HN' NG D?N?C□AH ' ?HN' FAJ ' CF?C' CFGDG □ ' HA' CDBG' KG?OG ' ?HN' HA' DG?W' DG CH K' M?OG ' >AD' JF?C □G' G>>GCCGN' LE' N□N?OC□D' KDGOGKC ' 'NDAKKGN' O? B?WE ' LE'>?W G' DGKDG-GHC?C□AH ' A>' CFG OABD G A>' JADWNME ?>>?□D ' ?HN' CFG' JAD(□H ' A>' @?H8 KODGC' FG?DC' #FG' @□HN' OA@KDGFGHN ' CFG' O$ ' CDBCF' JFGH' □C □ ' GMGP?CGN' LE' CFG' ?DC A>' CFG KAGC ∩HCA' ?' >□C C?CG >AD □C ' OA@KDGFGH ∩A H' #FG' O$ '@A?W' KBDKA G □ ' CFGH' GPAWPGN ' CFDAB F' ?' GD□G ' A>' NGNBO-C∩AH ' ∩H' CFG @□HN' A>' F□@' JFA' □ ' CFB ' @APGN' #F□ ' □ ' CFG' F□ FG C MA □O ' LGO?B G' □C □ ' L? GN' BKAH' CFG LDA?NG C' KDG@□ G ' "E@GD' HGGD' ?C' F?(KGDG' JFGH' FG' ?E ' CF?C' CFG @AD?W' A>' CFGMA'□ ' CF?C' @?∩NGH ' A>'QB?M□CE' FABWN' HAC' DBH'?J?E' J□CF' LW?O(?@AAD ' #FG' ?DO? @' AHWE CGWM ' BKAH' CFA G' JFA' NG@?HN' ?HE' M□CGD?W' @AD?W' ∩H' ?' F□ JAD(' A>' ?DC .GO?B G' OAFH AH' AHWE' ?J'∩H' F?(KGDG8 ' ND?@?' = ?' @□DDAD' A>' M□>GS$' FG' KDG>GD ' F□ ' OA@GNE' CA' F□ ' CD? GNE' =' □ ' CD? GNE' GG@ ' CA' LG' (□W' F□ ' OA@GNE' CA' LG' ∩H C∩HOC I' FGH' CFG' KAGC □ ' JAD(∩H ' J□CF D?HNGD' @?CGD□?' CF?H' LGWAH ' CA' CFG ∩?@□W□?D ' OGH@ ' A>' M□G' FAJ GPGD H?CBD?W ?HN' BH□PGD ?W' CFG OD□C□D' NAG ' HAC' GG CF?C' CFG' DG □AH' A>'M□CGD?W CFC∩H ' □ ' HGOG ?D□WE' ?L?HNAHGN R CF?C' (□W' @B C' LG' @ADG' @?H□>G C' ∩H □C ' G>>GOC ' G' ?DG' CFGH ∩H ?' JADW' A>' F□ FGD' DG?W□CE CF?H' GPGDE N?E DG?M□CE' =' H' CD?' GNE' FG A>CGH J□CG ' J□CF' DG?C'?KKG?D?HOG A>'CA□W?HN' CBNE' J□?C□ ' J□CCCGH' ?C' M? C' J□CF' M□COMG >GM□O□CE I' #F□ ' HAJ' CD□(G ' CFG @A' BKGD>O□?W' CBNGHC' A>' F?(KGDG ?' @AH CDAB ' G' AKGH =' DGHG I' ?HN' JG' BHNGD C?HN' □C' G' A@□C ' AKKADCBH□CG ' A>' H CDBO-∩H ' A□' NGW□ FCH ' J□OF' CFG CD?∩H' A>'F□ ' CADE' GG@ ' CA' >A□OG' BKAH' F□@' ?HN' ?KK?DGH□WE' DGSGOC ' CFA G G F□L□C□AH ' J□OF' JABWN' LG' @ADG' ?'>GOC-∩H ' >A□' CFG' ?(G' A>NFA G' J□OF' ?□G' @ADG' G? E I' ' C' □ ' ?' DG?□' KD□P□WG G' B ' ABC' A>' CFG' DG ∩AH' A>' KWG? BD?LWG' G@AC□AH ' C' J? ' F□ ' F□ FGD' ?□C' G>>GCCGN' LE'N□N?OC□D' KDGOGKC ' 'NDAKKGN' O? B?WE ' LE'>?W G' DGKDG-GHC?C□AH ' A>' CFG OABD G A>' JADWNME ?>>?□D ' ?HN' CFG' JAD(∩H ' A>' @?H8 KODGC' FG?DC' #FG' @□HN' OA@KDGFGHN ' CFG' O$ ' CDBCF' JFGH' □C □ ' GMGP?CGN' LE' CFG' ?DC A>' CFG KAGC ∩HCA' ?' >□C C?CG >AD □C ' OA@KDGFGH ∩A H' #FG' O$ '@A?W' KBDKA G □ ' CFGH' GPAWPGN ' CFDAB F' ?' GD□G ' A>' NGNBO-C∩AH ' ∩H' CFG @□HN' A>' F□@' JFA' □ ' CFB ' @APGN' #F□ ' □ ' CFG' F□ FG C MA □O ' LGO?B G' □C □ ' L? GN' BKAH' CFG LDA?NG C' KDG@□ G ' "E@GD' HGGD' ?C' F?(KGDG' JFGH' FG' ?E ' CF?C' CFG @AD?W' A>' CFGMA'□ ' CF?C' @?∩NGH ' A>'QB?M□CE' FABWN' HAC' DBH'?J?E' J□CF' LW?O(?@AAD ' #FG' ?DO? @' AHWE CGWM ' BKAH' CFA G' JFA' NG@?HN' ?HE' M□CGD?W' @AD?W' ∩H' ?' F□ JAD(' A>' ?DC .GO?B G' OAFH AH' AHWE' ?J'∩H' F?(KGDG8 ' ND?@?' = ?' @□DDAD' A>' M□>GS$' FG' KDG>GD ' F□ ' OA@GNE' CA' F□

?' HGJ' N□DGOC□AH' ?@AH Ć' CFG' CF□H(□H ' >GJ' CA' ABD' H?C□AH?M' AK□H□AH' A>' F?(KGDG ' CFGD' OD□C□O ' A>' ?' F□ FGD' OFAAM' CF?H' ABD' AJH' D?OG' A>' OA@@GHC?CAD ' F?N' KDGOGNGN' OFMG GM' □H' +GD@?HE ' ?HN' □Ć' JABMN' HAC ' KGDF?K ' LG' CAA' @BOF' CA' ?E' CF?C ' ? ' CFG' DGPGDGHC' CBNE' A>' F?(KGDG' F? ' KD□HO□K?MME' >AD@GN' CFG□D' G CFGC□O' OFAAM' F? ' GHC' B ' L?O(' CA' CFG' DGPGDGHC' CBNE' A>' F?(KGDG ' G' M□PGN' □H' CFG' FG?DC ' A>' CFG' KGAKMG ' JFA' (HGJ' HACF□H ' A>' CFG' !H M□ F' OD□C□O ' #FG' MG?DHGN ' ? ' CFGE' JGDG' O?MMGN ' BHNGD CAAN' F□@' MG? C ' $GC' CFG' MAPGD ' A>' CDBCF' DGSA□OG' CF?C' CFG□D' NG KAC□ @' □ ' APGD

^')

' BD' D?K□N' (GCOF' A>' OD□C□O?M' AK□H□AH' BKAH' F?(KGDG' □H' !H M?HN' F? ' HAJ' LDAB FC' B ' CA' JF?C' @?E' LG' O?MMGN' CFG' GOAHN' D?OG' A>' OA@-@GHC?CAD

#FG' !H M□ F' GN□CAD ' A>' F?(KGDG' F?PG' OGDC?□HME' LDAB FC' CA' CFG□D' C? (' ?' DG?C' P?D□GCE' A>' QB?M□C□G ' >DA@' JF□OF' OA@L□H?C□AH' JG' @□ FC' G KGOC' A@G' PGDE' >GM□O□CAB ' DG BMC ' #FGE' N□P□NG' CFG@ GMPG ' □HCA' CJA' OFAAM ' JF□OF ' M□(G' ?MM' OFAAM ' F?PG' CFG□D' BLN□P□ □AH ' "AJG ' AKG ' #FGAL?MN ' ?H@GD ' OAFH AH ' LGMAH ' CA' CFG' OFAAM' JF□OF' N□N' HAC' GG(' ?HE' PGDE' G ?OC' ?OQB?□HC?HOG' J□CF' ABD' G?DME' M□CGD?CBDG ' ?HN' JF□OF' KDAL?LME' JABMN' F?PG' NG K□ GN' CFG' G F□L□C□AH ' □>' HAC' CFG' DG?M□CE ' A>' ?HC□QB?D□?H' ?HN' L□LM□A D?KF□O?M' (HAJMGN G '! ' HGJ' OFAAM' ?DA G ' JFA G' ?OQB?□HC?HOG' J□CF' JF?C' F? ' LGGH' O?MMGN' LM?O(MGCCGD' M□CGD?CBDG' J? ' G CGH □PG' GHAB F' CA' KDANBOG' ?' NGO□NGN' DGPAMBC□AH' □H' F?(KGDG?H' OA@@GHC?DE ' ?KGMM ' CGGPGH ' &?MAHG ' "GGN ' %ABOG ' ?DG' CFG' DGKDG-GHC?C□PG ' A>' CFG' M?CCGD' OFAAM ' #FG' >□D Ć' OFAAM' OAHC?□HGN' CFG' @A Ć' LD□MM□?HC' @GH' ' CFG' GOAHN ' CFG' @A Ć' K?□H C?(□H ' OA@@GHC?CAD ' #FG' N□□MMG Ć' A>' CFG' >□D Ć' OFAAM ' #FGAL?MN ' J? ' BHQBG C□AH?LME' CFG' LG Ć' A>' CFG' >□D Ć' D?OG' A>' GN□CAD ' "AJG' J? ' □HNAMGHC ' AKG' >M? FE ' ?D ' LBDCAH' K?D?NA □O?M ' OAFH AH' KGN?HC□O ' #FGAL?MN' LDAB FC' F□ ' OA@-@AH' GH G' CA' CFG' C? (' ?HN' F? ' MG>Ć' B ' JG' O?HHAC' ?PA□N' CF□H(□H ' CFG' LG Ć' A>' ?MM' CFG' OAHSGOCBD?M' G@GHN?C□AH ' >' CFG' ACFGD' OFAAM ' CFG' DG?M' MG?DH□H ' ?HN' A@GC□@G ' ABHN' SBN @GHC ' A>' ?KGMM ' □ ' LBD□GN' □H' ?H' AL OBD□CE' A>' CFAB FC' ?HN' CEMG R CA' ?E' HACF□H ' A>' F□ ' OA@@GHC' LG□H ' KD□HCGN' GK?D?CGME' >DA@' F□ ' CG C R ZJF□OF' KBC ' ?MM' ADN□H?DE' DG?N□H ' >AD' KBDKA G ' A>' □H>AD@?C□AH' ?Ć' OA@KMGCG' NG>□?HOG ' >'

CGGPGH ' ?HN' &?MAHG ' CFGE' F?PG' F?N ' @ADG' AD' MG ' CFG' MADE' A>' F?P□H ' M□H(GN' CFG@ GMPG ' CA' F?(KGDG' >AD' @ADG' CF?H' F?M>?' OGHCBDE ' "GGN' ?HN' F?M@GD ' JGDG' @GDG' BKGDP□ AD ' ?HN' ?LD□N GD ' A>' JF?C' CFGE' N□N

#FG' GN□C□AH' A>' ?KGMM' J? ' KBLM□ FGN' □H' CGH' @?MM' AOC?PA' PAMB@G ' ' CFDGG' EG?D ' ?>CGD' CF?C' A>' 0AFH AHR CF?C' □ ' □H' 46 ' □ ' DG>?OG' □ ' KD□HCGN' □H' JF?C' JG' O?MM' CFG' P?D□ADB@' GN□C□A□□ ' A>' F?(KGDG ' LBC' CGGPGH ' F? ' ?NNGN' CA' □C' CF□ ' NGKDGO□?C□H ' HACG R = %D ' 0AFH AH8 ' AK□H□AH' A>' CF□ ' KGD>AD@?HOG' @?E' LG' (HAJH' >DA@' CFG' >AMMAJ□H ' K? ? G' □H' &D ' .A JGMM8 ' < $□>G' A>' %D ' 0AFH AH ' 8R < >' CFG' @?H' JABMN' F?PG' 0A@G' CA' @G ' ' JABMN' F?PG' GHNG?PABDGN' CA' GHNAJ' F□ ' KBDKA G' J□CF' JADN ' >AD' ? ' □C □ ' FG' NACF' ?LLMG' @AH CDAB ME 8 I' GDC?□HME' = CFG' @?HI' NAG ' JD□CG' ?' @A Ć' G CD?ADN□H?DE' CEMG ' ?HN' □Ć' □ ' □@KA □LMG' CA' NA' >BMM' SB C□OG' CA' F□ ' GN□C□AH ' >DA@' CFG' DG?C' LBM(' A>' CFG' HACG ' ?HN' P?D□AB ' DG?N□H ' ='LG□H ' KBLM□ FGN' □H' ?' GK?D?CG' >AD@ I' J□CF' DG>GDGHOG ' CA' KDGP□AB ' GN□CAD ' A' AL OBDG' ?HN' KGDKMG GN ' CF?C' >GJ' JABMN' C?(G' CFG' CDABLMG' CA' ?CCG@KC ' CA' DG?OF' F□ ' @G?H□H ' ?KGMM' J? ' ?' @?H' A>' >ADCBHG ' ?HN' FG' NGPACGN' ?' M□>G' CA' CF□ ' M?LABD ' NE□H ' □H' CFG' @□N Ć' A>' □C' CGGPGH ' HGPGD' @GHC□AH ' F□@' LBC' CA' □H BMC' F□@ ' ?HN' ?@AH Ć' CFG' FG?K ' A>' CFG' @A Ć' CD? FE' HACG ' CF?C' GHOB@LGD' CFG' P?D□ADB@' GN□C□AH ' D?(GN' CA GCFGD' >DA@' CFG' K?@KFMGC ' A>' GPGDE' N?LLMGD' □H' OA@@GHC?DE ' CFGDG □ ' KGDF?K ' HAC' AHG' □H MG @□HNGN' QBAC?C□AH' >DA@' ?KGMM ' 0AFH' AMM□H ' CFG' KBLM□ FGD' A>' F□ ' KA CFB@AB ' ACG ' ?HN')?D□AB ' "G?N□H ' LD□H ' ?' OF?D G' ? ?□H Ć' CGGPGH ' JF□OF' @?E' ?OOABHC' >AD' CF□ ' BHDGMGHC□H ' FA C□M□CE' CA' ?' MG?DHGN' ?HN' ?@□?LMG' @?H' M?LABD□H ' □H' ?' KBD B□C' OA@@AH' CA' CFG@' LACF ' G' ?E ' CF?C' ?KGMM8 ' GN□C□AH' ='□ ' @?NG' CFG' DABHNJAD(' A>' JF?C' □ ' CA' K? ' >AD' CFG' GHB□HG' KDANBOC□AH' A>' CFG G' OA@L□HGN' GN□CAD I' V0AFH AH' ?HN' CGGPGH ' #F□ ' FG' ?E ' @?E' LG' KDAPGN' LE' ?' OA@K?D□ AH' A>' CFG□D' >□D Ć' GN□C□AH' A>' 3' J□CF' CF?C' A>' 0AFH AH8 ' A>' 45 ' ?KGMM8 ' F?P□H ' LGGH' KBLM□ FGN' NBD□H ' CFG' □HCGDP?M ' G' CFGH' KDAOGGN ' >BDCFGD' □H' CFG' OF?D G' R

6 JN' NHP' P LJA9 KMN !' 7' NHP ' U' MG' N' Y G' P GPO' M!O' MJQ I P!NPO % I MUPG' 7J NHP ' MO M!KPG' JL !' NHP' GM I P' L9M!' MA J!O !Q' NH' 7 PGH' I MNNP ' M!O' MKKJ I J_ 9MNPO' P OP!KP' !' L 7' 7' NHP' !OJGN T' NH' H KH' NHP' LJ 9 ! !Q' N MOP' HMG' APP!' LJ GJPO' M!O' 7' NHP' 9MN NJOP' N ' H KH' N' HMG' APP!' PWNP!OPO ' !' PMKH' 7' NHP' MA P ' IP!N !PO' LM N KJ9M G# O ' O 77P !Q' MG' N' O PG' 7 I' NG' 7 I P ' GP97' !' !J I AP 9PGG' !GNM!KPG' !' M99' 7' NHP I' N' G GN 99' 7 J!O' N ' MQ PP' NH' NHMN' PO N !' H KH' P' M P' Q M P9T' N 9O' !' G ' I M!T' OG' AT' NHP' MLLM P!N' I M!MQP ' 7' NHP' AJG !PGG ' Y HMG' ! N' APP!' PWM I !PO' APT !O' !P' L9MT+% R

`R4

. BĆ' CFGDG' J? ' ?HACFGD' O?B G' A>' CFG' FA C□M□CE' A>' CGGPGH ' ?HN' F□ ' OFAAM' A>' OA@@GHC?CAD ' ?D@GD' J? ' CFG□D' ADEKF?GB ' #FG□D' ABM ' JGDG' KDA CD?CG' LG>ADG' CFG' G CGHC' A>' F□ ' DG G?DOFG ' □H' CF?C' KGO□G ' A>' M□CGD?CBDG' JF□OF' KA G G ' CF□ ' □H BM?D' ?NP?HC? G' >AD' CFG' OBMC□P?CAD ' CF?C' □>' FG' CBN□G ' □C' □H' ?H' AD□ □H?M' GN□C□AH ' A>' JF□OF' AHME' AHG' AD' CJA' OAK□G ' ?DG' (HAJH' CA' G □ Ć' VCFG' @GD□C' □ ' AHG' □>' CFGDG' □ ' ?' L?(GD8 ' NATGH' (HAJH ' FG' □ ' □@@GN□?CGME' KDAHABHOGN' MG?DHGN ' SBN□O□AB ' M?LAD□AB ' ?OBCG' HN' CF□ ' J? ' ?D@GD8 ' KD?□ G ' G' JDACG' = H' ! ?E' AH' CFG' $G?DH□H ' A>' F?(KG?DG I' JF□OF' F? ' HAC' AHG' K? ? G' A>' AM□N' OD□C□O□ @' >DA@' CFG' >□D Ć' K? G' CA' CFG' M? C ' ?HN' >DA@' JF□OF ' □>' CFG' H?@G' ?HN' CFG' JAD(' A>' F?(KGDG' JGDG' CA' KGD□ F ' ?HNUZ' AHG' OAKE R ?' BH□QBG' OAKE' □ ' CFG' ?>>GOC□AH?CG' H?@G' >AD' CFG G' CF□H R ' OABMN' LG' @□D?OBMAB ME' KDG GDPGN ' CFG' AHME' □H>GDGHOG' >DA@' CFG' LAA(' JABMN' LG' CF?C' □MM□?@' F?(KGDG' J? ' ?' PGDE' AL OBDG' ?HN' □ HAD?HC' @?H ' JFA@' A@G' @□ SBN □H ' ?N@□DGD ' F?N' LGGH' NG □DAB ' CA' G ?MC' □HCA' ?H' GKFG@GD?M' DGKBC?C□AH ' ?HN' CF?C' "□OF?DN' ?D@GD' J? ' ?' PGDE' N□ C□H B□ FGN' ?HN' MG?DHGN' @?H ' JFA' F?N' CD□KKGN' CFG' @? (' A>>' CFG' KDGCGHNGD ' #FG' >□D Ć' GN□C□AH' A>' ?D@GD8 ' K?@KFMGC' ?KKG?DGN' □H' 4 ' ?KGMM ' JFA' F?N' CBN□GN' F?(KGDG' J□CF' >?D' @ADG' ?OOBD?OE' CF?H' CF□ ' @GDG' KGN?HC ' JFA' HGPGD' KDANBOGN' ?HE' M□CGD?DE' KGD>AD@?HOG' □H' F□ ' M□>G' G OGKC' CF□ ' ?DDA ?HC' K?@KFMGC ' FG MN ?' OAHCD?DE' AK□H□AH' CA' ?D@GD R ' CF?C' F?(KGDG' =' J? ' PGDE' PPGMM DABHNGN ' ?C' MG? C' □H' $?C□H ' ?C' OFAAM' CF?C' □C' J? ' GP□NGHC' CF?C' FG' F?N' A@G' (HAJMGN G' A>' CFG' C?M□?H ' I' ?HN' CF?C' = A>' CFG' DGH OF' M?H B? G' FG' J? ' A@GJF?C' ?' DG?CGD' @? CGD' CF?H' A>' CFG' CJA' CF?C' F?PG' AHG' LG>ADG I

#FG' KD□HO□KMG' A>' ?KGMM8 ' GN□C□AH' J? ' CA' □PG' CFG' KM?E ' A>' F?(-KGDG' ? ' =' GC' ABC' LE' F□@ GM>' □H' QB?DCA ' AD' LE' CFG' KM?EGD ' F□ ' >GMMAJ ' □H' >AM□A I' □ ' □HCDANBOC□AH' OAH □ C ' A>' ?H' ?H?ME □ ' A>' CFG' P?MBG' A>' CFG G')?D□AB ' ?BCFAD□C□G ' ?HN' FG' N□ OD□@□H?CG ' PGDE' SB CME' LGCJGGH' CFA G' KM?E ' □H' QB?DCA ' JF□OF' =' F?PG' @BOF' DG G@LM?HOG' CA' CFA G' □H' CFG' >AM□A I' ?HN' CFA G' JF□OF' JGDG' =' >□D Ć' ND?>C ' AD' GM G' □@KGD>GOC' ?HN' CAMGH' OAK□G I' □ ' CG Ć' □ ' >AD@GN' BKAH' CF□ ' N□ OD□@□H?C□H ' KD□HO□KMG ' HAC' ?CC?OF□H ' ?H' GQB?M' P?MBG' CA' ?MM' CFG' AD□ □H?M' OAK□G ' □H' QB?DCA ' AD' BKGD GN□H ' CFG' CG Ć' A>' CFG' >AM□A' LE' CFDB C□H ' □H' K? ? G ' ABC' A>' CFG' >□D Ć' ND?>C ' ?HN' □@KGD>GOC' OAK□G ' #A' ?E' CF?C' F□h' CG Ć' □ ' CFG' DG BMC' □HP?D□?LME' A>' ?' ABHN' SBN @GHC' JABMN' LG' CA' ?E' CAA' @BOF' ' ?HN ' □HNGGN ' A@G' A>' F□ ' G@GHN?C□AH ' ?KKDA?OF' ?' M□CCMG' CA' CFG' D□N□OBMAB '

. BĆ' JG' F?PG' HA' FG □C?C□AH' □H' ?E□H ' CF?C' □C' □ ' ?' LGCCGD' CG C' LGO?B G ' ?KKDA?OF□H ' @ADG' HG?DME' CA' CFG' AD□ □H?M ' CF?H' CF?C' A>' @?HE' A>' CFA G' FA' O?@G' ?>CGD' F□@ ' ?HN' JGHC' AH' @GHN□H ' ?HN' @GHN□H ' >AD' F?M>' ?' OGHCBDE ' C□MM' CFG' JADMN' J? ' C□DGN' J□CF' CFG' N□H' A>' CFG□D' C□H(GD□H

#FG' >□D Ć' M?LABD' A>' CGGPGH ' JF□OF' KDGOGNGN' CFG' GN□C□AH' A>' ?KGMM' LE' CJA' EG?D ' J? ' CA' DGKD□HC' □H' >?O' □@□MG' ='CJGHCE' A>' CFG' KM?E ' A>' F?(KG?DG ' LG□H ' CFG' JFAMG' HB@LGD' KD□HCGN' □H' QB?DCA' NBD□H ' F□ ' M□>GC□@G ' AD' LG>ADG' CFG' "G CAD?C□AH ' OAMM?CGN' JFGDG' CFGDG' JGDG' N□>>GDGHC' OAK□G ' ?HN' KBLM□ FGN' >DA@' CFG' D□ □H?M I' &A Ć' ?OOBD?CGME' N□N' FG' G GOBCG' CF□ ' M?LAD□AB ' NBCE ' G' F?PG' O?DG>BMME' OAMM?CGN' CFG G' DG □@KDG □AH ' LE' CGGPGH ' ' ?HN ' J□CF' CFG' G OGK□AH ' BKAH' ?H' ?PGD? G ' A>' F?M> ? NATGH' A>' CFG' @□HBCG Ć' NGP□?C□AH ' □H' G?OF' KM?E ' JG' ?DG' ? ' JGMM' OAHCGHCGN' J□CF' BD' OAKE' >AD' ?MM' KBDKA G ' A>' BC□M□CE' ? ' □>' JG' KA G GN' CFG' D?DG Ć' GN□C□AH' A>' CFG' @A Ć' GM> ?C□ >□GN' OAMMGOCAD ' #FG' HG Ć' KDA DG □PG' @APG@GHC' A>' CGGPGH ' J? ' C□MM' □H' CFG' ?@G' ?>G' K?CF ' G' LGO?@G' BH□CGN' J□CF' 0AFH AH' □H' CFG' GN□C□AH' A>' 3 ' H' F□ ' ?NPGDC□ G@GHC' FG' ?E R =' #FG' M?LABD ' A>' KDGOGN□H ' GN□CAD ' F?PG' HAC' MG>C' DAA@' >AD' ?' LA? C' CF?C' @?HE' P?MB?LMG' DG?N□H ' F?PG' LGGH' DGCD□GPGN ' CFAB F' □C' @?E' LG' >?□DME' ? GDCGN' CF?C' CFG' CG Ć' A>' F?(KG?DG' □ ' DG CADGN' CA' CFG' OAHN□C□AH' □H' JF□OF' CFG' ?BCFAD' AD' D?CFGD' F□ ' >□D Ć' KBLM□ FGD ' ?KKG?D' CA' F?PG' MG>C' □C ' BOF' G@GHN?C□AH ' ? ' JGDG' ?L A-MBCGME' HGOG ?DE' ?MAHG' ?N@□CCGN I' G' NG>□HG ' JF?C' ?DG' ?L AMBCGME' HGOG ?DE ' BOF' ?' ' ?' BKKME' A>' K?DC□OMG ' FGH □HN□ KGH ?LMG' CA' CFG' GH G' G' DGSGOC ' J□CF' □HN□ H?C□AH' ?MM' ?CCG@KC ' CA' C?@KGD' J□CF' CFG' CG Ć' LE' □HCDANBO□H ' ?' EMM?LMG' □H' ?□N' A>' CFG' @GCDG ' G' NGOM□HG ' B G C□AH ' A>' OADDG KAHNGHC ' = CF?C' @□ FC' F?PG' KDAPGN' A>' DG?C' ?NP?HC? G' CA' ?' @ADG' N?D□H ' OA@@GHC?CAD I' *KAH' BOF' ?>G' >ABHN?-C□AH ' J? ' CFG' GN□C□AH' A>' 3' DG?DGN ' H' 6' □C' J? ' =' DGP□ GN' ?HN' ?B @GHCGN I' ?HN' □H')' □C' J? ' DGKD□HCGN' J□CF' ?NN□C□AH ' LE' ??O' "GGN ' CGGPGH ' F?P□H ' NGOM□HGN' CFG' >BDCFGD' O?DG' A>' CFG' JAD(' CGGPGH ' ?M A ' □H' =' DGHNGDGN' ?H' ?OOGKC?LMG' GDP□OG' CA' CFG' CBNGHC ' A>' ABD' ND?@?C□O' F□ CADE' LE' CFG' KBLM□O?C□AH' A>' =' □ ' AMN' KM?E ' AH' JF□OF' F?(KG?DG' >ABHNGN' F□ ' &G? BDG' >AD' &G? BDG' A@GNE' A>' !DDAD ' #?@□H ' CFG' FDGJ ' □H ' 0AFH ' □H ' GHDE') ' □H ' GHDE') ' ?HN' □H ' $G?D I

H' 67' &?MAHG' ?KKG?DGN' ?' ?H' GN□CAD' A>' F?(KGDG' G' O?@G' >ADJ?DN' J□CF' =' ' BKKMG@GHCI' CA' CFG' GN□C□AH' A>' 6' □H' JF□OF' FG' DGKBLM□ FGN' CFG' KAG@ ' A>' F?(KGDG' ?HN' CFG' GPGH' NABLC>BM' KM?E ' JF□OF' F?N' LGGH' KD□HCGN' ? ' F□ ' □H' CFG' CF□DN' ?HN' >ABDCF' >AM□A ' #FG

‘ ‘ 8 7‘ >‘ 7 7

GH0ABD? G@GHC‘ JF□0F‘ FG‘ F?N‘ DGOG□PGN‘ □HNBOGN‘ F□@‘ □H‘ 17‘ JFGH‘ CGGPGH‘ F?N‘ DGC□DGN‘ >DA@‘ F□‘ GN□CAD□?M‘ M?LABD‘ □H‘ OAHHGOC□AH‘ J□CF‘ CFG‘ LAA(GMMGD ß GN□C□AH‘ CA‘ KBLM□ F‘ ?‘ OA@KMGCG‘ GN□C□AH‘ A>‘ FS‘ AJH‘ LBC‘ JF□0F‘ J?‘ C□MM‘ ?‘ P?D□ADB@‘ GN□C□AH‘ =‘ J□CF‘ CFG‘ 0ADDGOC□AH‘ ?HN‘ □MMB CD?C□AH‘ A>‘ P?D□AB‘ OA@@GHC?CAD I‘ H‘ CF□‘ >□D C‘ ?KKG?DGN‘ F□‘ =‘ %□ GDC?C□AH‘ AH‘ CFG‘ #FDGG‘ ?DC‘ A>‘ GHDE‘) I‘ ?HN‘ F□‘ =‘ □ - CAD□O?M‘ OOABHC‘ A>‘ CFG‘ !H M□ F‘ C? G I‘ &?MAHG‘ KDA>G G‘ CFG‘ ?@G‘ ?H □GCE‘ CA‘ ?NFGDG‘ CA‘ CFW‘ GHB□HG‘ CG C‘ A>‘ F?(KGDG‘ ?‘ CGGPGH‘ F?N‘ KDA>G GN‘ LG>ADG‘ F□@‘ LBC‘ FG‘ AKGHGN‘ ?‘ J□NG‘ >□GMN‘ >AD‘ GN□CAD□?M‘ M□OGH G‘ □H‘ F□‘ KD□HO□KMG‘ A>‘ @?(□H‘ BK‘ ?‘ CG C‘ ABC‘ A>‘ CFG‘ >AM□A‘ GN□C□AH‘ ?HN‘ CFG‘ KDGP□AB‘ QB?DCA‘ ‘ ?HN‘ CA‘ ?NN‘ CA‘ CFG‘ ?KK?DGHC‘ P?MBG‘ A>‘ F□‘ AJH‘ M?LABD‘ FG‘ G ? GD?CGN‘ ?‘ ACFGD‘ F?PG‘ □HOG‘ NAHG‘ CFG‘ DG?M‘ P?MBG‘ A>‘ CFG G‘ QB?DCA‘ R =‘ #FGE‘ ‘ ?DG‘ KDG>GD?LMG‘ CA‘ CFG‘ G F□L□C□AH‘ A>‘ CFG‘ ?@G‘ KM?E‘ □H‘ CFG‘ >AM□AQ‘ >AD‘ CF□‘ KM?□H‘ DG? AH‘ LGO?B G‘ □H CG?N‘ A>‘ KD□HC□H‘ CFG G‘ KM?E‘ >DA@‘ ?‘ @?HB OD□KC‘ CFG‘ GN□CAD‘ A>‘ CFG‘ >AM□A‘ CA‘ ?PG‘ M?LABD‘ AD‘ >DA@‘ A@G‘ ACFGD‘ @AC□PG‘ KD□HCGN‘ CFG‘ DG?CGD‘ K?DC‘ A>‘ CFG@‘ >DA@‘ CFG‘ PGDE‘ OAK□G‘ JF□0F‘ CFGE‘ DGKDG GHCGN‘ ?‘ @?□@GN‘ ?HN‘ □@KGD>GOC‘ ?HN‘ >DGQBGHCME‘ >DA@‘ ?‘ M?CG‘ □H CG?N‘ A>‘ CFG‘ G?DM□G C‘ GN□C□AH‘ □H‘ A@G‘ □H C?HOG‘ J□CF‘ ?NN□C□AH‘ ?HN‘ ?MCGD?C□AH‘ A>‘ CFG□D‘ AJH I‘ #FA G‘ A>‘ ABD‘ DG?NGD‘ JFA‘ F?PG‘ K?□N‘ ?CCGHC□AH‘ CA‘ ABD‘ AL GDP?C□AH‘ AH‘ CFG‘ =‘ C?CG‘ A>‘ CFG‘ #G C‘ I‘ JF□OF‘ KDG-OGNG‘ G?OF‘ KM?E‘ J□MM‘ (HAJ‘ CF?C‘ CF□‘ □‘ HAC‘ ?H‘ ?OOBD?CG‘ C?CG@GHC‘ A>‘ CFG‘ QBG C□AH‘ >AD‘ CFG‘ M?D G‘ ?NN□C□AH‘ CA‘ CFG‘ >AM□A‘ OAKE‘ JFGH‘ OA@-K?DGN‘ J□CF‘ CFG‘ QB?DCA‘ CFG‘ O?DG>BM‘ G@GHN?C□AH‘ ?HN‘ GPGH‘ CFG‘ A@□ - □AH‘ JF□OF‘ ?DG‘ GMNA@‘ J□CFABC‘ A@G‘ ABHN‘ ?KK?DGHC‘ DG? AH‘ OABMN‘ HAC‘ F?PG‘ LGGH‘ CFG‘ ?NN□C□AH‘ ?HN‘ ?MCGD?C□AHZ‘ A>‘ CFG‘ GN□CAD‘ A>‘ CFG‘ >AM□A‘ LBC‘ @B C‘ F?PG‘ LGGH‘ CFG‘ DG BMC‘ A>‘ CFG‘ ?BCFAD8‘ M?LABD‘ KGDF?K‘ NBD□H‘ ?‘ GD□G‘ A>‘ EG?D‘ C‘ ?KKG?D‘ >DA@‘ &?MAHG8‘ DG>?OG‘ CF?C‘ ?‘ >GGM□H‘ J?‘ ?□H□H‘ DABHN‘ CF?C‘ CFG‘ OAH C?HC‘ ?OOG □AH‘ A>‘ HACG‘ CA‘ F?(KGDG‘ J?‘ LGOA@□H‘ ?H‘ GP□M‘ ?HN‘ FG‘ N□ ? DGG‘ J□CF‘ CFG‘ >AMMAJ-□H‘ AL GDP?C□AH‘ A>‘ 0AFH AH‘ R =‘ C‘ □‘ HAC‘ VFG‘ DG@?D(‘ PGDE‘ D?CG>BM‘ CA‘ OAH □NGD‘ FAJ‘ M□CCMG‘ CFG‘ BOOG □AH‘ A>‘ GN□CAD‘ F?‘ ?NNGN‘ CA‘ CF□‘ ?BCFAD8‘ KAJGD‘ A>‘ KMG? □H‘ G‘ J?‘ DG?N‘ ?N□D□DGN‘ CBN□GN‘ ?HN‘ □@□C?CGN‘ JF□MG‘ FG‘ J?‘ EGC‘ NG>AD@GN‘ J□CF‘ ?MM‘ CFG‘ □@KDAKD□GC□G‘ JF□OF‘ □ HAD?HOG‘ ?HN‘ HG MGOC‘ OABMN‘ ?OOB@BM?CG‘ BKAH‘ F□@ I‘ #FG‘ HGJ‘ GN□CAD‘ J□CF‘ ?‘ K?D-NAH?LMG‘ OA@KM?OGHOE‘ CAJ?DN‘ F□‘ O?MM□H‘ ?E R =‘ G‘ OGDC?□HME‘ J?‘ DG?N‘ ?N@□DGN‘ CBN□GN‘ ?HN‘ □@□C?CGN‘ ?C‘ CFG‘ KGD□AN‘ @GHC□AHGN‘ LBC‘ BDGME‘ HAC‘ □H‘ CFG‘ ?@G‘ NG DGG‘ ?‘ ?C‘ KDG GHC‘ #FG‘ BOOG □AH‘ A>‘ GN□CAD‘ F?‘ G>>GOCGN‘ CF□‘ □C‘ F?‘ @?NG‘ F□@‘ BHNGD CAAN‘ □C‘ F?‘ @?NG‘ F□@‘ KAKBM?D‘ 5 □C‘ F?‘ FAJH‘ GPGDE‘ AHG‘ JFA‘ □‘ 0?K?LMG‘ A>‘ DG?N□H‘ FAJ‘ @B0F‘ BKGD□AD‘ FG‘ □‘ HAC‘ AHME‘ CA‘ 0AH AH‘ ?HN‘ MGCOFGD‘ JFA@‘ CFG‘ L?N‘ C? CG‘ A>‘ CFG‘ M? C‘ ? G‘ >DA@‘ CFG‘ C□@G‘ A>‘ CFG‘ "G CAD?C□AH‘ CA‘ CFG‘ GHN‘ A>‘ CFG‘ OGHCBDE‘ GC‘ ?LAPG‘ F□@‘ LBC‘ CA‘ ?MM‘ CFG‘ ND?@?C□O‘ KAGC‘ A>‘ ?HC□QB□CE I‘ 0AH AH‘ ?HN‘ MGCOFGD‘ JGDG‘ HAC‘ GC‘ ?LAPG‘ F?(KGDG‘ ?‘ JG‘ F?PG‘ NG@AH-CD?C□PGME‘ FAJH‘ >DA@‘ CFG‘ C□@G‘ A>‘ CFG‘ "G CAD?C□AH‘ CA‘ CFG‘ GHN‘ A>‘ CFG‘ OGHCBDE‘ . BC‘ GPGH‘ □>‘ CFGE‘ JGDG‘ □C‘ J? ‘ HAC‘ CFG‘ BOOG □AH‘ A>‘ GN□CAD‘ CF?C‘ F?N‘ @?NG‘ F?(KGDG‘ KAKBM?D‘ ‘ KM?□H‘ DGKD□HC‘ A>‘ F?(KGDG‘ J□CFABC‘ ?‘ □H MG‘ HACG‘ LBC‘ J□CF‘ CFG‘ KGMM□H‘ @ANGDH□ GN‘ JABMN‘ F?PG‘ @?NG‘ F□@‘ @ADG‘ KAKBM?D‘ CF?H‘ ?MM‘ CFG‘ OD□C□O?M‘ GN□C□AH‘ JF□OF‘ CFG‘ G□ FCGGHCF‘ OGH-CBDE‘ F?N‘ KDANBOGN‘ & ?MAHG‘ ?E‘ CF?C‘ NBD□H‘ CF?C‘ OGHCBDE‘ =‘ CF□DCE‘ CFAB ?HN‘ 0AK□G‘ A>‘ F?(KGDG‘ F?PG‘ LGGH‘ N□ KGD GN‘ CFDAB F‘ !H M?HN I‘ #FG‘ HB@LGD‘ JABMN‘ F?PG‘ LGGH‘ QB?NDBKMGN‘ □>‘ F?(KGDG‘ F?N‘ LGGH‘ MG>C‘ CA‘ F□‘ AJH‘ BH?□NGN‘ KAJGD‘ & BOF‘ A>‘ JF?C‘ CFG‘ 0A@@GHC?CAD‘ N□N‘ G KGO□?MME‘ □H‘ CFG‘ □MMB CD?C□AH‘ A>‘ F?(KGDG8‘ KFD? GAMA E‘ ?HN‘ CFG‘ G KM?H?C□AH‘ A>‘ F□‘ >B □C□PG‘ ?MMB □AH‘ CFGE‘ N□N‘ JGMM‘ . BC‘ CFGE‘ @B C‘ HGGN‘ LG‘ OD□C□O‘ J□CFABC‘ F?P□H‘ ?HE‘ E CG@‘ A>‘ OD□C□O□ @‘ @ADG‘ KDA->ABHN‘ CF?H‘ CFG‘ G? E‘ C? (‘ A>‘ >?BMC >□HN□H‘ ?HN‘ CFB‘ CFGE‘ DGHNGDGN‘ F?(KGDG‘ MG‘ KAKBM?D‘ CF?H‘ FG‘ JABMN‘ F?PG‘ LGGH‘ □H‘ ?H‘ ? G‘ JFGH‘ OD□C□O□ @‘ J?‘ M□CCMG‘ BHNGD CAAN‘ ?HN‘ @GH8‘ GEG‘ JGDG‘ N?TTMGN‘ LE‘ ?H‘ ?DD?E‘ A>‘ H?@G‘ CA‘ BKKADC‘ A@G‘ >M□KK?HC‘ DG@?D(‘ BKAH‘ F?(KGDG‘ J?HC‘ A>‘ ?DC‘ A@G‘ G F□L□C□AH‘ A>‘ F□‘ □ HAD?HOG‘ A@G‘ NGCGOC□AH‘ A>‘ F□‘ ?H?OFDAH□ @‘ A@G‘ N□ OAPGDE‘ A>‘ ?‘ QB□LLMG‘ LGEAHN‘ CFG‘ KM?□H‘ @G?H□H‘ A>‘ CFG‘ JADN‘ C‘ □‘ O?DOGME‘ KA □LMG‘ CA‘ DG?N‘ ?‘ OGHG‘ A>‘ CFG‘ P?D□ADB@‘ F?(KGDG‘ J□CFABC‘ >GGM□H‘ CFG‘ BCCGD‘ J?HC‘ A>‘ ?‘ DGPGDGHC‘ K□D□C CAJ?DN‘ CFG‘ ?BCFAD‘ #FG G‘ CF□H‘ ?H(‘ @ADG‘ NGGKME‘ □HCA‘ CFG‘ @□HN‘ A>‘ CFG‘ DG?NGD‘ A>‘ F?(KGDG‘ CF?H‘ CFG‘ GHGD?M‘ G KDG □AH‘ A>‘ CFG‘ OA@-@GHC?CAD ß ?N@□D?C□AH‘ JF□OF‘ ?>CGD‘ ?MM‘ GG@GN‘ M□CCMG‘ @ADG‘ CF?H‘ OA@-KM□@GHC‘ CA‘ CFG@ GMPG‘ □H‘ CFG□D‘ ? AO□?C□AH‘ J□CF‘ CFG‘ KAGC‘ G‘ AKGH‘ ?‘ KM?E‘ ?C‘ ?‘ PGHCBDG‘ CA‘ GG‘ FAJ‘ >?D‘ □H‘ CFG‘ K□D□C A>‘ ?‘ @ANG C‘ ?KKDGO□?-C□AH‘ A>‘ CFG@ GMPG‘ ?HN‘ ?H‘ G?DHG C‘ ?N@□D?C□AH‘ A>‘ CFG□D‘ ?BCFAD‘ CFG‘ GN□CAD‘ M?LABDGN‘ CA‘ DGHNGD‘ F?(KGDG‘ KAKBM?D‘ C‘ □‘ ?@MGC‘ $GC‘ B‘ KBC‘ NAJH‘ ?‘ >G E‘ A>‘ CFG□D‘ ?HHAC?C□AH‘ R

S 3 5‘ , ‘ H G‘ G !P‘ 7‘ NHP‘ M77PKNPO‘ OG‘ !N OJKPO‘ AT‘ /T9T+R S‘

6‘ ‘ ! ‘ ‘ %# BK‡ 9 PGP‘9 !PG‘ M P‘ !‘ NHP‘ P!9M QPO‘]JM N‘ 7‘ ‡ M!T‘ 7‘ NG‘ @“ M I 9PN%G‘ MAGJ O N PG‘ MG‘ N P99‘ MG‘ APMJN PG‘ M GP‘ 7 I‘ NHP‘]JM!N NT‘ MOOPO‘ M7NP‘ N‘ MG‘ 7 GN‘ N NNP!+R S

6‘ ($ ‘ ‘ D‘ ‘ ‘ ‘O $‘ ‘ 9 ‘ ‘ M I‘ J! 99 !Q‘ N‘ GJLL GP‘ NHMN‘ HMU‘ GLPM P‘ K J9O‘ MLL L MNP‘ NHPGP‘ MAGJ O‘ P77JG !G‘ N‘ “ MN +R S

=‘ ‘ ‘ ‘ $‘ F $‘ ‘ 2‘]JPGN !‘ HPNHP‘ M‘]J AA9P‘ APN PP!‘ ‘ M!O‘ ‘AP‘ ! N‘ HP P‘ !NP!OPO+R R 4

6‘ % ‘ $ ‘ ‘ S 2‘ HP‘ M!MKH ! G I‘ G 7 GN‘ L !NPO‘ JN‘ AT‘ @ M!O‘ NHP!‘ P‘ M P‘ N 9O‘ AT‘ # ‘ NHMN‘ HMUGLP P‘ OP PO‘ H G‘ 2K! 9POQP‘ 7‘ NH G‘ 7M I JG‘ J! P G NT‘ 7 I‘ M‘ N J I LP T‘ A U‘ KM99PO‘ S‘ HP‘ / 7P‘ 7‘ ?MKU‘ X 9N !+R

=‘ B ‘ HP‘ QHN‘ L G OT‘ G‘ MKK OP!NM9+R R

, ‘ . ‘ / HP‘ GU 99‘ O GL9MTPO‘ !‘ NHP‘ I M!MQP I P!N‘ 7‘ NHP‘ : H GN‘ G‘ K !N MGNPO‘ NH‘ H G‘ I M!MQP I P!N‘ 7‘ NHP‘ L PNP !MNJ M9‘ AP !QG‘ ß 6‘ HPT‘ M P‘ AJN‘ PMU‘ M!O‘ !P77 KMK JG‘ LMQPM!NG+R S

! ‘ ‘(‘ ‘& ‘ ‘ ‘ =‘ HP‘ L PN%G‘ 99‘ M!O‘ AGKJ P‘ PWL PGG !‘ GPP I G‘ N‘ HM P‘ APP!‘ KMJGPO‘ AT‘ H G‘ M77PKNMN !‘ 7‘ K !K9JO !Q‘ NHP‘ GKP!P‘ NH‘ M‘ K JL9PN+R S‘ /

S‘ L ‘ ‘ ‘D ‘ 2‘ XM AJ N !%G‘ PMO !Q‘ AP !Q‘ Q P!‘ 6 H G‘ G M‘ ! A9P‘ P I P!OMN !‘ H KH‘ M9 I GN‘ GPNG‘ NHP‘ K N K‘ !‘ M‘ 9P P9‘ NH‘ NHP‘ MJNH +R S‘ /

6‘ %$ ‘ ‘ ‘ ‘$ ‘ $ ‘ ‘ ‘$ 3‘ ‘ " 2‘ XM AJ N !‘ GMTG‘ NHMN‘ NHP‘ M99JG !‘ G N‘ ?J P!M9‘ MN P‘ V ‡ 6 27‘ HMUGLPM P‘ HMO‘ PMO‘ ?J P!M9‘ HP‘ K J9O‘ ! N‘ HM P‘ !Q9T‘ MKKP!NPO‘ - GNHJ I JG+R S4

, B O‘ $‘ ‘ ‘ : BK ‡ H G‘ GLPPKH‘ G N‘ H A9P‘ N‘ AP‘ PMO‘ ‘ N‘ AP‘ JNNP PO+R SG/ ‘ 6 4PN‘ G I P‘ I M9‘ I MT‘ AP‘ PWN MKNPO‘ 7 I‘ N‘ MG‘ M99‘ H G‘ GJAGP]JP!N‘ KM9M I N PG‘ P P‘ !Q‘ N‘ NH G‘ GM MQP‘ P7 !P I P!N‘ 7‘ P P!QP+R S Z□

=‘ 3 R‘ ‘ $‘ 0 : BK ‡ 2!‘ HMUGLPM P%G‘ 9 KP!N JG‘ O KN !‘ NHP‘ I PM! !Q‘ I MT‘ AP R‘ @ D X

d ‘ ‘& ‘ ‘ 6‘ HM9KGLPM P‘ HMG‘ APP!‘ J!7 NJ!MNP‘ !‘ H G‘ I M!MQP I P!N‘ 7‘ NHP‘ GN T‘ 7‘ NH G‘ L9MT‘ NHP‘ I GN‘ GN U !Q‘ K KJ I GNM!KPG‘ 7‘ H KH‘ M GP‘ G‘ PM 9T‘ !‘ NG‘ 7 I MN !‘ MG‘ ! N‘ N‘ 9PM P‘ H I‘ I‘ 7 ‘M‘ K !K9JG !‘ GJ NPO‘ N‘ NHP‘ I L NM!KP‘ 7‘ NG‘ APQ ! ! !Q‡ #7NP‘ NH G‘ 9MGN‘ !NP P‘ NH‘ NHP‘ : H GN‘ NHP‘ KHM MKNP‘ 7‘ " M I 9PN‘ HMG‘ 9 GN‘ M99‘ NG‘ K !GP]JP!KP+R S

= B ‘ ‘ ‘ ‘ 3 ‘4‘ ‘0$ ‘:A ‘ ‘

& ‘ $ J $ ‘ ‘ 3

HPGP‘ 9 !PG‘ M P‘ ! N !‘ NHP‘]JM N‘ M!O‘ I QHN‘ HM P‘ APP!‘ I NNPO‘ !‘ NHP‘ 7 9 ‘ NH JN‘ Q PMN‘ 9 GG‘ 7 ‘ NHPT‘ M P‘ AGKJ P‘ M!O‘ M77PKNPO+R SG/

6‘ ‘O ‘ $ ‘3 ‘ ‘ $ ‘ ‘ ‘O ‘ " ‘ HP‘ L PN‘ !‘ NHP‘ 7 7NH‘ MKN‘ HMO‘ 7 Q NNP!‘ HMN‘ HP‘ NP‘ !‘ NHP‘ 7 GN+R SG&

= %$: ‘ ‘ 3 ‘ $ ‘ $ ‘ ‘ .

J O‘ $ ‘$ O‘ O ‘O

5 ‡ OM I P‘ !7 I G‘ I P‘ NHMN‘ NHPGP‘ OG‘ M P‘ I P P9T‘ NPKH! KM9‡ #‘ 9 I M!‘ AJNKHP ‘ M!O‘ OPM9P‘ !‘ D O : 9MNP9T‘ AGP PO‘ N‘ H I‘ NHMN‘ H G‘ !PLHP ‘ @M!‘ O9P‘ 9MO‘ K J9O‘ !9T‘ ‘ H I‘ !‘ I MU !Q‘ NHP I ß ‘Y “ P‘ K J9O‘ J O‘ NHP I‘ AJN‘ 2‘ MG‘ A QPO‘ N‘ $ ‘ $ ‘ R ‘ GHML P‘ NHP‘ P!OG‘ 7‘ O J D O : +P‡ ‘ ‘ NHP I‘ P]J PG‘ M‘ OPQ PP‘ 7‘ GU 998‘ M!T‘ !P‘ KM!‘ J O‘ NHP I‘ XH P P‘ PK 9_ 9PKNG‘ NHP‘ L 7PGG !‘ 7‘ HMUGLPM P%G‘ 7MNHP‘ 99‘ MO I N‘ NHMN‘ H G‘ G I‘ I QHN‘ AP‘ ! ‘ GN M!QP‘ N‘ GJKH‘ NP I G‡ 2‘ HM P‘ 7 P]JP!N9T‘ GPP!‘ LMKUMQPG‘ 7‘ 9‘ L !!PO‘ JL‘ NH‘ D O I R

! ‘ D R 6‘ HP‘ L PN‘ G‘ MKKJGPO‘ 7‘ HM !Q‘ GH !‘ 9 NN9P‘ PQM O‘ N‘ L PN KM9‘ EJGN KP‘ M!O‘ I MT‘ AP‘ KHM QPO‘ NH‘ P]JM9‘ !PQ9PKN‘ 7‘ L PN KM9‘ L AMA HNT‡ HP‘ MLLM N !‘ 9P7N‘ NHP‘ PQ !G‘ 7‘ NHP‘ OPMO‘ N‘ 9 NN9P‘ LJ L GP8‘ NHP‘ P P!QP‘ H KH‘ HP‘ OP I M!OG‘ G ! N‘ ANM !PO‘ AJN‘ AT‘ NHP‘ OPMNH‘ 7‘ H I‘ NHMN‘ MG‘ P]J PO‘ N‘ NMUP‘ N8 M!O‘ NHP‘ Q MN 7 KMN !‘ H KH‘ J9O‘ M GP‘ 7 I‘ NHP‘ OPGN JKN !‘ 7‘ M!‘ JGJ LP‘ M!O‘ M‘ I J OP P‘ G‘ MAMNPO‘ AT‘ NHP‘ J!N I P9T‘ OPMNH‘ 7‘ 1LHP9 M‘ NHP‘ T J!Q‘ NHP‘ APMJN 7J9‘ NHP‘ HM I 9PGG‘ M!O‘ NHP‘ L JG+R SG/

6‘ " M I 9PN‘ KM!! N‘ AP‘ GM O‘ N‘ HM P‘ LJ GJPO‘ H G‘ P!OG‘ AT‘ P T‘ M M!NMA9P‘ I PM!G8 M!O‘ 7‘ NHP‘ L PN‘ HP!‘ HP‘ GMK 7 KPO‘ H I‘ MN‘ 9MGN‘ I PM!N‘ N‘ HM P‘ P!7 KPO‘ GJKH‘ M I M9‘ N‘ G ! N‘ NHP GN‘ NHMN‘ KM!‘ AP‘ OPOJKPO‘ 7 L I‘ NHP‘ L9MT++++++++ " M I 9PN‘ GPP I G N‘ HM P‘ APP!‘ H NHP N‘ PQM OPO‘ MG‘ M‘ HP ‘ ! N‘ J!OPGP !Q‘ NHP‘ L NT‘ 7‘ NHP‘ MJO P!KP8 M!O‘ APKMJGP‘ ! ‘ NP‘ !‘ HMUGLPM P‘ HMG‘ NMUP!‘ NHP‘ LM !G‘ N‘ L !N JN‘ NHP‘ I I M9 NP!OP!KT‘ 7‘ H G‘ KHM MKNP +R S

#FG‘ GN□CAD‘ A>‘ CFG‘ >□D C‘ OAMMGOC□AH‘ A>‘ CFG‘ JAD(‘ A>‘ F?(KGDG‘ □H‘ CFG□D‘ =‘ NNDG ‘ CA‘ CFG‘ DG?C‘)?D□GCE‘ A>‘ "G?NGD I‘ ?E R =‘ "G?N‘ F□@‘ CFGDG>ADG‘ ?HN‘ ? ?□H‘ ?HN‘ ? ?□H‘ ?HN‘ ? ?□H‘ ?HN‘ □>‘ CFGH‘ EAB‘ NA‘ HAC‘ M□(G‘ F□@‘ BDGME‘ EAB‘ ?DG‘ □H‘ A@G‘ @?H□>G C‘ N?H GD‘ HAC‘ CA‘ BHNGD C?HN‘ F□@ I‘ #F□‘ J?‘ ?NP□OG‘ CF?C‘ OABMN‘ HAC‘ F?PG‘ KDAOGGNGN‘ >DA@‘ ?HE‘ OA@@AH‘ @□HN‘ #FG‘ >ABHN?C□AH‘ A>‘ ?‘ D□ FC‘ BHNGD C?HN□H‘ A>‘ F?(KGDG‘ □‘ MAPG‘ CGGPGH‘ DG?N‘ ? ?□H‘ ?HN‘ ? ?□H‘ J□CFABC‘ MAPG‘ ?HN‘ CFGDG>ADG‘ J□CFABC‘ BHNGD C?HN□H‘ . A JGMM‘ CFG‘ GN□CAD‘ A>‘ & ?MAHG8‘ KA CFB@AB‘ GN□C□AH‘ KG?(□H‘ A>‘ ?‘ HACG‘ A>‘ CGGPGH‘ AH‘ ?@MGC‘ ?E‘ CF?C‘ CGGPGH‘ F?‘ G KDG GN‘ F□@ GM>‘ = J□CF‘ ?‘ @BOF‘ ? KGD□CE‘ ?‘ □>‘ FG‘ F?N‘ F?N‘ ?‘ KGD AH?M‘ QB?DDGM‘ J□CF‘ CFG‘ ?BCFAD I‘ CGGPGH‘ F?N‘ ?‘ KGCC□>A □H‘ @□HN‘ J□CFABC‘ ?‘ K?DC□OMG‘ A>‘ MA>CE‘ >GM□H‘ J□CFABC‘ □@? □H?C□AH‘ J□CFABC‘ GPGH‘ ?‘ MA □O?M‘ ?KKDGFGH □AH‘ A>‘ CFG‘ @?MM‘ QBG C□AH‘ CA‘ JF□OF‘ FG‘ ?KK□GN‘ F□@ GM>‘ . BC‘ FG‘ J?‘ JAHNGD>BMME‘ M?LAD□AB‘ HAJ□H‘ HAC F□H‘ A>‘ CFG‘ KD□H-O□KMG‘ A>‘ KF□MA AKF□O?M‘ OD□C□O□ @‘ FG‘ K?DGN‘ HA‘ K?□H‘ □H‘ FBHC□H‘ BK‘ □MMB CD?C□PG‘ >?OC‘ FG‘ N?LLMGN‘ □H‘ OM? □O?M‘ MG?DH□H‘ A‘ ?‘ CA‘ LG‘ ?LMG‘ CA‘ ?KKME‘ ?‘ QBAC?C□AH‘ J□CF‘ 0AH □NGD?LMG‘ HG?CHG ‘ ?HN‘ FG‘ M?LABDGN‘ F□‘ CEMG‘ □HCA‘ GK□ D?@@?C□O‘ @?DCHG ‘ J F□OF‘ K? GN‘ >AD‘ J□C‘ #FG‘ P□O□AB‘ CEMG‘ A>‘ CFG‘ =‘ $GCCGD‘ A>‘ 0BH□B‘ I‘ J?‘ GP□NGHCME‘ F□‘ @ANGM‘ ?HN‘ JF?C‘ 1/‡ 22‡ =‘

CF?C OAJ?DNME MLGMMGD F?N LGGH HCFG KAMCO?M JADMN CGGPGH J? ?@LCAB CA LG HCFG MCGD?DE G PGDE A>CGH ?CC?O(GN BHNGD?@? (CFA G JCF JFA@ FG @ GN HCH@?CG OA@K?HAH FK CMM ?C M? C F H?@G LGO?@G ?LEJADN >AD @G?HHG ?HN @?M HCE G LGO?@G?H GNCAD A> F?(KGDG G J? ? AOG?CGN JCF OAFH AH HCFG KDGK?D?CAH A> ?H GNCAH ?HN JF?C FG NN HF J AJH J?E J? >?D BKGDAD CA JF?C F BOAMMG? BG F?N G>>GOCGN JCFABC F@ G ?PG ? HGJ CAHG CA CFG ODCO?M MMB CD?CAH A> F?(KGDG LE LDH H HAC AHME CFG GMG ?HC MCGD?CBDG A> F?(KGDG8 AJH ? G CA OA@K?DG JCF F@ LBC LE FBHCH APGD ?MM CFG JGGKH A> CFG LAA(C?MM A> CFG ?@G ? G CA >HN CFG ?KKMO?CAH A>?? >?@MO?D ?MB AH AD CFG @G?HH A>?H BHOA@@AH JADN . BC FG LGO?@G ?@LCAB CA FAJ F KAJGD A> JDCH ? J GMM ? F N MO GHOG > JG CBDH APGD CFG P?DADB@ GNCAH ?HN MO FC BKAH ?HACG JFOF OAHC?H A@GCFH M(G?LBD C A> GH?M ?N@D?CAH >AD CFG ?BCFAD JG >HN CFG H?@G A> ?DLBDCAH ?>> GN CA C ?DLBDCAH8 HCGMMGOC J? O?K?OAB GHAB F >AD MAPG A> F?(KGDG . BC FG NGM FCGN HF NGOAD?CH F AK HAH J CF CFG CH GM A> F AJH K?D?NA G CGGPGH J? CFG @?H CA KBMM A>> CFG CH GM ?PH DGCDGN >AD >CGGH EG?D >DA@ CFG GNCAD FK A> F?(KGDG HF = FG DGCBDHGN JCF DGHGJGN P ABD CA F M?LABD A> MAPG R CF?C A>NG>?OH F@ & ?MAHG HF CFG HCGDP?M F?N LGGH JAD(H F?DN CFAB F KGDF?K JCF HA DG?C C?MGHC HF CFG GHNG?PABD CA KDGGDPG GPGDE PG C G A> F HCFAD G J? BOOG >BM ?HN CGGPGH J? CFGHOG>ADJ?DN F GHG@E G JABMN HA MAH GD J?M(HF CFG K?CF CF?C FG F?N AHOG CDAN G DGSGOCGN ?MM F AMN OAH GDP?CPG AKHAH H F GNCAH A> = FG ?E HF F NPGDC G@GHC R

R 7 QH ;3H =E HI 3HK IJHJ ?N =O3 F ?3H B3HI =E BH A3;E 7 B; B 7 =3 B; HKHIJ; =I.B=QHCH3 ;>>;3HI MN IHAH77;3N.7 I=BH 3 & 4 !.7 "'-; $ K PB ?H K;P IHJ B; QH B;J 3HAH CHJ B 7 H] E3=K 7 E=OI ; I BH;J. ; IJ QH3H BH3HE=3H AH3 ; I =E 7 >O3 N BH3H;7EHQM H3;3N =AAO33HIAH7 ;3H ?H H3 OIJH37 ==J B; I B; A;KH J=QI =O7 J 7A=M=O3HJ ?N F BH C;3 ; =I =E HCH3N 7= M B3=OPB QB AB B;J EM=QHJ. ; IJ B; 7 ;PI; HJ ; M;7 I BH KOJJN 3H7H3C= 3 =E BH E 37 E=M =L I >M; IH3 H3K7. B; BH C ; =I7 =E ;A;3HMH77 BH; 3H QH3H 7HA=IJHJ ?N B=7H =E ;7 PI=3;I ;3H77 BH I HP3 N =E J3;K;7 BO7 >3H>;3HJ E=3 BH Q=3MJ 71O7 =I ;MHCHM Q B BH II=AHIAH=E EHK;MH7 >O37HJ I ;A;K> ;IJ HJOA; HJ I ;?;PI = 7 =E HI. BH3HE=3H. ;7 QH ;3H =MJ B; . ?N ;JK IP A=33HA =I7 Q;33;I HJ ?N A=K K=I 7HI7H ;IJ BH M;Q7 =E KH 3H. QH B;CH I=3 P JMN ;JBH3HJ = BH H] =E B;@ >H3H. QH 7B;MM HI 3H; =O >=>=IHI 7 = H]AB; IPH B; >B3;7H E=3 ;I= BH3 F K=3H PH3K; IH. ; IJ 7;N. I7 H;J =E . B; QH B;CH JHC ; HJ E3=K BH H] =E BH >O?M 7BH37 =E 7 IPMH >M;N7 I UO;3 =. =3 BH 3 7OAAH77=37. BH HJ =37 =E BH E 37 E=M =L B; QH B;CH 7=KH KH7 E=MM=QHJ BH 7OPPH7 =I7 =E ; ;3?O3 =I. ; W=BI7=I. ; 6;3KH3. =3 ; N3QB . I >3HEH3HIAH = BH JHA 7 =I7 =E ; HK IP7 =3 ; =IJHMM. I=Q B7 ; IJ IP BH 3 AB= AH =E 3H;J IP7 K PB ;B;CH ?HHI IEMOHIAHJ ?N ;77=A ; H7 QB=7H B PB 7=OIJ IP I;KH7 A;II= E; M =HIE=3AH 3H7>HA . C a. MM ;K 7 MH3. W=BI B; I@H. MM ;K MN. ;IJ B=K;7 ==>H S

?H R

R 7 KH. I7 H;J =E ; K J ;IJ 7H3C MH ;JBH3HIAH =;IA HI A=> H7. QBHI [=EHIJ IP ;P; I7 7HI7H ;IJ KH 3HX BHN EO3I 7B I=3H;M BHM>. B; ; EO O3H HJ =3. QHMM ;AUO; I HJ Q B BH >B3;7H=M=PN =E =O3 ;O B=3I7 ;PH. 7B=OMJ ?H ; M ?H3 N =3H7 =3H 7=KH ;>>;3HI KH;I IP =B 7 A=33O> HJ M IH7. ;IJ ; JHAHI EM=Q =B 7 =?7 3OA HJ CH37 E A; =I BH M; H3 [;7 ;M3H;JN B;7 ?HHI =?7H3CHJX K;N ?H E3H\ UOHI MN HE HA HJ ?N BH H]>OM7 =I =E O7HMH77 ;IJ 7O>H3IOKH3;3N 7NMM;?MH7. ;IJ ; I =AA;7 =I ;M 7O>>MN=E 7OAB ;7 K PB E=3 O =O7MN B;CH ?HHI =K HJ. I=Q B7 ;IJ IP BH JHAM;3; =I =E HK IP7 ;IJ =IJHMM. QB=7H E3;OJOMHI >3HE;AH ;77H3 7 B; BHN B;CH >O?M 7BHJ =O3 ;O B=3I7 >M;N7 F ;7 ;?7=MO H I BH 3 IOK?H37 ;7 BH A=IAH CHJ BHK MM 7=KHQB; 3H7HK?M IP BH >3=AH77 ;?=CH 7OPPH7 HJ ?H ;O B=3 aHJ. BH >O?M A Q MM ;7@ I C; B E=3 ;A=KK=J=O7 ;IJ >MH;7;I H] =E B;@7>H;3H " = B IP Q MM ?HM=7 = BH Q=3MJ=I ;AA=OI =E BH KH;7O3H 3HA=K\ KHIJHJ. BH3H ?H IP E=M =7 ;IJ UO;3 =7 HI=OPB 3HK; I IP E=3 BH O7H =E ;I \ UO;3 ;I =3 A3 A;M 3;CHMH37. =QB=K ;1=M =CH3 ;3OPPHJ >;CHKHI K;N ?H K=3H JHMHA ;?MH B; I ;I H;7N >;77;PH =CH3 ;7K== B =IH. B=OPB BHN ?= B A=IJOA = BH 7;KH =?1HA TT

HN CF CFGH CFG CG C A> F?(KGDG CF?C !H M?HN F? DGSACOGN HF >AD F?M> ?OGHCBDE #FG G ?DG CFG M?LABD JFGCFGD A> OADDGOCAH AD A> ODCO?M AKHAH CF?C F?PG @?NG F?(KGDG =KAKBM?D I #FG ODCO?M AKHAH F?PG OG? GN JG LGMGPG CA F?PG ?HE G>>GOC G OGKC ?@AH C ?>GJ KGN?HCO KGD AH JFA >?HOE CF?C C CFG OMGPGDGD CA N -KD? G CF?H CA ?N@DG . BC CFG CG C ? OAHBKCGN LE CGGPGH CF?C JFOF J? GHGD?MME KBC HCA CFG F?HN A> CFG DG?NGD A> F?(KGDG #FG HB@LGD A> GNCAH A> CFG CG C ?MAHG A> F?(KGDG KDHCGN NBDH CFG >D C F?M> A> CF OGHCBDE J? LE HA @G?H HOAH NGD?LMG ?HN A> CFG G GNCAH CFGDG JGDG @?HE CFAB ?HN OAKG EG?D LE EG?D BKKME-H CFG M?D G ?HN HODG? H NG@?HN >AD ?(HAJMGN G A> ABD DG?CG C KAGC CF FGDE >GJ G OGKCAH HNGGN ?MM CFG G GNCAH JGDG OAKG A> A@G GNCAH JFA G DGOGPGN CG C OAH NGDGN ? ? C?HN?DN R GPGH CA CFG OAKEH A> CEKA D?KFO?M GDDAD #F?C DGOGPGN CG C CA B G CFG JADN A> CFG COMG K? G A> JF?C O?MMGN CFG CD?NG GNCAH DA@ CFG CG C A> CFG OADDGOCGN OAKG MG>C LE CFG M?CG +GAD G Y

CGGPGH ! Q ?HN !N@BHN &?MAHG ! Q I >JG JGDG CA BK-KA G >DA@ CF CCMG CF?C CGGPGH ?HN &?MAHG F?N ? DGGN CA GCFGD CA MG?PG ? CG C >AD CFG LGHG>C A> KA CGDCE JG FABMN LG H?MME NGOGPGN #FG DGOGPGN CG C CF?C KDANBOGN LE CGGPGH JFGH FG >?HOGN F@ GM> ,?C MLGDCE CA DG CADG A@G ?KK?DGHC @G?HH CA F?(-KGDG8 OADDBKCGN MHG ?HN ? NGOGHC >MAJ CA F AL CDBOCGN PGD >O?-CAH I & ?MAHG J? J?M(H HF F AJH CD?O(CF?C A> G CDG@G O?BCAH ?HN ?H @KMOC DGM?HOG AH CFG PGDE G?DM G C OAK G #FG CG C A> F GNCAH A> 62 CFAB F NG>AD@GN JCF ?LBHN?HC @?D(A> O?DGMG -HG ? ?H FAHG C CG C > JG ?N@C CFG KDHOKMG BKAH JFOF C Z >ABHNGN . BC CFG CG C A> CGGPGH HF JFOF CFG KGOBM?D PGD >O?CAH A> F?(KGDG G KGO?MME C >DGGNA@ C P ABD C P?DGCE A> K?B G C JGGCHG C @?SG CE ?DG ?OD>OGN CA JF?C FG O?MMGN = KAM FGN PGD >O?CAH I J? DGOGPGN >AD HG?DME F?M> ?OGHCBDE ? CFG C?HN?DN CG C

?EMGE CFG FG?N A> CFG OFAAM A> !H M F KAGCDE =HF CFG @A C F F ?HN K?M@E C?CG I A> CGGPGH JDACG F GKC?KF JFOF OAHOMBNG JCF CFG G MHG R

R B7 =K?K;N>H3 7B. ?O I= B7 I;KH B=7BHJ IHQMO7 3H O>=I B;@7>H;3HI7E;KHS

#F @?E H@ LE CFG NG A> 0AFH AH8 KD? G A> ?GD@AH HF CFG .A D?KF?@ %D?@?CO?I JG F?PG ?MO C A> CFCDCE HHG KM?E LE +?DDO(;H , G JGMM (HAJH CA F?PG LGGH CFG ?BCFAD A> CFG >AMMAJH A@G A> JFOF ?DG AD HF?M ?HN CFG DG C CD?H M?CAH AD ?MCGD?CAH >DA@ ACFGD ?BCFAD JCF ?NG H CA ?N?KC CFG@ CA CFG KDG GHC C? CG A> CFG KBLMO I V KDGNG-OG AD KDHCGN BKAH CFG CCMG A> ?CD? GNE A> JFOF HF ?@M?D J?E FG J? , CFG ?BCFAD I , H $G?D ?#D? GNE LE ?FB@ #?CG I +?DDO(8 F?(KGDG?H ?BCFAD FK J? OAH>HGN CA "A@GA ?HN 0BMGC =#FG ?DG I V&N B@@GD FC8 %DG?@ #FG #G@KG C =?CFG-DHG ?HN GCDBOA I V#?@H A> CFG FDGJ =MADTGM ?HN GDNC?I V HCGD8 #?MG E@LGMHG ?@MGC #F J? KDGCCE JGMM >AD ?CJH C?D HC BHOF?DC?LMG CA H>GD CF?C CFG CD?C>ADN 0BLMGG HF 41 J? A@GCFH ?@OF >AD CFG FAHABD A> %?PN +?DDO(? A> MMC?@ F?(KGDG W H CF @G@AD?LMG AOO? AH CFG ADKAD?CAH A> CD?C->ADN AKGHGN CFGD KDAOGGNH LE CFB ?NNDG H +?DDO(R = D EAB JFA F?PG NAHG CFG @G@ADE A> F?(KGDG A @OF FAHABD ?DG G CGG@GN CFG >CCG C KGD AH CA LG ?KKACHCGN CFG >D C CGJ?DN A> F SBLMGG I #FG ANG BKAH NGNO?CH CFG #AJH F?MM ?HN GDGOCH ?

C?CBG CA F?(KGDG J? JD□CCGH LE +?DD□O(? JGMM ? KA(GH LE F□@ C □ QB□CG ? AAN ? L□DCFN?E ANG B GN CA LG C JABMN LG LGEAHN ABD M□@□C CA NG OD□LG CFG G>>GOC JF□OF CF□ ANG KDANBOGN FAJ D?KCBDAB J? CFG KBLM□O N□HHGD FAJ LD□MM□?HC JGDG CFG CD?H - K?DGHO□G □H CFG F?MM ?HN FAJ ?KKDAKD□?CG JGDG CFG OF?D?OCGD A> CFG @? QBGD?NG ?C JF□OF ? CFAB ?HN KGD AH JGDG KDG GHC +?DD□O(KA(G ?H AD?C□AH □H FAHABD A> F?(KGDG JF□OF FG □ ?M A ?□N CA F?PG OA@KA GN #FG LG □HH□H ?HN GHN A> □C ?DG OA@@AHKM?OG GHAB F LBC □C OAHC?□H K? ? G JF□OF ?DG A >?D □H ?NP?HOG A> CFG ZOD□C□O?M AK□H□AH A> F□ N?E ?HN JF□OF ?KKG?D CA B A OAHCD?DE CA CFG F?L□C A> CFAB FC JF□OF +?DD□O(@B C F?PG ?OQB□DGN >DA@ F□ CFG?-CD□O?M KD?OC□OG R A AKKA GN CA CFG DGOADNGN AK□H□AH CA JF□OF FG J? □H CFG F?L□C A> MAA(□H BK J□CF M?P□ F DGPGDGHOG R CF?C JG O?HHAC DGOG□PG CFG DGOADN A>CFG CD?C>ADN 0BL□MGG ? GP□NGHOG CF?C FG JDACG □C ?E JG O?H F?DNME CF□H(FG (HGJ CFG >BMM >ADOG A> JF?C FG J? BCCGD□H

C JABMN LG ?NDG?DE C? (CA ?CCG@KC CA CD?OG ?MM CF?C J? KBLM□ FGN ?LABC F?(KGDG >DA@ CFG N?CG A> 0AFH AH8 >□D C GN□C□AH CA CFG OMA G A> CFG G□ FCGGHCF OGHCBDE >GJ ABC A> CFG FG?K A> CFG G >AD ACCGH G@?H?C□AH A> CFG OD□C□O?M @□HN CFG @BMC□CBNG A> JF□OF KDAPG CFG CDAH N□DGOC□AH A> CFG H?C□AH?M ?N@□D?C□AH @?E HAC LG BHKDA>□C?LME HAC□OGN 0AFH AH JFGH FG F? N□ @□ GN F?(KGDG >DA@ CFG F?O(MG A> CFG BH□C□G ?E = ?@ ?M@A C >D□ FCGHGN ?C @E AJH CG@GD□CE I G NDG?NGN CFG ?NPAO?CG A> ?OAHCD?DE AK□H□AH = ? E!□CG? J□CFNDGJ >DA@ CFG NG>GHOG A> #DAE JFGH FG ?J GKCBHG F?(□H CFG J?MM I GKCBHG ?DD□PGN >DA@ OACM?HN □H CFG F?KG A> = BD ADE "G@?D(AH #D? GNE I #F□ JAD(CFAB F □C NDAKKGN □HCA ALM□P□AH J? CFG KGD>AD@?HOG A> "□OF?DN AH , DA>G AD A> B@?H□CE □H CFG *H□PGD □CE A> +M? AJ I @?MM KGO□@GH J□MM B>>□OG R = □CF ?H □@K?DC□?M□CE JF□OF LGOA@G GPGDE @?H CF?C N?DG CA CF□H(>AD F□@ GM> MGC B ?MMAJ F□@ V F?(KGDG DG?C @GD□C ? ? OA@□O JD□CGD DG?CGD C□MM ? ? KAGC LBC M□CCMG PGDE M□CCMG ? ? CD?-GN□?H HN □ CFGH KAAD F?(G KG?DG CA LG G OMBNGN >DA@ CFG HB@LGD A> DG?C CD? GN□?H W G □ LBC MGC F□@ LG L?H□ FGN M□(G A@GD >DA@ CFG DGKBLM□O A> M?CA J□CF @?D(A> N□ C□HOC□AH ?HN PGHGD?C□AH ?HN @?E F□ >ADGFG?N M□(G CFG +DGO□?H L?DN8 LG LABHN J□CF ?H FAHABD?LMG JDG?CF A> GPGD LMAA@□H >MAJGD I #FGDG O?H LG HA NABLC A> CFG K?CGDH□CE A> CF□ KDANBOC□AH #FG ?@G DA>G AD A> B@?H□CE □H CFG *H□PGD □CE A> +M? AJ KDANBOGN □H CFG ?@G E G?D F□MA AKF□O?M H?ME □ ?HN MMB CD?C□AH A> A@G A> F?(G-KG?DG8 F?D?OCGD I ?HN CF□ LAA(F? AHG J□CF CFG ?KKGHN? G A> HGJ OF?D?OCGD CFDAB F @?HE GN□C□AH ?HN □ ?MM□GN @ADGAPGD CA ! ?E AH CF□ ?HN CF?C F?(KGDG?H CF□H ?HN ? =KGD□MAB FAC I □HNGGN □H = H ! ?E AH CFG ?BMC A> F?(G KG?DG I G F?MM □PG HA @ADG CF?H ? GHCGHOG ;H , ?@ □HOM□HGN CA LGM□GPG ?HN F?MM FAJ GHNG?PABD CA □MMB CD?CG CF?C CFG DG?CG C LMG@□ FG □H F?(G KG?DG F?PG KDAOGGNGN >DA@ F□ J?HC A> 0AH B@@?CG C? CG ?P□H HA KGD>GOC N□ OGDH@GHC KDAOGGN□H >DA@ D?C□AH?M □HPG C□ ?C□AH A> CFG CDBG O?B G A> LG?BCE □H KAGC□O?M A@KA □C□AH FG F?N HGPGD G C?LM□ FGN □H F□ @□HN ?HE E CG@ A> DG BM?D KDAOG AD ?HE C?HN?DN A> ND?@?C□O G OGMMGHOG I , GC CF□ AMG@H KGD AH JFA CF□H(CF?C F?(KGDG F?N HGPGD G C?LM□ FGN □H F□ @□HN ?HE E CG@ A> DG BM?D KDAOG F?N HA KGD>GOC N□ OGDH@GHC A> CFG CDBG O?B G A> LG?BCE F? CFG CG@GD□CE CA JD□CG ? LAA(A> >ABD FBHNDGN K? G AH F□ ND?@?C□O OF?D?OCGD A@GCF□H A> ? PGDE N□>GDGHC NG OD□KC□AH J? KDANBOGN CFDGG EG?D ?>CGD = H ! ?E AH CFG %D?@?C□O F?D?OCGD A> □D 0AFH ?M C?>>□I #FG ?BCFAD J? &?BD□OG &AD ?HH AHOG *HNGD GODGC?DE A> C?CG #FG LAA(□ >?D ?LAPG CFG ? G #FG ?BCFAD □ ? CF□H(GD ?HN AHG JFA F? LGGH C?B FC CA CF□H(LE F?(KGDG #?(G ?H G ?@KMG R = H CFG DABK A> ACFGD KAGC CFG K?DC JF□OF ?DG HAC GGH NA HAC □H >?OC G □ C #FA G OF?D?OCGD □H F?(G KG?DG JF□OF ?DG GGH AHME □H K?DC ?DG EGC ?K?LMG A> LG□H BH>AMNGN ?HN BHNGD CAAN □H CFG JFAMG GPGDE K?DC LG□H □H >?OC DGM?C□PG ?HN □H>GDD□H ?MM CFG DG C I #FG =" G@?D(AH A@G A>CFG F?D?OCGD A> F?(G KG?DG I LE #FA@? F?CGME KBL□M□ FGN □H 65 □ A@GCF□H N□>GDGHC >DA@ CFG KGD>AD@-?HOG A> CFG OACOF KDA>G AD F?C OABMN □HNBOG F□ G@□HGHC DGM?C□AH JFA DGKBLM□ FGN □C □H 631 CA JD□CG CFB WR

R Z3 B; HMN. 7B=OMJ ?H =?7H3CHJ. 7 KH3HMN >= I IP =O B; 7OAB ;IJ :LOAB 7>HHABH7 " IJA; H AB;3;A H3 I= B; BHN QH3H. I H;AB A;7H. Q3 HI Q B B; " - 3 E. BHI. BHN 3H;MN AB;3;A H3 7 A. BH A3 A 7K 7 EOMN ?=3IH =O . QB; HCH3 K;N B;CH ?HHI BH JH7 PI =E B;@H7>H;3H J=O? QBH BH3 B;@H7>H;3H HCH3 B;J ;IN B=OPB ; ;M =E K;M IP B 7 >H37=I;PH7 7>H;@ AB;3;A\ H3 7 A;MN I K=7 I7 ;IAH7. A=IAH CH 2 >3=?;?MN I ;< 2 BH J3HQ AB;3;A H37 A=33HA MN. ?HA;O7H BH ! & "" ! 1! "" # ;IJ Q=OMJ IHCH3 B;CH ; ;IHJ. I B; JH>;3 KHI . 7OAB H]AHMMHIAH ;7 BH B;7. E BH B;J K;JH ;IN 7 OJ HJ HEE=3 7 E=3 IJ BH 7;KH. >3=?;?MN. K;N ?H 7; J =E =KH3. ;IJ =E B=7H = BH3 Q3 H37 QB= B;CH H]AHMMHJ BH K=7 I JHM IH; IP AB;3;A H37S

? CFG =?BM KDG?OF□H ?C CFGH I J□CF CFG ?KA CMG OF?D?OCGD□TGN □H F□ @?SG CE CFG OGKC□O □H F□ NABLC ?HN CFG GHCFB □? C □H F□ PGHGD?C□AH VOF?D?OCGD @?D(GN ? NGGKME ? CFG "□OF?DN ?HN &?OLGCF BKAH JF□OF CFG DGM?C□AH A> CFG DOFL□ FAK A> %BLM□H JD□CG R J? CF□ KDANBOGN LE "?>>?GMMG LGO?B G FG OABMN HAC ?PA□N □C'W #FGDG □ AHG @ADG JAD(?HN AHG AHME CA JF□OF JG @?E KA□HC ? LG□H BKGD□AD CA CFG ADN□H?DE OD□C□O @ A> CF?C ? GR =CFG LBCCGDJA@?H8 D?H(CA @?D(GC I C □ &D F□CGD8 = KGO□@GH A>?' A@@GHC?DE AH F?(KG?DG I KBLM□ FGN □H 1/ G F?PG A>CGH QBACGN □C JF□OF @?E LG B>>□O□GHC CA @GH□C□AH >AD ABD KDG GHC KBDKA G @□N C CFG ODAJN A> JD□CGD >DA@ CFG @□NNMG CA CFG GHN A> CFG G□ FCGGHCF OGHCBDE JFA JGDG ?NN□H CA CFG @? A> OA@@GHC BKAH F?(KGDG JFGCFGD □H CFG F?KG A> G ?E MGCCGD KAG@ KF□MA AKF□O?M ?H?ME □ MMB CD?C□AH CFGDG J? AHG JFA HAC G KGO□?MME NGPAC□H F□@-GM> CA F?(KGDG?H OD□C□O @ F?Z ? OAH □NGD?LMG □H>MBGHOG □H CFG D?NB?M >AD@?C□AH A> ? ABHN H?C□AH?M C? CG #FG =" GM□QBG A> HO□GHC !H M□ F AGCDE I LE #FA@? GDOE AD□ □H?MME KBLM□ FGN □H 45 FAJGN CA CFG JADMN CF?C CFGDG J? A@GCF□H □H CFG G?DME JD□CGD LGEAHN CFG B G CA JF□OF CFGE F?N LGGH ?KKM□GN LE F?(KGDG8 OA@@GHC?CAD H CFG G >D? @GHC □C JABMN LG GGH CF?C !H M?HN >DA@ CFG G?DM□G C C□@G F?N KA G GN ?H □HFGD□C?HOG A> DG?M KAGCDE ?HN CF?C FG JFA F?N LDG?CFGN ? HGJ M□>G □HCA CFG >AD@ A> CFG K? C ?HN F?N (HAJH FAJ CA O?MM BK CFG FGDAG A> OF□P?MDE R CA

R IM CH BH3 >;MH 3OI@7. B; BH >3H7HI ;PH W=N7 I BH 31=N. ;IJ 3HK?MH7 ; BH 3 3;PH.S 2

J? HAC J□CFABC @ANGM A> G?DHG C K? □AH ?HN HALMG □@KM□O□CE □H CFG ?HO□GHC L?MM?N #FG KBLM□O?C□AH A> CFG G = "GM□QBG I MGN CFG J?E CFAB F MAJME CA CFG CBNE A> ABD GMNGD KAGC ?HN GPGDE ?NP?HOG □H CF□ N□DGOC□AH J? ? CGK CAJ?DN CFG @ADG G CGHNGN (HAJMGN G ?HN CFG LGCCGD BHBGD C?HN□H A> F?(KGDG F□@ GM> GDOE □H AHG K?DC A> F□ >□D C PAMB@G OAMMGOCGN = BOF L?MM?N ? ?DG QBACGN LE F?(G KG?DG AD OAHCD□LBCG □H ?HE NG DGG CA □MMB CD?CG F□ JD□CH I G N□N CF□ J□CF F□ B B?M AAN C? CG ?HN GPGDE AHG (HAJ J□CF JF?C (□MM FG OAHHGOCGN □H CFG C?MG A> =#FG D□?D A> DNGD +DGE I CFQ G =□HHB@GD?LMG M□CCMG >D? @GHC A ?HO□GHC L?MM?N I JF□OF JG >□HN N□ KGD GN CFDAB F CFG KM?E A> F?(KGDG □HCDANBOC□AH CA CF□ N□P□ □AH A> F□ JAD(FG □PG A@G PGDE GH □LMG AL GDP?C□AH BKAH CFG AD□ □H A> CFG !H M□ F C? G JF□MG □H F□ DG@?D(AH CFG □ CAD□G A> ABD KAGC FG C?(G ?C N□>>GDGHC ?HN JG CF□H(?SB CGD P□GJ A> CFG□D AD□ □H ?HN KBDKA G CF?H &?MAHG ?HN CFG ACFGD OA@@GHC?CAD MCFAB F GDOE KBC F□ AJH AK□H□AH O?B-C□AB ME >HAC C□@□NME FG F?N F□ FGD HAC□AH A> F?(KGDG ? ?H ?DC□ C CF?H CFA G JFA JGDG ?DDA ?C□H CA CFG@ GMPG CFG @GD□C A> F?P□H @?NG F□@ =KAKBM?D I =#FG □ CADE A> !H M□ F AGCDE I LE #FA@? ?DCAH KBLM□ FGN □H / J? ?HACFGD A> CFA G JAD(JF□OF ?NP?HOGN CFG CBNE A> ABD G?DME M□CGD?CBDG □H CFG K□D□C A> GMG ?HC OFAM?D F□K ? AKKA GN CA L□LM□A D?KF□O?M KGN?HCDE ?DCAH J? ?H ?DNGHC MAPGD A> F?(KGDG ? JG @?E OAMMGOC >DA@ GPGD?M M□CCMG KAG@ LBC FG J? O?DOGME ABC A> CFG CD?@@GM A> CFG OM? □O?M OFAAM □ GNBO?C□AH F?N C?B FC F□@ CF?C F?(KGDG JAD(GN J□CFABC ?DC ?HN □HNGGN FG FGMN CF?C @A C A> CFG !M□T?LGCF?H KAGC A JAD(GN O?CCGDGN ?LABC CFG KGD□AN□O?M G ?E□ C ?DG @?HE K?KGD AH F?(-KGDG JADCF OAH BMC□H LE CFG CBNGHC JF□OF □> HAC PGDE P?MB?LMG □H CFG@ GMPG HN□O?CG ?C MG? C CFG KDA DG A> AK□H□AH 0A GKF ?D CAH □H :! & 3 FG DGP□GJ #FG #G@KG C ?HN $G?D □ ? DG?C C□O(MGD >AD CFG BH□C□G & ?O(GHT□G □H CFG .F? ? F□ FGD DGPGDGHOG >AD F?(KGDG ?HN ? @ADG KF□MA AKF□O?M OAHCG@KC >AD CFG ?KKM□O?C□AH A> CFG ?HO□GHC DBMG CA JAD(F?P□H CFG□D AJH >AD@ A> P□C?M□CE B@LGDM?HN H CFG # " 3 . OAHCD? C & ?OLGCF ?HN "□OF?DN ?HN FG 0A@K?DG F?(KGDG J□CF P! OFEMB H ? J?E JF□OF G F□L□C CFG DG ABDOG A> F□ OFAM?D F□K ?HN CFG GMG ?HOG A> F□ C? CG MM CFG >D? @GHC?DE OD□C□O?M AK□H□AH BKAH F?(KGDG >DA@ CFG C□@G A> 0AFH AH8 DG>?OG CA CFG GHN A> CFG OGHCBDE G F□L□C A@G KDA DG CAJ?DN CFG DG?M >?□CF A@G ?CCG@KC CA O? C A>> HAC AHME CFG ?BCFAD□CE A> CFG ?HO□GHC DBMG A> ?DC LBC CFG @?MMGD ?BCFAD□CE A> CF?C MAJGD OFAAM A> □HN□P□NB?M SBN @GHC JF□OF CFG F?(KGDG?H OA@@GHC?CAD F?N LGGH KDAKK□H BK ? JGMM ? CFGE OABMN BKAH CFG□D AJH JG?(FABMNGD AMGD□N G F? JGMM NG OD□LGN CFG□D KDG-CGH □AH CA ?BCFAD□CE R =! PGDE OD□C□O JFA F? AD F? HAC @?NG ? OAMMGOC□AH A> LM?O(MGCCGD LAA(R □H □C GM> ?' B G>BM ?HN DG KGOC?LMG ?@B G@GHC R KBC AH CFG GPGH MG? BG LAAC A> GM> AK□H□AH ?HN CD□NG ?C AHOG >DA@ ?H □MMB CD?CAD □HCA ?' BKDG@G SBN G ?HN LM□HN ?HN NG?> >□MM F□ CFDGG ABHOG KF□?M ?C CFG J?CGD A> □? ?D? ?HN NGCGD@□HG KA □C□PGME CFG DG?CHG A> CFG O?C?D?OC CA LG HG□CFGD @ADG

HAD MG ' CF?H F ' CFDGG ABHOG KF?M F? ' LGGH ?LMG CA DGOG PG I' BOF ?' OD CO' J?' & D ' D?HO ' %ABOG ' JFA F? ' LGGH ?C CFG K?H ' A>' @?(H ' ?' >AD@?M G ?E =' H CFG H?OFDAH @ ' ?HN A@G ACFGD HOAH DB CG ' A>' F?(KG?DG I' #FG JADN ' LE JF OF & D ' %ABOG NG OD LG ' CFG G ?DG ' A>' OABD G ' =' ?L BDN CG I' =' NO CADC AH ' A>' DG?M CE I' = HG M GHOG I' = ?L BDN PAM?C AH ' A>' F CAD O?M ?OOBD?OE I' A@G OAHOG AH ' ?DG ' FAJGPGD ' @?NG LE CFG OD C O R =' ' LG CAJ H ' CFG GK CFGC A>' ' AH MGAK?CD?' ' JF @ O?M ' LBC @?E ' KGDF?K ' ?N@C A>' NG>GHOG I' C ' KGD>GOCME OMG?D CF?C ?' @?H JFA C?M(' CFB ' F? ' HAC CFG M FCG C KF MA AKF O?M OA@KDGFGH AH A>' CFG ALSGOC ' A>' DC ' ?HN CFG @ANG H JF OF DC JAD(' #FG NA@? H A>' CFG MCGD?M ?HN CFG NG?M ' FGMN CA LG AHG ?HN CFG ?@G ' C J?' CDBME ?N A>' CFG >AD@?C PG ?DC ' LE ?' K? HCGD JFA (HGJ' CFG KF MA AKFE A>' F ' AJH ?>C ?' @BOF ?' FG G OGMMGN H C ' KD?OC OG ' CF?C =' ?' GDP MG ?CCGHC AH CA CFG MGCCGD A>' NG OD KC AH ?' AKKA GN CA C ' CD?H M?C?LMG K DC ' ?OOBD?OE A>' F CAD O NGC? M ' G ?OCHG ' A>' OA CB@G ' YO ' ?DG HAC G GHC?M H CFG@ GMPG ' LBC ?DG P?MB?LMG AHME H KDAKADC AH ?' CFGE ? C CFG NG@?HN ' A>' CFG ?DC ' AD KDANBOG ?H G>>GOC AH CFG @? H?C AH ' #F ' @?E B>>O GHCME G KM?H JFE ?H H?CCGHC AH CA CFG G KA HC ' AH CFG K?DC A>' DG?C K? HCGD ' V?HN KAGC ' ?' OA@K?DGN J CF @GDG F CAD ?H ' F? ' HCGD>GDGN A' M CCMG J CF CFG DGKBC?C AH I' U

G F?PG M CCMG A>' @KADC?HOG MG>C CA HAC OG LG>ADG JG DG?OF CFG OMA G A>' CFG G FCGGHCF OGHCBDE ' ?LABC JF OF KGD AN JG AB FC CA DG C ' K H AH ' BKAH ABD OAHCG@KAD?D G ' G OGKC PGDE GHGD?M AHG ' JABMN LG ? ' @KDBNGHC ? ' @ KM?OGN ' GDF?K ' JG FABMN HAC OG H ?' >GJ' JADN ' CFG G CD?ADN H?DE >AD GD G ' A>' MM?@' GHDE DGM?HN ' G OAH NGD CFG@' ? ' CFG DG BMC A>' CFG ?MM GH DA H ' OF?D?OCGD U.>' F?(' KGDG?H AK H AH H CFG N?E ' A>' CFG D P?MD G ' ?HN OAHCDAPGD G ' A>' CGGPGH ' ?HN & MAHG ' A>' " C AH ?HN F?M@GD ' ' OMGPGD LAE ' JFA F?N ?' >AAM F >?CFGD JFA G ?N@D?C AH A>' F?(KGDG CAA (' CFG >AD@' A>' MAH H ' J CF ?H HCGH CE JF OF & D ' O(MG' OABMN HAC F?PG GQB?MMGN ' >AD CFG @?MMG C OD?K ' A>' F?(KGDG8 ' JD C H ' CFAB FC FG JABMN CDE F ' F?HN ?C CFG @?HB>?OCBDG A>'?' >GJ' BOF OD?K R ?' DGOG KC ' ?' @ADC-? G NGGN ' ?' DACG C?HC AH>G AH A>' ?CF ' LE MM?@' F?(KGDG ' CA LG KM?OGN H' AKKA C AH CA ?HACFGD >AD GDE A>' ?' "A@?H ?CFAM O AH>G AH A>' ?CF ' $G?DHGN @GH O?@G CA DG?N CFG OAH>G AH A>' >?CF ' ?HN AHG ?>>D@GN CF?C C J? ' >HGD CF?H ?HECF H ' H CFG FBDOF $CBD E ' CCE OAHBHNDBDH ' BOOGGNGN C. MGCCGD ' CA HHG ?CF?J?E ' @G@AD?HNB@ ' OAHHGOCGN J CF CFG CFG?CDG ' ?' HGJ' GN C AH A>' H ' $G?D ' J CF CFG ?BCFAD8 ' M? C ?MCGD?C AH ' ' ?HN ' CA ODAJH CFG JFAMG ' ?H AD H?M KM?E ' =') ADC GDH ?HN "AJGH? I' #FG NA0B@GHC ' JGDG KBL-M FGN H CFG @A C G KGH PG >AD@ ' MM CFG OD C O ' H CFG M?HN O?@G CA MAA (' BKAH CFG AD H?M ' A@G JGHC BKAH CFG D (HGG ' ?HN (GN CFG@ ' #FG =' LM?O(MGCCGD NA ' I' LG ?H CA CG?D G?OF ACFGD H K GOG ' ?LABC CFG D ?BCFGHC O CE ' ?DN H?@G ' JGDG PGH ?HN DGCBDHGN ' NBHOG ?HN LMAO(FG?N JGDG CFG GHCMG C P CBKGD?C AH ' #FG JFAMG OAHCDAPGD E CBDHGN BKAH CFG OAMABD A>' CFG H(' CFG J?CGD @?D(' A>' CFG K?KGD ' CFG KDGO G @ANG A>' BKGD OD KC AH CA ?' MGCCGD ' CFG OAHCG@-KAD?DE B G A>' ?' OA@@AH JADN ' CFG N?CG A>' CFG >D C B G A>' KDA@ ADE HACG ' CFG >AD@' A>' ?' @ADC ? G ' O?DOGME AHG A>' CFG MG?DHGN JGHC LAWNME CA CFG DAAC A>' CFG @KA CBDG ' ?HN FAJGN CF?C F?(KGDG OABMN HAC F?PG JD CCGH BOF BCCGD CD? F ' #FG .' FAJGPGDS GCCMGN CFG QBG C AH ' #FG KM?E J? ' LDAB FC ABC ?C %DBDE $?HG ' J CF G ?' KDAMA BG LE D O?@G ' .M?HN . BD G ' CFGE JGDG HP CGN CA NA ' CFG KGAKMG ' KDAHABHOG CFG D =' NDG?N NGODGG I' FGH &D ' G@LMG BCCGDGN CFG MHG R

R' I J' QBH I' B 7 7=WHK I' K=A@H3N 7 =TH3

=' CFG @A C N O ADN?HC FAJM GOFAGN >DA@' CFG KC CF?C GPGD ? ?MGN CFG AD ?H ' A>' FG?D H I' F?(KGDG J?' P HN O?CGN

C' CFG LG HH H ' A>' CFG HGCGGHCF OGHCBDE ?' HGJ' OFAAM A>' D C-O @' LG ?H CA G C?LM F C GM>' ?@AH C B ' F?DMG ' $?@L' ?HN MM?@' ?TM CC MGN CFG J?E H ?KKDA?OF H ' F?(KGDG ' >' HAC JFAMME H CFG K D C A>'P! CFGC O ' EGC JCF MAPG ' JCF NGGK (HAJMGN G ' JCF BDK? H ' ?OBCGHG ' JCF BH F?O(MGN @HN ' .BC H DG?CGD ?DA G ' HGJ' GD?' A>' OD C O?M AK H AH BKAH F?(KGDG ' ? ' KDAKABHNGN LE !H M F@GH ' @?E LG N?CGN >DA@' CFG NGM PGDE A>' CFG $GOCBDG ' A>' ?@BGM #?EMAD AMGD N G ?C CFG BDDGE H C CBC AH ' H 6 / ' F?C CF?C DG?C @?H N N >AD F?(KGDG NBD H 'CFG DG@?HNGD A>' F 'P?MB?LMG M>G O?H O?DOGME LG ?KKDGO?CGN LE CFG KBLM O ' AD F ' AK H AH ' JGDG HAC PGH CA CFG JADMN H >AD@?M CDG?C G ' ?HN KAHNGDAB ' PAMB@G ' #FGE JGDG >D? @GHC?DE ' CFGE JGDG O?CCGDGN ' ? ' C JGDG ' ?C D?HNA@ ' @?HE A>' CFG@' JGDG CFG AD?M MG AH ' A>' CF?C J NA@' ?HN (HAJMGN G JF OF FG KABDGN ABC CA ?' >GJ' ?N@D H ' N O KMG ' .BC CFGE F?PG F?N CFG D G>GOC ' AD' ABD GMPG ' KGD AH?MME' JG AJG ?' NGLC A>' D?C CBNG CA CF?C MMB CD AB ' @?H CF?C O?H HGPGD LG DGK?N ' >' NBD H ' CFG KDA DG ' A>' CF ' GN C AH ' JG F?PG LGGH GH?LMGN CA KDG GHC F?(-KGDG CA CFG KAKBM?D @HN BHNGD HGJ' ? KGOC ' MAA (H ' ?C F @' >DA@' ?' OGHCD?M KA HC ' JF OF FABMN KGD@C B ' FAJGPGD @KGD>GOCME ' CA OA@-KDGFGHN A@GCF H ' A>' F ' JAHNDAB ' ' JG AJG CFG NG DG A' CA' BHNGD C?HN F@' ABD GMPG ' CA' CFG GD@ ' A>' CFAB FC JF OF ?DG O?CCGDGN' CFDAB F CFG JAD(' A>' CF?C KF MA AKFGD $ CA' JFA@' CFG FA@? G' A>' >BCBDG C@G ' J MM ?LBHN?HCME OA@KGH ?CG >AD CFG K?DC?M HG MGOC A>' F ' OAHCG@KAD?D G ' G' NG DG CA' OAHOMBNG CF ' ABCM HG A>' CFG AK H AH ' A>' ACFGD ' BKAH CFG JAD(' A>' F?(KGDG ' H OAHHGOC AH J CF CFG @KGD->GOC G KDG AH A>' ABD AJH GH G A>' CFA G AK H AH ' J CF CFG H?@G A>

ZHI'=£P3H;'Q=3 B 3H7=3 HJ' =' B 7 £=3H7 ;
"" -- "';' K PB N'>=QH3□

"" -- "2>3H>;3HJ□ □6/ □ □ C□ G/
O'I;CN' 7 "" -- "$ J'L P'K 99PKNPO+

□J J Q31J 2>3H>;3HJ□ iOA□
"MIIP B' "" -- "';=;I7QH3 B 7 JH7 3H□

"" -- " 2 3H;JN□ 0' , □ ,
H' 7 "" -- "*;>3H77 IH;3;';1J 7HA=1J B K□

"" - 2 3H;JN□ Z□ "□ 5f□ C□ ,
="MH;7H N=O3 P3;AH;' BH >3=MPOH' 7 "" - '
J3 ; A□ □ □ %'

H3H' 7BH';7 3=OPB
7';3H' BH' 7QHMM IP " ',7H;7□

"1 3 2 D JPO' MG' N' P A*; □6□ *2 '
B=7H' B=O3' BH' >H;7;I'?H7' "1 3 -
JCH3 7HKHI 7' Z□ □ □ ,
H'7H' O>' B 7'?<M7□

"1 2P=CH3 1KHI ;'KOI A>;M'=3 A C M' iOA□
"1 ' 7'7>=3 IP'QB M' IEHA =I';3HHJ7□

"1 - " 5' 2 ! HI CHMN□ iOA□
B 7 > A O3H 7BH "1 - " 5' >H3O7 J□

. ';I.. F ';3HK=' H JHP3HH□ □ □ ,
H'QB=';7B:M' 7>H3 @ =3 BH3 7 . ';I..;PO M N'
O ';B;';BH'7>H;@7□

.. '[CX2 IAM IH =Q;'3J7[' KH ;>B=3 A;MN;' M=CH□
'I□'I□'□'%';
'J"= .. ' BH' CH3N' P3=OIJ□

';.. ' ' 2;EHA';M H3; =I□ i□i□i□C□%' '
'Q M 7=KH BIP' ' #';I ' ;3POH7
E;A M N□

EEHA'M'G ' B;I'N 'B;CH□ □ □ #2'
IH7' '?H'3; BH3 B=OPB'N=O' .. ' ;-i i2$
' ;I' 1
N'Q B=O' .. i
4 i□ □ &' '

- 2>3=I=OIAHJ' :7' ;'J 77NM:?MH□ □ %'
6 M' ;M' BN'?=1H7 Q B' -
AB HCHKHI □ □6□ □ +;
H7M' J3=>' B 7 BH;3';I = ;BH 7 I@ =E8H:3□
1J;E=3 1 $ =EH3 07 B 7 3;17=K□
AB HCH7 BH3'P==JIH7Z□ □ □ ;'
BH' JH3 CH7 BH3 B=1H7 N;';1J □ 1 ;' '3I1"H
--
AB MMH7 ;1J' HA =3□ □ □ □);'
'B;CH';'Q=K;'I17 M=IP IP□
I';>>H H B;' ';K'7 A@'Q B;M.
=';7HH P3H;' HA =3 I'B 7 QHHJ7 =E'H;AH□
R' AA JH1AH =E 3K=O3 H.S';>;77;PH E3=K□ □C□ (;
;'7 BH';'PHI MHK;1'9
A@I=QI□ □ □);'
H'I=' ' I2 '=1T□
NR "5I R'2 ' ', -,5' =' BH' KH□
Q B';K='7'A;3HEOM IUO 3N□ Z□ □ ;'
NR "5I R'2 ' ', . -,5' =' BH' KH□
BH' K=KH1 '=1T□
NR 2JGPO' I' NHP' G IQJ9M ' MG' M' I JI' 7
I J9N NJOP+' □ +' 2'
=Q'J=H7 K'N' =MJ' NR ';=E B 7 7MH 9
A ;H=I';7 =3N' =E□ □ "□ □ ;' -,5' =' BH' KH□
I J' K'N' JH7 3H7';M @H EHMM ;1J A3OH\' B=OIJ7□
1H3 7 1AH >O3TOH' KH□
A =37';>3=E 7 =E□ □ □ %'
'EHMM=QY7B >' I';A3N' =E>M;'NH37□
& 2 ;A =I□ i□ □
3H' H33=37 =E' BH' ?M==J;'I=1H =E' BH' K IJ'[
i=CH' K;'JH' BH'K'I = [' Q B' & ' BHN' K;'N ?H'
BH3H' IH BH3 >;3 N' 7'I=3 3OH' I=3 @ IJ'□
JJ =I□ i□ □ %';
IH'QB=K' 'Q MM ?H;' I =' AM;'K=3=O7'QB I IP;
E' B=O' JH1N17 ' BH' MH;7' 7MMM;?MH' =E' BN' "" i '
"" -- " 2>3H>;3HJ□ □ i□ C□ ';
O@H' 63HJH3 A@;' BH;3 IP B=Q' B;' HCH3N' J;'N

'=3T;'2 BH' Z□ □ □)';'[;IJ I'K;IN'= BH3>;7\
7;PH7X□
=Q' E' 'Q M' I='7;I7 A □
?B=3;' HAB I ;'07H' =E' BH' Q=3J□ □ □ □ ';
'O H3N\' (I $ NH;';E3 K K N' 7=OM
HEO7H' N=O' E=3 K N'JOJPH□

ZM' =333J J 7PO7 HJ□ □ C□ 2 ',
IJ'I=Q' B=Q' (I "K N' K;P I;' =I' 7
(" [CX . 7=I=OK□ □ □ C□ %□
BH3H7' I=' C 3 OH' QB >>H7' =O' =E' BH' A=O3 ;
BHN' ABH3 7B' ;' =' K @H ';7 ;N' BH3H[' ;1J NH' ;
Q M' I=' K=3H' ?O ' ("
?3;B;'K' O> J□ □ M□' □ □ C□ ;'
=OIP' (' & ,"$ BH' B;'7B='7=' 3 K□
BHI'@ IP' =>H O;'M=C1J' BH' ?HPP;3 K;' J□
("3 2>;7 KH□ Z□ "□ □ C□ ;'
:N;'QB;' ("3 'B;CH' N=O' E=3' B 7 HCHI\
IP9
(I " 2 I=';'B;'IJ;'E;3'=EE□ N□ □ ';'
=O3' KH;'I7 (I "
=O' B;'CH' KH;' 3 AB□
(- 5' (ii' 2 ;' ;' ;'?==@□ M□' □ ;'
1J' BH' A=KH7 ;'17QH3 N @H' ;'I' (- 5' (ii'
?7 3;A □ □ □ □ *;'
H IP' ;'I' (- '↑ QHHI' B 7 MO7 ';'J7 B K□
(5' [CX 2 7OEEH3 E=3□ Z□ "□ □ □ %'
B=O' 7B;M' ' 5' □
'7=MJ H3 N @H Q=3J□
6□' J□ □ □ □ %'
2A=17HI' =' AH3 ; I' ;3 AMH7 =E' ;' 3H; N□' □
H' Q MM' 7OJJHIMN□
;77' =O3 ,';'1J >H3HK> =3N';I7QH3'
AA=KK=J'; =I□ □ ';' □ □ %';
'7=MJ H3 N @H Q=3J□
i " 3' i' ' ' 2 ;AA=3J IP =' BH' E;'7B =I' =E
?;I H3';'1J'H];'PPH3; =I□ Z□ Z□ C□ ;'
'7>=@H' ?O' i " 3' i' ' ' ,

Z□ Z□ ZH;'703H' E=3' ZH;'703H□
□ i□ 7' =O' i @H' □
□ "□ QHME B' " PB □
Z□ □ ZOAB' J=';?=O' "= B IP□
□ □ MM7' HMM' B;' IJ7' HMM□
Z' □ BH' ZH3AB;'I';=E'4HI AH□
Z□ "□ □ Z J7OKKH3 " PB'7' 3H;'K□
□ □ :K IP=E' BH' B3HQ□
(□ □ =KHJN'=E' 33=37□
□ □ =3=MJ;'IO7□
□ □ 3=MO7';'1J' 3H77 J;'□
Z□ Z;'KH B□
i□ i□'i=CH37'i;?=O37'i=7 □
Z□ □ ZH33N' CH7'=E' IJ7=3□
□ □ HK>H7 □
□ □ I H37' ;MH□
W□' □ IP'M=BI□

□ □ □ □

&

("% SK !NPGN 7M N NH ! MNJ P= # # N= 2

("%
/ PG ! NHPGP N JKHPG " P9 P NHM ! 9 7P+

J ! OP9 PGKMLP 7 H I MG G ! 7 NHP 3M g 7 &
&P Q ! 9O 9 O AHM I
HMN 9MNP A UP 7 I NHP OJUP p 3WPNP +

% SMG N A O ? 1 NJ ! %O M ! PTP 7 O JAN JL ! I T 7MKP+
% I P NP99 I T NM9P ! PWL PGG OG+

% * $ 8 SD NH M N M ! 7 K KJ 7 GNM ! KPG # / +
PM G J PK J ! N MP ! NG HMO I GN U ! O9T AMNH%O
% * $ 8 2 KM I P ! N NHMN OPGP N L9MKP+

G J Q O 99G
2N GHM99 AP N H I NHP ! % 8 ''%;
GJ P OPGN JKN !+

%) D SMGU 7 X
%) 5 KN M JG%H JGP+

% % SGL ! 9O ! Q
G PPN % % GHM99 NHP HPM P ! G 9PN 7M99
I MUP NH G K ! N MKN Q +

GGMT 7 NHP OPP ? 1 2
! O 9 UP M E 99T N L 7 HJ ! NG I P ! K I P
1J 9JGNT 3 ! Q9 GH M99 NH LJ L9PO HM ! OG+

%% SMGG 2
# ! % I MT NJN NHPP+

GG K MN ! 7 OPMG " X H NP %G NHP T 7 &
3
&PMO %P NHP 9J I P 7 T J ! Q - M G% 7MKP+

%% G $ % SLJN ! NHPGP MLLPM M ! KPG 7 MQP
T) '
" P N G N9 MN HMNH
%% G $ %

%% SM77 M ! KPO 3
MG %% N HP +

%% G SM77 M ! KPO ? 1 2
HMN 2 O O G HP ! MG 7 GN %% G

% %$ $ SGNJ ! ! PO H I NH NHP 9 " O
2
3 ! JQH KMLNM ! 8 T J HM P % %$ $

% S7M9K ! P # X 2
3 ! NP M QP ! N9P %

N PMKH f7 !+

P ! I MGNG MN ($ I MUP ! N NHP M9N NJOP
X H KH NH J HMGN LP LP ! O KJ9M 9T 7P99+

' " 2S 7 H G ! J I PGN M ! PO 99 " O
-
P P O O 2 NPM
17 M ! T L ! KP G 9O " 2
$ SJ ! NP # / 2
HP ! G NHP P I NH ! HPM P !+
X HP ! PM NH9T NH ! QG I MOP P P !
$
2 S I MUP T J ! K ! K O & 2
! KP P KM ! ! N 2 " T J GHM99 GPP
?JGN KP OPG Q ! NHP KN %G KH M9 T+
@ + SN I MUP MN ! P T) $
2 MG Q9MO 2 O O I T K J ! N T I M ! M ! O T J+
@ + SAP PK ! K 9PO MN ! P
" P M ! O #J7 O JG KM ! I P *
HM ! 9P ! NPGN K ! N M PNT+
S M NPO 7 " 2
! O NHP 9 O " MGN ! QG H I
2 ! GPK PN M I AJGH ! NHP 7 PGN G OP+

J I P 9P 5 JUP 7 & 3
8 2 8 $ S9 UP I P " O
HP LP P K J9O 8 2 8 $
8 S ! NHP GP ! GP 7 9M 7J9 : 2 '
H JGN 7 I NHP K I LM ! T 7 8 " I P !+
8 S P P P ! N M9 " O
X P K I P NH ! J 8 " AM ! UG MQM ! +
! O U ! N J L P G N NHP M I 7 LPMKP+
8)8 8 SPL NHPN JGPO AT M 9 P M ! O 5 MT_
N ! " O
! O N KP AT 8)8 8 7 I 3 ! Q9M ! O%G
AM ! U
5 P AMKU MQM ! J ! N I T ! MN P K9 I P+
8' %% S ! N ! GL ! Q M P ? 8
QM ! GN H GP 7J T M ! O J ! I MNKHPO 7 KP
HP 8' %% 9 ! K J9O ! N MQP NHP 7 QHN
2 ! ' % SK ! GNM ! N9T AJ ! ! Q 9M I LG -
J*
X HP P 7 M I ! J I P ! N JL ! NHT A ! PG+
! O 2 ! -%
2 * 8$ 1 % ' " 1 S G9M ! Q LH MGP P] J M9P ! N
2 GH T J I MT QPN N " O - 2
2 * 8$ 1 % ' " 1

3+

3 ((SQ AMK@U
3 ((@ T J M P I M P99 JG 7 M O+

MOQP 7 7M I P N G9M ! OP %G 9 P T / JK
N 9PMGN 2 Q P
" % 0% 2 #
OT ! Q 9 7P N 9 ! Q ! 7M I T+
MQL LP " O - 2
HP O ! P 7 M / ! K 9 ! GH P " - -
MQL LPG 2
3 - -
M 9 77 O PGG 7 NHP 3 2
7P99 M99 ! AJ77+
M 9 77 O Q 9 UP MNN AJNPG 7 NHP 3 2
H J ! Q NHMN J ! G K J ! NP M ! O TPN O M G O T
7 N P99+
M9K ! PG ! NHP GNMQP &? 2
?JHPN% HM I AP +
3 ' () SDAP9N # # 2
1 HM ! Q I T AJQ9P ! M ! ! G A9P " ' ()
3 ' S J ! 2
& I P M ! O HP MNG M P MN NHP L ! N 7 AMNN9P
HP ! P G OP I JGN HM P (
3 ' ' SAM ! P7J9 " O - 2 +
T G QHN 7 NHPGP J " ' " P ! P I PG+
3 ') SLMGG P 2 2 2 2
3( ) 9 Q K NH MK] JM ! NM ! KP NHMN T J HM P 2
3 ') G SDHPMLPO JL " O - 2 2
P ! NH JGM ! O A 9O K NG N M ! O N P ! NT
U ! QHNG+
3 ') 0 ! NHP ! A9 O O O G X M9NP GPP
1 ! " 9 I PO ! %G L9M ! G+
M99MO " - 2
2 99 HM P N ! M LM N KJ9M " ''
3 '' 8 SL 9P / 2
1 GP N T HPNHP T J K GNM O I T " '' 8
AP NHP HM OP +
3 SA ! O 3 @ PP &
P99 I P MG HP M PGNPO ! M " A
A ! O &
" MGN NH J MKK O ! QN NHT MNH M ! O "
JQHN H NHP " P I T " P P7 O NHT A 9O G ! \
M ! GH I P ! N 9M 7 &
1J LM N NHP P ! P AM ! GH+
GM 9PO M9 ! QNHP AM ! UG ? + Y *
" M P 2 ! N HPM O NHPGP G9M ! OP G GH JN JN
P 9P T MG 2 HM P ") 0 $ 8 % A
3) SAM ! U JLN & ? 2
A PMU IT HPM N [SL ") * A PMU MN
! KP [

3 % SKJ GPG / *
I PN I P NH 9J ! MN K " % G I PN I P NH
L MTP G+
3 " % SP 9GL N ! NHP ?5MP I ! 9 QT " O 2 <+
M I ! ! N 3 " % * T J KM ! ! N K ! EJ P I P
3 " SKMLM G ! PO & 2
! O ! ! GNPMO 7 I J ! N ! Q " " GNPPOG
M AP G%GH LG # X 2
2N G 2 UP M " " 0% KHM +
M P NHP M P ! %G PTP T 2
7N G 7N T ! O MQ ! G 7 NHP ! QHN NHMN
OM ! ! Q
MT " $ G% 2 @
3 STPMGN 2 5 2
! O G I PN I P I MUP NHP O ! 9K N APM ! ! "
3 SKH 9Q X 2
P KT ! %G M " ; M P T L PNT " W
M ! PNG OP 7 1 2
HP HPM NG 7 9O QM P HM ! OG
JN J ! P HP M9O T G SDHM ! OG ! N HPM NG
3 % SL G ! AMGP @NHP QM I P : 2
2 ! OPPO 2 A O NHP " % 7 - NPJG+
3 % (SG9 P K J N & 2
T 9 O ! NHP " % (HP O NH MNNP ! O+
3 % % SK P ! QG 7 NHP 9PQG - 2
LM 7 " % %
MGNM O H I NHP MK9P SM99JG ! N NHP 6 M9P 7
3O LJG+R # #NH 2
H ! U N M " % * 8$ $ $ (
" MNH O JAN7J99T L ! J ! K%O NHT NH MN GHM99 KJN+
! O I ! KP N GM ! G P I GP+
3 SK9JA / 2
G9 OPG HP O ! JL ! H G Q M ! PO "
3 SGN 7P OPAMNP 2 X 2
! O 2 M M ! N T J ! NP M9P ! ! A PPO
"
MNP " O 2 2
% G M H OPO M9 J 8 M ! O HP ! N MLLPM G N
99 "

3 !" SGN 7P A PPO ! Q # 2
H G G J ! 7 IP NH G " !" GLT+
MNPO " O - 2 2
#99 7J ! GH%O M99 ! M IG
#99 L9J I %O 9 UP PGN OQPG NHMN NH NHP !O
3
3 ' SAMN JGPO ! MGH ! Q 9 ! P ! ! M GN PM I # #+
/ 2
2 P I P I AP NHP U GG ! Q 7 HP " '

3:

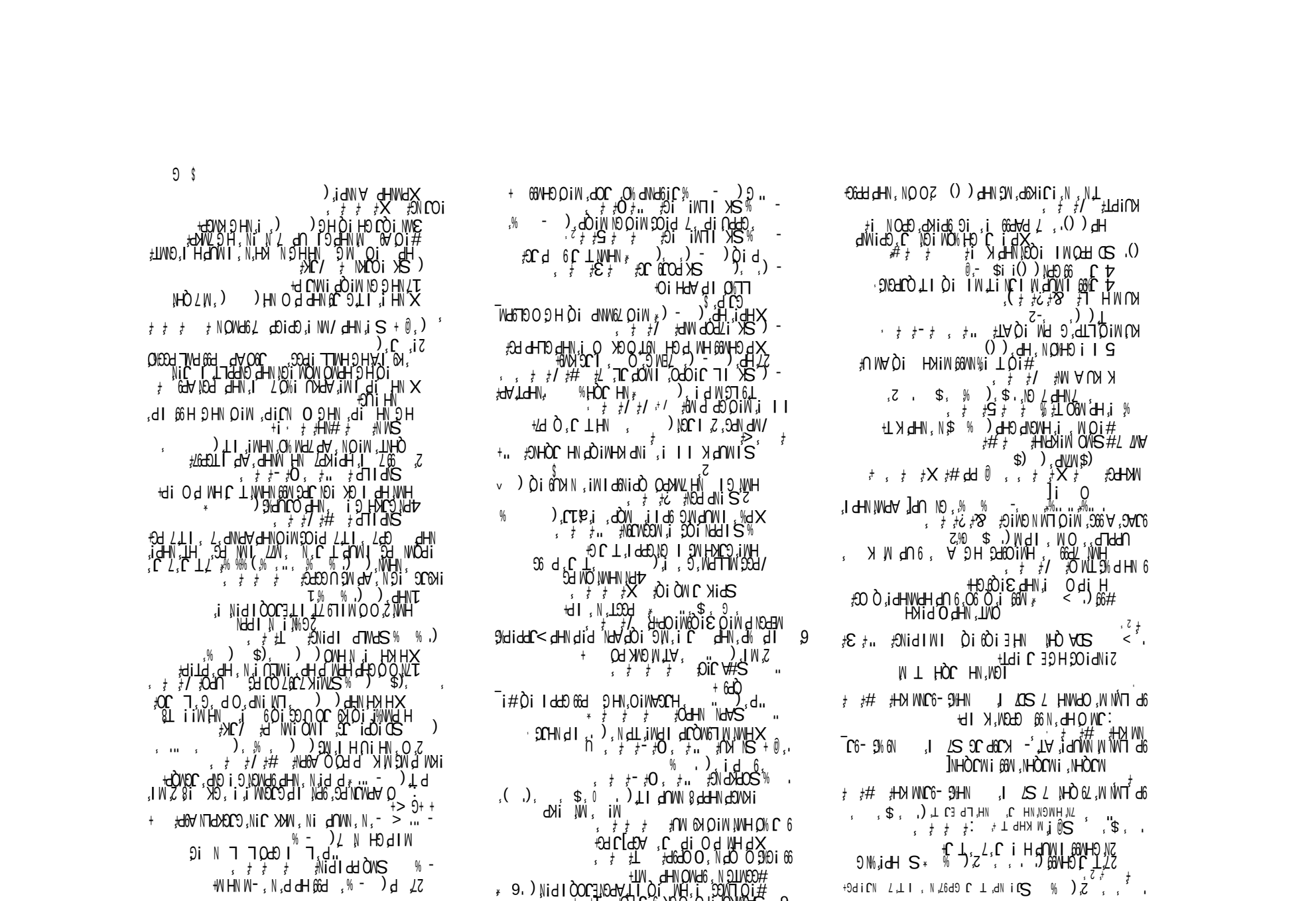
MNOP U ! QHNG K PMN ! 7 ? 2
G 9O P AT NHP H ! J Q !Q HM ! O
17 PJ OP / ! U ! QHNPO ! NHP 7 P9O+
MN9PG JL ! NHP GNMQP " O H JG
JN LM O ! QP ! N9PG M99+
3 SKHM MKNP ! NHP I G OM ! KP 2
)
3 ! NP :P 9O O J J ! N T I P ! @M ! O NHP
3 +
3 SA JGH $ O " O - 2
" P M I A9PO JL M ! O O !
X NH GHM99 EPGNP G M ! O MGH " NG+
3 2 SM NP I 7 AJ 9O ! Q I PMGJ P I P ! N 2
2 7 NH G 9M H 9O ! P ! ! M NP ! TPM 2 %99 P ! N
NHP 7M PGN H JGP ! N M7NP NH PP LP ! KP M " 2
MT ! M O%G KMGN9P & 2)
27 T J NH P P99 A ! Q NHP I N 3 2 G%
(% '
3 " SN AP A ! P & ? 2 2
2 ! NHT APGN APG J ! K P 9O ! NHP A P +
3 " N AJ M9 ! NHT U ! O PO%G Q M P
H J GHM9N AP A I P N NHMN GM I P M ! K P ! N M ! 9N$
3 (% (G ST P9O N K KJ I GNM ! KPG 1
% G P T Q O 2 I JGN " ((% (0
3 (" SAPK I P GJGKPLN A9P 7 K I 7 N # 2
/ 2
O IT GMUP " (" H 9O O PMNH M H 9P
MN NHP M I %G P ! O+
3 SDHM P K I LMGG ! : 2 2
1 AP ! N 9 UP T J I GN PGG8 " *
(
P ! MJQHN M H 9P # / 2
M NT G AP APMNP P I L9 TPO M ! O " $
8$ '
PMK ! N NH G J ! OP O9 AP / 2
#LL MKH NH J " ($ % " * "
HMN AT NHT K I 7 NMA9P APM I G 2 I MT
-P JGP NH G 9PMNP
PMOG I M ! : 2
2 99 AP NHT " % * M9P ! N ! P+
3 " SHM P M I P I T 2 &? 2
T 9 O M ! O T J P P NHP ! MN M ! NJM S
MT 2 O " "
PM AM N ! Q 2 X 2
2 HM P GPP ! MKUP G ! 9 GP+
PM QM OP ! ! NHP M UG OP " 3 2
-M G QM OP ! +
PM OG " O 2
" 7 NHP QP ! P M9%G KJN+
3 !(' $ SD I M ! N9P NH H KH M KH 9O G K P PO
HP ! KM PO N NHP KHJ KH N AP AMLN CPO X 2
/ U NHPP M " !(' $ 7 M G] J P%G KH 9O
3 % @ + S7 QJ PG G GPP ! 2
O IT MJNH NT " % 7 M K POP ! N AJ9U+
3 % @NHP P 9G " 2 2
M H NHP N NHP GNMUP IT N A M P " %
3 (8 SM P ! NP ! N ! M K ! " 2
2
H ! P PBMPG M ! O NH JQHNG
3 (8 $
3 SLM N K L9P 7 NHP P A N APMN 2W
JN HP ! IT Q9MGG GH G IP I TGP97 ! OPPO
3 M ! O KH LL%O NH NM ! ! %O M ! N] J NT+
3 2 SL ! J ! KPO A NT " O - 2
/ P N ! N JG NHMN M P G] J PG 7 NHP ! QHN%G A OT
AP KM99PO NH P PG 7 NHP OMT%G " 2
3 SDHP9 IPN " O - 2
2 GM T J ! Q " M T NH H G " !+
PM P " 2 @ PP " - 2 7+
" P P H G " JL+
PM P G " - 2
HP " %O !+
3 (SDAPK I ! O & ? 2
! O QM P H I HMN " (9 P 2 I QHN+
N GNPLL ! Q %P NHP A J ! OG 7 I OPGNT
3 A < P I APOOPO GPN / 2
NH JGM ! O 7M J G 7 I M I MJ ! O GHP O P
17 M I AP K TGNM9 M ! O 7 " A
PO7P99 " O 2
MT AJN NHP I M ! NHMN MG H G " '' 8
PO9M I APQQM G / 2
HP K J ! N T Q PG I P L 7 M ! O L PKPOP ! N
173 ' " %
3 ' 2
HP L " ' A$ P N PMO JL !+
2 ! K L M9 GJ77P M ! KP 7 ! OG M LM ! Q MG Q PMN
G HP ! M Q M ! N O PG+
PQQM G : 2
3 MN " M99 I MG+
3 0% % 8% 0% SOPMNH # 2
X H KH G9PPLG M ! O ! P P LM9MNPG I P NHP OJ ! Q
HP " 0% % 1 (% G%

/

3 '0 S I MGUPO , NH7 MJO / JK
'G
X NH JN M O H !PGNT AJN TPN OP7 9MO
X NH ! M O KP+
3 $ < ((?+ '<+
HJG M7NP Q PPN !Q GLPMUG NHP U !Q 7O M!KP
2! I T " $ N NHP I MEPGNT+
HP A %O I MEPGNT 7 3 !Q9M!O HP P
APH 9OP!+ " 3+
" MO 2 ! N U! !NH GP KJGN I G
2 GH J9O HM P APP! " $ ' N T J LMLP +
3 !' (' G SNP I G 7 !M QMN !+ 1+
JGN AP " !' G (' G
T OPA N M!O K PO N +
P99 !M%G A OPQ I+
HP NHM! P 7 M O APQM!' M O G I M% K !79 KN
99 NHMN 3 '' G% " 9MLL%O !' L 7+
!7 !NPO H I NH GP97 K I LM G !G+
P99T M!O NHP I P I AP G 7MA9P 7+
MUP PO KNG 7 JGNJT N GJLL N JGJ P G+
3 ' SAP I PO+
" GHP MG" '
P! 9 %G 7M9GPH O+ &+?+
#77PKN !' I MUPG H I 7M9GP+
P QM I 9 %MUP G* + 7 '
#GM 9 I MUP !'3
3 %)' (SM!'2NM9 M!'OM!KP+ 5+7 ' <+
" PM M 3 %)' (*APN PP!'N 7 J
K I LM!T+
3 % ($@ + SGJ99T+ "+
#!O ! '! G 9'! 'KMJNP9 O NH" % ($
HP , NJP 7H G +
3 % ''G SO GG 9 PO+ "+
XH 9GN NHPT " % '
#9 I GN N EP99T , NH NHP MKN 7 7PM +
NM!O OJ I A M!O GLPMU ! N H I+
3 % 8G SGN PO OPL G NPO+ 3+
2!' HMN GM7P L9MKP T J HM P " % 8O IT I !PT+
3 % $ SO GN MJQHN O GN MKNPO+ 2!OJKN !'
XHMN[2 M I ! N " % $
3 @ + SL J 7 NH+ 5+
3 NHP I 7 I NHP NP I LPGN 7 I !P PTPG+
3 K7 L SM99 GJ77P+ "+
9 !Q N IT I NHP +
HMN HP I QHN ! N " NHP !OG 7HPM P!'
G N HP 7MKP N JQH9T+
3 %) '' SD NH APNNP GU 99+ / JK+
O AJ NHP! GP 2%99 HJ ! ! M]JE!' GN 99+
XH 9P NH J ! P PJG OPGKM!N%GN " %) '' '
3 'SAP!N !' M!' M!Q9P+ KWW+
2' I MT AP GN M QHN NH JQH NHPT NHP I GP9 PG AP
"
P G 7 JNHM I LN !+ "+ 5+
#G 3 % '4 $ - 7P99 JL !' #GKMLM N+
P T+ "+ 3+
!P HP P HP H LPG
2!' M99 NH G ! A9P " % 2 HMG A JQHN NH H I
1!P KM P MA MO+
3 8 2 @ + SO GK P+ "+ 5+
" P P K I PG NHP]JPP!' H GP 9 UG " 8 22%
M!QP +
3 8 2 @ + S P PM9+ / +
" P O O " 8 2 H G L MKN KP+
3 2 " 2 S7J NHP NHM!' APT !O+ T+
1 ! N 9 UP I P8
0 I !P%G " 2 " 2
3 D %SNP I 7K !NP I LN+ "+ 5+
: PMN I P!' 7N O P AT , 9P " D %
MG 7 NHP 9O+ ?+
I I O NT NHP " % $ 8
3 $ 8 " % SKHM99P!QP NHP , !O N GLPPO+
+ #+
" $ 8 " % HP ! L PLM PG+
3 " %SAM 7 ! NH 7PNNP G MNNMKHPO N N+ "+
+
PNH JQHN 2 9MT
X GP NHM! NHP I JN !PG !' NHP " '" %
99G+ #+
XP M P 9 UP N L P M Q O9T K I I O NT
AP !Q NMUP! JL 7 NHPGP I P!%G " '%
99G+ "+ 5+
T 9 O HP!' GHM99 P Q N HPMLG OP M!O
NMUP JL K I I O N PG J! ! J " '%1
99G+ #NH+
$ #99 J " '%
! KU I P O !, NH %P I +
99G !' NHP !PKUG+ #+ / j+
X NH " '% $ ()%+S6 P N U! D !J!N
M I P!' AT NHPGP L PGP!NG+R
99G L9MKPO !?J! JG JNJG% GNMNJP+ ?+
: O !!M NMUP NH G LMLP BK+
O A 9NG+ #+
HM99P!QPO JL O MN NHP 79 QHN M!O I T J!K9P%G
7 9 PMO !Q NHP KHM99P!QP GJAGK APO7 JL O
M!O KHM99P!QPO H I MN NHP " !" '

OG 7 2NM9T+ + + + 7+
HP K O NH G !Q MG G PPN9T MG NHP 9M U BK+
OG OPKP %O NH LM !NPO Q MLPG+ #+
3 P!' MG L " %+ (0 8 $ -
-%
5 GJ 7P N AT NHP PTP+
I M I O+ + +
4 8 X HMN , O G NH G AP7 P JG 1
HP 8 7 3 $
3 $!$ 3%"' SK L MG A9P I GH+ / JK+
X GP NHM!' M G9M GH LP " $!$ 0%"'
GH L K GNJ I P 7+ " + + - + + +
XH GP H NP ! PGN I P!NG 7 QJ P !! KP!KP+
3 %% SDA9 !O+ + + <+
X HMN HM I KM!' T J " %% K !GLPKNJ N PG
Q9PM!' JN 7 NH G KHM MKNP 1
N !Q NHP NHJ I A+ & ?+ +
2 9 " 2 $ "+ MN NHP I +
3' () SOM U+ :+ + + +
HMN ! GHP G APK I P MG "' ()MG 2+
3' () SG M NHT OM U+ + #+ + +
27 7M 7MK%O+
HP J9O G PM NHP QP!N9P I M!' GH J9O AP HP
G GNP 8
27 "' ()* HT !MNJ P O M !Q 7M!' M!N K+
MOP M 7 J9 A9 N+
9MKU !OMT Q !' 7+ + + +)' +
3' ()! 2
3' % %SD GPO MG M P A' !PJNP + / JK+
MGH 7M9GP HPMN MLL%O !' PLP !NM!N K 9O+
HT HMGNT GL !Q GN 99 "' % %* M!O !P%P Q G
9O[
3' ($ %SOPD MN ! + KW+
HPGP "' ($ % QM P IT HPM N M! NHP T JNH
#!O GP PGGMTG L %O NHPP IT APGN 7 9 P+
9PGGPO NH GN9P GJLL GPO NJPG 7+ + #+ + + +
M OJJG P!PO KNJG+
9PGG !Q NHP I M MQP APO+ + + 5+ + +
NHP APGN A OP APO 99 P+
9PGG !Q APQQ !Q 7+ " + + +
#!O HP!' T J P OPG JG N AP A9PGG%O+
2%99 "' %% " 7 T J+
9 KU / + + +
H G M Q O "' ()@
3' S!MNJ MG O GL G N !+ + #NH+ + <+ @ PP
T+ + + +
N M!QP J!JGJMG "'
XHP!' I M!%G GN G !' G HP O PG N I JKH
Q O[
9 O9PGG+ "+ - + + +
17 HM P 2' GPP!' M N I P9T LM NPO QH GN+
17 MGHT GP I A9M!KP' I PMQ P' LM9P' M!O "' ' %%'
P !Q M99 OPGKP!OPO N NHP 9MA J !Q HPM N+
9 O 9PNN !Q+ &+ + + +
1J O KN G GMT NH G G ! ' I !NH N "' '
9 O 99 2' O M + " + O+ - + +)'
3' 8 '" ' 8 !' NHPP NH J M M , NKH
$# !O GN M QHN MT Q P NHT G JG N H I NH J
GP %GN+
3' %% %ST J!Q I P!' 79 P' 7 NHP ! A 9 NT+ / + +
XH GP M PGN HM !QG I MOP NHP "' %% % O NP+
3' 8% V +SG P99G+ # + + +
H G "' 8% IT HPM N+$
9JP 7HPM P!%G !' N !KN+ T+ + +
HP P!K9 GPO 9 QHNG ! ' KM! L PO
!OP NHPGP !O G H NP M!O MCJ P 9MK%O
9 $"' ' '$ G% 8 ' (
3 V2+ SMOO PGG+ + +$+ <+
#KK GN G 7 !N HP " HP HP MGGM G
HP +
3 SMKK GNPO+ #+ X+ + +
P NM !' N G 2' 9 U%O HP +
#!O " HP % NHP M!N !' MT 7T JNH+
3 SMKK GNPO+ + #+ + +
J9O HP HMO " I P+
M %G " PMO M P !+ " + O+ - + + +
3MGNKHPML+ #' & I ' !' NHP 3 G% 9
3 "S ML+ #+ &' + +
" P NHMN M 7 9 O NH P T GP9T H N
5 NH P T 7 9 GH9T M9NH JQH HP G I M N+
N N GPP I GP!GP9PGG 7 NHP " "
OQ%O+ " + - + + +
JN JN M9MG[
XP " G MQM !+
3) SG I M99 G O+ " + + +
XHP!' HP H I GP97 I QHN H G]J PNJG I MUP
X NH M AM P ")
9 !QA UP+ &+ + + + +
HP!' 3 ' ")
3 '' 0 SG 99P!+ / JK+ <+
" P P !P AP !Q NH !Q%O APM G AMKU M " '' 'G
M!O PO+
3 ' SAPQ I PO APG I PM PO+ + + + R
0 NHP 0 !" ' 3 ' M!]J G I 9PG JL !' I P+

3 " % S7 I A I AMQ M K NN ! 9 JGPO MG GNJ77_
!Q+ / + / + / + + +
#G " " % M!O MG 9 ! !Q N NHP N I P+
! !PNPO+ + + + @ PP 1+ + + +
#!O H G MGKP!N G ! N AT GJKH MGT OPQ PPG MG
NH GP H HM !Q APP!' GJLL9P M!O K J NP JG N
NHP LP L9P " NH JN M!T 7J NHP OPPO N
HM P NHP I MN M99 !N NHP PGN I MN !' M!O PL N+
U 7 !QG M!O !!PNG+ X+ 2 !
2 HMO MNHP NHM!' 7 NT GH 99 !QG 2 HMO I T ")
4 % 4 % HP P+
U GP!GP 7 NHP NP I+ " + O+ - + 9 + +
T NHMN N I P 99 J ")# 2 NH !U AP O M !+
U J!K GG%O+ T+ + +
JKH QM !G NHP KML 7 H I NHMN I MUPG H I 7 !P+
4 PN UPPLG H G ") (%%G
3 @ + SMKK GN+ " + + +
2 99 " H I L PGP!N9T+
3 SMO M!NMQP+ + + + <+
J9O 2 NH " # KHM!QP 7 M!' O9P L9J I P+
3 SK I LP!GMN !+ &+ + + E
7 9U NH O !', PA O8 NHP P G ! '"
3 = \ NHP AM QM !+ & + + + +
HP NHP 3O M O OPMO N]J N IT 3O M O 8
4 J!Q 4 U HP G AJN " # APKMJGP A NH NHPT
MNKH ! N NHP H QH LP 7PKN ! 7 IT 9 GG+
NG+ : + + 2
MT Q P I P ! N NHP " %
3 %ST) * ' ,O(' + : 2 ' (+(' " + 3+ + +
#N NH G !GNM!N
" P " % I P NH G I P N KU+
3 ' '$ SP!K J MQPO AT 7M9GP H LPG+ + +
'
" 'T J P P " ' '$;H 'K GG%O+
P %G KML+ " + + - + + +
HP M!G P G MG PMOT MG M " 8 G%(-
3 % S GH HPM N%G OPG P+ + + + +
#!O T J GHM99 HM P T J " % ! !NH G PNKH+
G I I J9N L9 PO+ + + +
" 'GHM99 NH G " % ' -' O QPGN
HP GP!MNP%G K J NPGT
3 % SDA MNG M !+ + + +
XHP P G NHP I MGNP " % 1
A J!OMNT AGNMK9P+ # NH+ + *
1J QP! N9P 79M I P
- UPG NGP97 M!O 9 UP NHP KJ P!N 79 PG
3MKH " N KHM7PG+
3 SA J!OM T+ / + + +
O I NHP O PMO GJ I I N 7 NH G KHM9UT " '
9G+ / + / + / + 6/
#' P T Q O " 8'
3 ()SO Q 7 M LM N KJ9M GLPK PG+ + 2!OJK_
N ! $
"J!NGN7 I !' 2' KHM QP NHPP NP!OP P99 IT
H J!OG
3 ()' P 9 I M!+
3 ()S7P I M9P HM P + / + + + @ PP / + + +
" J!O' GLM! P9 " ()' NT I +
3 SK M7NT+ # + X + 6/
!KP O P!KH I P!' M P G " *
M T NHMN , 99 2%99 9 P M!O O P M I M O+
MUPG 7 KP+ + + + +
I P J!' 7 I ") %' (# M!O M!G P ' ! !P+
MGG+ " + O+ + +
3 %%# KJ [
H J OM I NPO M!O 9JWJ JG I J!NM !' Q MN
177P %GN I P " %%' 1
3 SA M MO + ?+ + +
HP P P!O NHT " # M!O NJ !' NHT 7MKP !' LPMKP+
3 S I MOP 7 !P+ + + + +
H J HMGN " ' I M!T I P!+
3 2S7 !P T+ # + / + + +
" G " 2 G ! N !' I T K GN+
M 9G+ / + / + / + + +
#' O P!KH " 8'
3)' -' @ + S LP!+ + + + +
#!' N GHM99 L9PMGP T J N ")' -' NH G+
3)'8)') SA PMU NHP I MNNP N H I : + + +
R+<
' 99 P ")'8 $'$
3)' $ - ' SAPQ !' NHP LM 9P+ # !O+ + ' <+
& I P%G P I LP 'M!O' !PLHP ")' $ '- ' '
3 % S KP+ + + + +
T I T N NH ' NHP 7 G HMG M!' PWKP99P!N " %
PMNH%O+ # NH+ + +
3 $G # MG N P P+
'M!' J!N MA9P M!O K !N !JMNP Q O!PGG+
3 $ '2 '8 SNMUP A PMNH HP!' T J M P
O !U !Q+ " + O+ - + + +
XHP!' T J " $ '2 '8 # NHPT (2!S
HP I [
AP+ T+ + +
A NH G '
2G ! A9P NHM!' MNNP!O !Q 7 M KHPKU8
& KHP NHM!' O !Q ! NH !Q 7 M " "



5P9 P MIKP'9PQM9ǂ "ǂ ' ǂ-ǂ ǂ
2'O 'OPG P' ' (* BK+
, SOPIMIOPO' ATǂ "ǂ ǂ ǂ
PG OPG'N 'AP' ' 'M' GL IQP'[
%SIP NGǂ 1ǂ ǂ ' 'M' GL IQP'[
#IO' IT' %
MT'GLPMU'JIA IPNPO'N 'MG'L JO'M'7 NJIP'
#G'NH G'NHMM'2'HM P' PMKH%O+
%SIP NGǂ ǂ ǂ '
1L I 'NHMM'G 'GN KUG' I' M K JG'GHM99'
1'7H G' % A' I JG+
5PI I MKGǂ /ǂ ǂ '
+ HMM'HMNH'9M O'UI PG'JIOP'H'G'L 99 ǂ
2G SOPIPO ǂ "ǂ ' ǂ-ǂ ǂ '
HPI'9PN'H I'A' 2G 'NHP' PQPING H L+
'2 '$ ' ' $ ' QC SOPIPO' T 'J'HMO' I'
H I'M' QHN+ ǂ3ǂ ǂ ' O GN'HP' '2 '$ ' ' $ $
& i SMIiJIK MN iǂ ǂ ǂ ǂ '
HP' G 7MGN' I T 7P+
M P'NHMN' P O 'NHP' ('9MKU
1'7' JN M O' OP +
- '@ + SLM N+ ǂ ' ǂ ǂ ǂ '
2'I MT' - ' NHF9 NN9P' H 9P'2'H P+
G p p QINT' 7T J' PMG i+ "ǂ ' <+
- '2 ' % SIO GL9MKP' NHP'
2? = - 2 % 2' % '
SG 9 NM T+ -ǂ ǂ : p '
T IMIT'M' 'MIO'LM i7J9'LP KH+
%('@i'JG K SD M MN iǂ :ǂ ǂ ǂ '
#iO'MHP P'MGGJIP'G IP' NHP'H A9P'7 I'
2? = - 2 % 2' %
G p p QINT' 7T J' PMG i+ "ǂ ' <+
- '2 ' % SIO GL9MKP' NHP'
2'I MT' - ' NHF9 NN9P' H 9P'2'H P+
- '@ + SLM N+ ǂ ' ǂ ǂ ǂ '
2'O 'OPG P' ' (* BK+
, SOPIMIOPO' ATǂ "ǂ ǂ ǂ '
PG OPG'N 'AP' ' 'M' GL IQP'[
%SIP NGǂ 1ǂ ǂ ' 'M' GL IQP'[
#IO' IT' %
MT'GLPMU'JIA IPNPO'N 'MG'L JO'M'7 NJIP'
#G'NH G'NHMM'2'HM P' PMKH%O+
%SIP NGǂ ǂ ǂ '
1L I 'NHMM'G 'GN KUG' I' M K JG'GHM99'
1'7H G' % A' I JG+
5PI I MKGǂ /ǂ ǂ '
+ HMM'HMNH'9M O'UI PG'JIOP'H'G'L 99 ǂ
2G SOPIPO ǂ "ǂ ' ǂ-ǂ ǂ '
HPI'9PN'H I'A' 2G 'NHP' PQPING H L+
'2 '$ ' ' $ ' QC SOPIPO' T 'J'HMO' I'
H I'M' QHN+ ǂ3ǂ ǂ ' O GN'HP' '2 '$ ' ' $ $
& i SMIiJIK MN iǂ ǂ ǂ ǂ '
HP' G 7MGN' I T 7P+
M P'NHMN' P O 'NHP' ('9MKU
1'7' JN M O' OP +
- '@ + SLM N+ ǂ ' ǂ ǂ ǂ '
2'I MT' - ' NHF9 NN9P' H 9P'2'H P+
G p p QINT' 7T J' PMG i+ "ǂ ' <+
- '2 ' % SIO GL9MKP' NHP'
2? = - 2 % 2' %
SG 9 NM T+ -ǂ ǂ : p '
T IMIT'M' 'MIO'LM i7J9'LP KH+
%('@i'JG K SD M MN iǂ :ǂ ǂ ǂ '
#iO'MHP P'MGGJIP'G IP' NHP'H A9P'7 I'
6'5PGN JKN i' 7' T R' PWN MKN'7 Iǂ ǂ ǂ ǂ '
%- % >< J% % H KH' P'OPGL GPǂ &ǂ ǂ ǂ ǂ '
O QHN i'Q'HP'LM9P 7MK3O' 99MQPG NHF M ǂ
#iO' GNPiNMN i' 7' %- % ' %
6'5PGN JKN i' 7' T R' PWN MKN'7 Iǂ ǂ ǂ ǂ '
H J'M N'Q PMN'9 O'D!PIT'7MNHP %G'G GNP %G'G i+
6'5PGN JKN i' 7' T R' PWN MKN'7 Iǂ ǂ ǂ ǂ)'
: 'Q 'I IT'GP MIN'NMUP'NH J' 9JG%H GP+
6'5PGN JKN i' 7' T R' PWN MKN'7 Iǂ ǂ ǂ =' '
&'5PGN'G O' BK+
SK I P'MI'PIOǂ ǂ ǂ '
2'LJ L GP'i N' M N' i'7 NJIP'N 99'
HPG'P' M G'
0 SPIOPOǂ "ǂ ' ǂ-ǂ ǂ '
99'H G'7 PIO'G KUIPGG'HMNH' G'I P\
5P ǂ 7'NHP' 9O' TGNP PGǂ ǂ 5ǂ ǂ '
" 'H [H 'H [
5P ǂ /JKǂ
JN'MG'NHP'PM NHF O NH' PPL'NHP'GJI'API'Q GPN'ǂ
5 M9ǂ ǂ/ǂ ǂ '
#iO'NHPI'HP'O P 'NF "7 I'HDL UP+
6'5 M9 QJP' i' MGNP R'GLPK IPI' 7K N K GI' i'ǂ "ǂ
'O+ -ǂ ǂ '
XH 'NHPI'M77 QHNPO'BK+
5 MIN%G'L PGN' Tǂ ǂ '
/ P'HUP' 0%- %
'(-'2S MG'K L9N GMIN' "ǂ ǂ '
" P' '(-'2 NHH G'OJQ'AP7 P'HP'GJKUPO'N+
5 O ǂ ǂ ǂ ǂ +
2I'GJKH'M I QHN+
N O' ' NHF M' 99 'I'HP'HMIO+
(SHP M9O K O GN iKN iǂ ǂ #ǂ ǂ '
/PN'H I $PM'N'7 'M' ('APN PPI'H I_
GP97'MIO'H G'H GP+
SO GK OMIN' Tǂ ǂ '
I;N IP'?N
HMN'I NH IQ Q 7N' 7 'I J9N NJOPG'
% S 9O' ǂXǂ ǂ '
/PN'NHPI'7 I'7 NHF M GM L N' JGH'MN' IKP
X NH'G I P % 'G IQ+
I2 i SK JLN i' 7 6'Q P'T J'Q O P%PI+R
/ǂ /ǂ/ǂ ǂ2'
: O' I2 i 'M99[
5 QQP&%G'L QI ǂ ǂ ǂ 5ǂ ǂ '
/ U' i'NHP'M9 I MIMK8 7 IO' JN' I IG9 IPǂ
%% SN MIGO PGG iǂ /JKǂ
HPi'IT' %% ' G'G '9P'G 'AMGP+
f 7S IL PGG iǂ ?ǂ ǂ ǂ '
HP' 7L NT+
% "' '@ + SOPN MKN'7 I ǂ #ǂ/ǂ ǂ '
% "' 'M99'NHP'APIP7 NG 7'T J' i'K J1N Tǂ
4 iD =' '

5MI MGU K 9 J PQǂ ǂ ǂ '
#' %)i(' 'GN KU+
5MIK IQ'H GPǂ /ǂ/ǂ ǂ '
HP' ('$ % '99 NP99'T J+
SL pǂ ǂ ǂ ǂ '
4 J'GNMIO' NH i'H G *O'T J'i N'O
SL pǂ ǂ#ǂ '
IP i N' NH i'H G 'AT'NHT' 9+
5MI GH' INPLLP MIKPǂ "ǂ ǂ '
HP'U IQ'O NH' MUP'N i QHN'BK+
5MI P9%G'6' g XM G+R' "ǂ ǂ -ǂ ǂ '
"MNH' 'JQHN'NHP'I J p'BK+
%) %S5MIPGǂ "ǂ ǂ '
2i]J p'IP7 GN' HMN' %) %'M P' i'-M Gǂ
)'$ % SDH JGP HKH'G NHP'GPMN' 7'QI 'I'MIO'
O GK INPIN+ #ǂXǂ ǂ '
'NHP')'$ % *MIO'NHP'OPNPGNPO' 7P+
, @ + SL PLM Pǂ "ǂ ǂ -ǂ ǂ '
'T J'AMNN9P'7 'NHPT'M P'MN'HMIO+
5MNKHPN' I PMOǂ ǂXǂ ǂ '
pIO'H I'ATT J'N 'Ipi'N' ($ '
O 'L PK JG 7 pIOG H O' i'OPMNH%G ' %%
i QHN+
N iǂ ^^^ǂ
', %%SPIO9PGG'HM iQ' i'KP NM i'N IP' 7'PWL M_
SPP 'NPM G 7NHPǂ #ǂ/ǂ ǂ '
HP'A Q' JIO' NPM G
J G%O' IP'MI NHP'O i'H G ii KPIN' i GP'
2i'L NP JG'KHMGP+
X HPI?'HM P' ()6 'NHP'GPM' NH'O LG'7J99'GM9N'
$2' < %%2-'NHT'K JINPIMIKP2 1ǂ ǂ '8
'$2' , NH'MI'JGJ LPO'APM O'
%S MIN' 7APMJNTǂ ǂ 3ǂ ǂ '
HPI'G HP'NHP'Q JIO'
1'7'I'T %
5P7PK%' 7EJOQ'IPIN'Tǂ ǂ '
p IQ'GKM KP' IMOP'JL
2'IPMI'N 'IM i'HP'HMO'i N'MLL PHPIG i'
1'7' M IQ'.NP G'7 ' ('A
#G 7N'NHP'KMJGP' 7'7PM +
SI P' M9JPO' p M O?ǂ &ǂ ǂ ǂ '
' i N'G 'OPPL'M I'
#' ǂ ǂ ǂ ǂ '
#G'M 'AP'PMGN'7 NH' i'HP'K I I i'M +
"M P?'OPGP PO'MN' J'H QHPGG%'HMIOGǂ
&PGN'G O' BK+
SK I P'MI'PIOǂ ǂ ǂ '
2'LJ L GP'i N' M N' i'7 NJIP'N 99'
HPG'P' M G'
0 SPIOPOǂ "ǂ ' ǂ-ǂ ǂ '
99'H G'7 PIO'G KUIPGG'HMNH' G'I P\
5P ǂ 7'NHP' 9O' TGNP PGǂ ǂ 5ǂ ǂ '
" 'H [H 'H [
5P ǂ /JKǂ
JN'MG'NHP'PM NHF O NH' PPL'NHP'GJI'API'Q GPN'ǂ
5 M9ǂ ǂ/ǂ ǂ '
#iO'NHPI'HP'O P 'NF "7 I'HDL UP+
6'5 M9 QJP' i' MGNP R'GLPK IPI' 7K N K GI' i'ǂ "ǂ
'O+ -ǂ ǂ '
XH 'NHPI'M77 QHNPO'BK+
5 MIN%G'L PGN' Tǂ ǂ '
/ P'HUP' 0%- %
'(-'2S MG'K L9N GMIN' "ǂ ǂ '
" P' '(-'2 NHH G'OJQ'AP7 P'HP'GJKUPO'N+
5 O ǂ ǂ ǂ ǂ +
2I'GJKH'M I QHN+
N O' ' NHF M' 99 'I'HP'HMIO+
(SHP M9O K O GN iKN iǂ ǂ #ǂ ǂ '
/PN'H I $PM'N'7 'M' ('APN PPI'H I_
GP97'MIO'H G'H GP+
SO GK OMIN' Tǂ ǂ '
I;N IP'?N
HMN'I NH IQ Q 7N' 7 'I J9N NJOPG'
% S 9O' ǂXǂ ǂ '
/PN'NHPI'7 I'7 NHF M GM L N' JGH'MN' IKP
X NH'G I P % 'G IQ+
I2 i SK JLN i' 7' 6'Q P'T J'Q O P%PI+R
/ǂ /ǂ/ǂ ǂ2'
: O' I2 i '%99[
5 QQP&%G'L QI ǂ ǂ ǂ 5ǂ ǂ '
?JGN KP' % 'NHP' KN %G'KH M9 T+
iKP' P'KMII N'MN IP'T J'T J'GHM99'GPP
H J'M N'Q PMN'9 O'D!PIT'7MNHP %G'G GNP %G'G i+
6'5PGN JKN i' 7' T R' PWN MKN'7 Iǂ ǂ ǂ)'
: 'Q 'I IT'GP MIN'NMUP'NH J' 9JG%H GP+
6'5PGN JKN i' 7' T R' PWN MKN'7 Iǂ ǂ ǂ =' '
&'5

15 S I M9 KP‡ ‡ ‡ ‡ ,
#iO' UNHMN' i '9M 7J9 I PMiG KMi'KM T I P
1JN' 7H G 15 -' PMK+
3LHPGJG 'J i9M 7J9 M UG 7‡ ‡3‡ ‡ 'G
H G G NHP' 7M T'9MiO+
-S "P K J9PG‡ ‡ ‡5‡ ‡ ,
H G G -G p i','M NT MiNMG p i+
3 P' APMJNT%G OPMO' 79PPKP I MOP'MI NHP'QMT‡ ‡2W ‡
$ @ PP‡ ‡ ‡ ‡ 'G
9 P'M GPK iO'9 7P i'GPK iO'HPMO'
E (&5-" "'. ', i 3 5
3 G'OPMNF 7 S7 1' NH%G -9JNM KH‡ #‡ ‡ ‡
T I GN PGG9 %O'NHPP'BK+
++G D MiOP iQ‡ #‡/‡ ‡ ,
&JiG9 G 3'L9Q IMQP+
3 S MiOP iQ'JiGPN9PO‡ 1‡ ‡ ‡ ,
PN WN'MI' 3'AM AM MI'MiO' GJLP GJAN9P
piPN MI+
- i "SLMO‡ "‡ ‡ ,
XH 'IM iNM iG'NHpI'\H 'M P'NHPT' - i "'A
3G 9‡ "‡ ‡ ‡ ,
X J99W O iU JL' - 'A
-' ‡ ,
SI NN ' 7NHP'-p KT'7MI 9T‡ "‡ 'O‡ -‡
HMN' MI'GHM99'AP'1T'NH ip‡
X P99'2' 99AMKU'H I'GN M QHN8' -, 'W
-', ?' "‡ 'O‡ -‡ ‡ , @ PP "‡ 'O‡ -‡ +
R‡Z.
S -, 'WS-p KT[SMiO'GPN' i‡
-, -SGL PG‡ "‡ 'O‡ -‡ ‡ ,
HP'L ikP%G -, -'HM P'i7 lPO'I P+
-- 5SN M9'PWMI iN ‡ /‡ ‡ ,
"P NP NH G AJN'MG'MI' -- 5' 'NMGNP 7'IT'
NJP+
- i SK iEPKWJ P‡ "‡ 'O‡ -‡ ‡ , $
2'GLPMU'i 'N NH G i' - i '
#G HMN'2'NH i U QHN'HP+
3N i‡ 7X‡ ‡ ‡ ,
X NH'9 1'MN' i '
21 lPO MNP9T'N 'IM T+
1 Sp]JM9' io 77P piN‡ X‡ ‡ ‡ ,
#iO' UNHMN' i '9M 7J9 IP

> 1i& SK JiNPiMiKP‡ ‡KW ‡<+
0 ' N GPP'NHP JOK%G 'QPi9PGN G QHN
HP' I GN G PPN. 1i& $ 'OP7 iipO%GN K PM_
NJ P+
> 1i& -S7PMJ PG'K JiNPiMiKPG‡ &‡ ‡ ‡2'
4PN?' P99 p!p!AP'
HP. 1i& -' 7NHPGP' Ipi+
> 1i& -S7PMJ PG‡ "‡ 'O‡-‡ ‡ ‡
#iO' GMM i' . 1i& -' i'M A9 OT' IMGU+
> '@ + SM77 QHN‡ ‡ ‡ ‡ ‡
XP' J JGN' N IMUP M GKM PK ' 7NHP 9M '
PMN IQ' N'JL'N ', 'NHP A OG 7L PT+
> 'a1 / SM77 QHN‡ "‡ ‡ -‡ ‡ '<+
i&' GPPGN' HMM9G LMGN' Q '. ' NHT' U iQ'
NHM9+
> F & ' ' KKMG i' 7PM ‡ "‡ ' ‡ -‡+
H J GHMU%GN' NHT' HPMO8 MiO'H 9O%GN' N. $ '
G i+
'GLPE 'M N JNH‡ $
> ' S1MUP !P'M7 M O‡ "‡ ' ‡ -‡ ‡ '
HP' LP L9P. '
OPM 'i 'K 9 J G‡ ‡ ‡)'
"P'NHMN' G P99 HMiQPO' i'NH G 9O' IPPOG N'
. ' i' i i& -
> .&.'3& " SQJM O' NHMN' G NHP' KMJGP 7'7PM ‡ ‡
7N+ ‡ ‡ ',
PP'N 'IT'H JGP'9P7N i'H'P. .&.'3& "
17'MI'JiNH 7NT'UiM P+
> -'@ + SDiGPO i'NHP'MKN P GPiGP‡ ‡ ‡ ‡ ',
', 7 'IT' 9 7P' " NPiG ' . -' H G
0 + .
8 " ' HPi'ip p'N JGN' IP 72'AP'M7PM O‡
OPMNPO‡ T‡ ‡2'
#'GMLL9P'N 'NHP'T JiQPGN8 N 'NH%I P'IMNJ P'
1'NHP. ' PNK'HPOiPGG'NHMN'Q9 'T'A iQG JG[
#'Q9MGG'NHMN'. "'NHPI+
0 7P‡ ‡ ‡)'
HP' T 'ipK'U%O'. .
HP'GL N GN iQ'O J1'NHP'PM L P K iQ
> 3 -SGH N'GM 9G'7 QHN iO'GM 9G‡ X‡ ‡ '
9ML' i' I P' GM 9G8 LJ GJP' JL' NH T J'
. 3 -

> Si!JAP ‡ ‡ ‡ '<+
HP'Q PMNP'. ' 7'NHP'GJAEPK\'HP9O'NHP'OJUP'N'
AP' GP+
0 9P+ ‡ ‡ '<+
'7T J'HM P'M GMNN i'i'NHP.
N' i'NHP' GN' MiU' 7 IMiH O'GMT'N+
> "SL 9 GHPO‡ /‡ / ‡ ‡2'
" G O GK J GP'LP PlLN T'H G N iQJP. "'
> "SO?7 9PO‡ ‡ ‡ '
O ' MiJ %G GGJP'HM P2'. "'IT I iO+
> "&. SQM P'NHP'9MGN' L 9 GH N ‡ ‡ ZMMW ‡
JN' HPi'T J'K JiNPiMiKP. G"'&.'H G 9 ip'
HPi'9MKU%O'2' I MNNP+
> -SNH 99G'GHM7NG‡ ‡ ‡ ‡ +
#i'T J'O M 'AMKU M O' P%9J LJN T J % NHP'
. -
> "' -' SOPOJKP'M N 9P‡ "‡O‡ ‡ '
"JQH' ML PN'M9G S H 'JGJ L%O'NHP' K i'
17' HM 9PG'NHP'OJUP' 7 / M ip'G 9P'HP 'IM9P'
17' NHP' N JP' 9 iP' MiO' GN KU' 7 HM 9PG'NHP'
: PMN S
'. "; $ NHG I P GH G 7N JNH'BK+
> "' ' i S7 iO'H I'i N' JN‡ "‡ ‡ ‡ '
27'GHP. "' i
'3 iQ9MiO'GPiO'H I+
> SK iK9JG i‡ ‡ ‡#‡ ‡ '
#iO' NHP' . ' G @7 ' NHP' H KH‡ 2' IMT Q ' NHP'
7 ip '2' 99 9 P'M AMKHP9 +
> '@ + SGPiNPiKP‡ ‡ ‡ ‡ '
IP' P P'NHP P'TK LHP' 'M 7'JiKN i+
#iO' 9PN' Q 'AT' NHP'MKN +
> S79 MN‡ #‡ ‡ ‡ '<+
'1 ' GP p %O IM T'N
"M P'UI N' MQM i'MiO' . $' NH PMN%i iQ' I GN'
GPMHUP+
O9PI GH'O JiUM O‡ ‡ X‡ ‡ '7+
H G > -'" & ' "
> '@ + SN 'A 'N iQ'N 'Mi'PiO /JK‡
I P%G' i.. ', -'N', 'NHP'HMNP 77 PG+
> --SPiO9PGG‡ 1‡ ‡ '
JN' KHPG'. --$'EG MG'L 'MG iNP +
'H I'NHMN'P p'7PM G'HP'GHM99 AP'L +
O P O MUP‡ "‡ 3‡ ‡ '
HMN' B" ' O O?'2' H N' NH PP'N I PG' i'NHP'
HPMO+
> 5 3' ' '(ii'SHM U iQ' MN' MNP 7 9‡ "‡ '
‡ -‡ ‡ ‡2'
P9 P P'IP'9 OG'7 '. 5 3' ' '(ii'$
2'GM 'i N' APNNP'GL N'NHPGP GP pi'TPM G%'OMT+
> -SI AP9PGN‡ ‡ ‡ ‡ '<+
T' -'G i+
XH NHP'X 9N NH J'Q 'I'D
> -SI A9PGN‡ ‡ ‡ '
T' -'G i+
XH NHP'X 9N NH J'Q 'I'D
> -' ' "-' i "' &- ' /‡ / ‡ ‡ ' @ PP&‡'?‡
‡ '/
HP' -' "-' i "' &- ' 99 i N'GP P I'T
NJ i+
0 GN A 1' '7 3OTLN‡ #‡ /‡ ‡)'
2'99' M 9'MQM iGN M99 NHP. -'B('i.' 35, '
> "SGJAEPKNPO'N '7 NG‡ ‡KW W‡
"' 'HM P'I P'TPG JN' 7'NHP 'GLHP PG APPI'
"W ;
0 WPO'7 QJ P7 'NHP'N IP'7GK i‡ 1‡ ‡ '
JN'M9MG[N 'I MUP' IP
HP' .4 "'. 3& '.i ' ' 'i.'-.i '
'L iN'H G69 'MiO' I iQ'7 iQP'MN+
O9ML O MQ IPO' N‡ X‡ ‡ ‡ '
'GPP'H 'NHP'GPM'. ,B" 3i "'
HP'KM %O A HP'7WKP' i'M'. -'
> -'SG 9O P %G'L OP H I‡ /‡ /‡ ‡ '
2 'MiO' GJKPPO'NHT' PMUIPGG+
OP OM T‡ T‡ ‡ ' @ PP"‡ 'O‡-‡ ‡ ' /
pIGP9PGG'AMJA9P
N'NH J'M. i" 5$'AJN' I9T'HP
' Q I HUP' NH JN\
> "SK ILMI i'HJGAMIO‡ ‡#iO‡ ‡2' ' @ PP
"‡' 'O‡-‡ ‡ ' /
#iO' G PM' NH'HP' 7J9d U P'
#iO' 7MNH' 7NHMN' KHMGNP O GH i J %O'OMI P+
OP PG‡' "‡ '<‡ @ PP"‡ 'O‡-‡ ‡ '7+
2IOPIN' NH'. -
X HPI'NHPT'HM P 9 GN'MiO'7 7P NPO'NHPI GP9 PG+
OPI GPPO‡ "‡ 'O‡-‡ ‡2'
X P'HM P'NHP PKP LN' 7. B- "
> S7PNK'HPO‡ "‡ ‡ '
1I' i'T J'I AP9GG 3iQ9 GH'
XH GP'A9 O -' 7 I'7MNHP G 7 M L 7[
> S7PNK'HPO‡ "‡ ‡ -‡ ‡ '
'GPP IT'MPM G'MiO'HPM'IT" :B. 'Q MiG+
> S 9PiN'PMKPGG P‡ ‡#NH‡ ‡ '
1'NHP. ' PNK'HPOiPGG'NHMN'Q9 'T'A iQG JG[
0 7P‡ ‡ ‡)'
HP' T 'ipK'U%O'. .
HP'GL N GN iQ'O J1'NHP'PM L P K iQ
> 3 -SGH N'GM 9G'7 QHN iO'GM 9G‡ X‡ ‡ '
9ML' i' I P' GM 9G8 LJ GJP' JL' NH T J'
. 3 -

> 1i& SK JiNPiMiKP‡ ‡KW ‡<+
0 ' N GPP'NHP JOK%G 'QPi9PGN G QHN
HP' I GN G PPN. 1i& $ 'OP7 iipO%GN K PM_
NJ P+
> 1i& -S7PMJ PG'K JiNPiMiKPG‡ &‡ ‡ ‡2'
4PN?' P99 p!p!AP'
HP. 1i& -' 7NHPGP' Ipi+
> 1i& -S7PMJ PG‡ "‡ 'O‡-‡ ‡ ‡
#iO' GMM i' . 1i& -' i'M A9 OT' IMGU+
> '@ + SM77 QHN‡ ‡ ‡ ‡ ‡
XP' J JGN' N IMUP M GKM PK ' 7NHP 9M '
PMN IQ' N'JL'N ', 'NHP A OG 7L PT+
> 'a1 / SM77 QHN‡ "‡ ‡ -‡ ‡ '<+
i&' GPPGN' HMM9G LMGN' Q '. ' NHT' U iQ'
NHM9+
> F & ' ' KKMG i' 7PM ‡ "‡ ' ‡ -‡+
H J GHMU%GN' NHT' HPMO8 MiO'H 9O%GN' N. $ '
G i+
'GLPE 'M N JNH‡ $
> ' S1MUP !P'M7 M O‡ "‡ ' ‡ -‡ ‡ '
HP' LP L9P. '
OPM 'i 'K 9 J G‡ ‡ ‡)'
"P'NHMN' G P99 HMiQPO' i'NH G 9O' IPPOG N'
. ' i' i i& -
> .&.'3& " SQJM O' NHMN' G NHP' KMJGP 7'7PM ‡ ‡
7N+ ‡ ‡ ',
PP'N 'IT'H JGP'9P7N i'H'P. .&.'3& "
17'MI'JiNH 7NT'UiM P+
> -'@ + SDiGPO i'NHP'MKN P GPiGP‡ ‡ ‡ ‡ ',
', 7 'IT' 9 7P' " NPiG ' . -' H G
0 + .
8 " ' HPi'ip p'N JGN' IP 72'AP'M7PM O‡
OPMNPO‡ T‡ ‡2'
#'GMLL9P'N 'NHP'T JiQPGN8 N 'NH%I P'IMNJ P'
1'NHP. ' PNK'HPOiPGG'NHMN'Q9 'T'A iQG JG[
#'Q9MGG'NHMN'. "'NHPI+
0 7P‡ ‡ ‡)'
HP' T 'ipK'U%O'. .
HP'GL N GN iQ'O J1'NHP'PM L P K iQ
> 3 -SGH N'GM 9G'7 QHN iO'GM 9G‡ X‡ ‡ '
9ML' i' I P' GM 9G8 LJ GJP' JL' NH T J'
. 3 -

> SI9PM7 7 'PNM9 JGPO' i'GPN IQEP P P E&‡ &‡ ‡
‡ '
HP'GJ99P'LMGMOP' 7'NHT' PM T'GNPLG
3GNPPI'\'.I $' HP P i'NH J'M N'N 'GPN'
HP'L PK JGEP P9 7'NHT'H IP PNJ i+
> 3 SNH JN IQ‡ ‡#‡ ‡2'
'A T‡2%9G' HL'T J7 I'5I2'.I 3'7PiKP+
> -i SL9PINT‡ ‡ ‡ '
#99'.i -i $'M99 MAJioMiKP+
'7PPO' IT' ii KPIN'LP L9P+
>i -i '.' '5 SMJNJII' 'L9PiN7J9 GPMG i‡ '
‡9 ‡'
LPMU' 7'NHP'GL IQ'U- "'.i -i 'i.' '5 '
>i 'K i i0 /‡ ‡ '
'NHPT'KMii N'N JKH'IP.i ' i 3
O ' ip]JN9 NT‡ ‡ ‡ ‡4$
5 'i N'AMi GH' PMG i'
>i ' N& 5
O '1'7 '1'NHPH AAT H GP G7 Q N‡ "‡ ‡ ' '
@ PP/‡'/‡ ‡ ' /
XH GP'PL NML'H' G‡>i K.i $' $ ' i((5H
i - '-'.i 3i
>i ' ' 1 -SMLPNT' MNH‡ ‡ ‡ ‡ '
MT2 GMTG'NH7'PIO'.i ' 1 -
>i ' 2i'i " -SOJ IQ' N ' O IM PG MN' NHP'
GM I P'NMA9P‡ #'X‡ ‡ '
2'O O'NH IU NHP'.i 2i'i " -$ N 'AP'M
L PNMT GP'7P99 +
>i '@ + SPI7 KP‡ "‡3‡ ‡ '
27'T J' 'i 'JiNP'i'T J'K ILPM ING
#iO'.i 'NHPI' NH'M K iGNMiKT'NHP'KM O IMG
MII N'GNMiO'JiOP'NHPI+
>i '@ + S NBJP' PQM O‡ /JK‡
O ' IP'2'.i 'i N'M QJ1PIN'MGN M +
4 J'I MT i N'G 'PWNPiJNNP'A G 77PiKP+
>i '2'HM P'HMO'GJKH'7NJ9NG+
HP'GJ99P'LMGMOP' 7'NHT' PM T'GNPLG
3GNPPI'\'.I $' HP P i'NH J'M N'N 'GPN'
HP'L PK JGEP P9 7'NHT'H IP PNJ i+
>i Fi 'iMK JiN' 7‡ ‡ ‡ '
2%9G' M MiN'H I.'i 'O i iQ+
>i S i'K iGP]JPiKP' 7‡ "‡ ' ‡ -‡ ‡ ‡ '
HPGP'KHPPUG M P'LM9P'.i ' MKH iQ' 7 'T J'
Q O+
>i SAPKMJGP‡ T‡ ‡ '
-9MT'JOOP'MiO'PWPK JN ip 'M3'H I GP97+
>i ' P'O '7PM'NHP'9M +
>i SAPKMJGP‡ "‡ ‡ '
2'KMii N'A9M1P'NHPP.i 'IT9 P'NH J'JGPGN+
>i SD iGNPMO' 7‡ "‡ ‡ '
>i 'KHM MA9P'L MTP G+
HM OG'79 iN6'MiO'LPAA9PG'GH J9O'AP' NH i'
i'HP+
>i ' ' 3' i "' -'+:%T'GH J9O'KMNKH'K 9O‡ :‡
‡ ‡ ‡
4PN'HP P'NHPT'GHM99 i N'9 P'.i ' 3' i "
0 'K i i0 /‡ ‡ '
'NHPT'KMii N'N JKH'IP.i ' i 3
O ' ip]JN9 NT‡ ‡ ‡ ‡4$
5 'i N'AMi GH' PMG i'
>i ' N& 5
O '1'7 '1'NHPH AAT H GP G7 Q N‡ "‡ ‡ ' '
@ PP/‡'/‡ ‡ ' /
XH GP'PL NML'H' G‡>i K.i $' $ ' i((5H
i - '-'.i 3i
>i ' ' 1 -SMLPNT' MNH‡ ‡ ‡ ‡ '
MT2 GMTG'NHP7'PIO'.i ' 1 -
>i ' 2i'i " -SOJ IQ' N ' O IM PG MN' NHP'
GM I P'NMA9P‡ #'X‡ ‡ '
2'O O'NH IU NHP'.i 2i'i " -$ N 'AP'M
L PNMT GP'7P99 +
>i '@ + SPI7 KP‡ "‡3‡ ‡ '
27'T J' 'i 'JiNP'i'T J'K ILPM ING
#iO'.i 'NHPI' NH'M K iGNMiKT'NHP'KM O IMG
MII N'GNMiO'JiOP'NHPI+
>i '@ + S NBJP' PQM O‡ /JK‡
O ' IP'2'.i 'i N'M QJ1PIN'MGN M +
4 J'I MT i N'G 'PWNPiJNNP'A G 77PiKP+
>i '2'HM P'HMO'GJKH'7NJ9NG+
H SAPKMJGP‡ ‡ ‡2'
4 J'I MT i N'G 'PWNPiJNNP'A G 77PiKP+
>i '2'HM P'HMO'GJKH'7NJ9NG+
HP'GJ99P'LMGMOP' 7'NHT' PM T'GNPLG
3GNPPI'\'.I $' HP P i'NH J'M N'N 'GPN'
HP'L PK JGEP P9 7'NHT'H IP PNJ i+
>i Fi 'iMK JiN' 7‡ ‡ ‡ '
2%9G' M MiN'H I.'i 'O i iQ+
>i S i'K iGP]JPiKP' 7‡ "‡ ' ‡ -‡ ‡ ‡ '
HPGP'KHPPUG M P'LM9P'.i ' MKH iQ' 7 'T J'
Q O+
>i SAPKMJGP‡ T‡ ‡ '
-9MT'JOOP'MiO'PWPK JN ip 'M3'H I GP97+
>i ' P'O '7PM'NHP'9M +

5 8 2 $2% - SAP J !PO AT NHP GPKJ _
N PG T J Q P # #7H
H J Q %GN G 9 !Q I ! 2 7PM I P NH J
9N 8 2 $2% - GH N9T+

5 2 $ S : O Q P T J Q O ! QHN " #
5 2 -

: 9M I G MGN9P # #
HM! P 5' %*

: 9MGGPG# " # - # N+
5' %% %* ' %% %

: 9MGGT I M QP!NG 7GJKH A UG# /JK# @ PP &#?#
PMO NHP GJAN9P GH ! !Q GPK PK PG
X N ! NHP ' %%2 %* % ($" $%

5')@ + SE UP 7 # 5# H
MT 2 KM! ')JL ! KKMG !+

: 9 PG# :# #H
T J '

: 9 PG LP 7J I PO# X # # #
#LM 7G PPN ' %

: 9 I# # 5# H
! O 9 QHN NHP I MN NHP 7 P T ' 8!8 G% PTPG#

5' D @ + SPWL9M ! PWL J!O# " #O# #
XH KH M9]JP 9M! O NHP O P! KH J!EJGN9T ' D
AP NHP PM9 I 7O M!KP+

5' @ + SG M99 # # #
H JQH P P T O L 7 MNP G PM MQM !GN N+
! O QMLP MN O%GN N ' ' H I +

5 $ 8 ' S IM T# #X # #
27 2 I MT HM P T J 9MOTGH L%G Q O 99 N
$ 8 '

5 " S : O AP !Q I T QJ OP# "#O#H
4PN 5 " *NP99 H I P H9 K I P !+

5 G' 2 S : O T P9O T J Q P T J PK I LP!GP#
% # # /# H
5 G' 2 7 T J 9MGN K I LM!T+

5 G' 2 S : O P]J NP T J# " #)
XP99 5 G' 2

: O 7 9 P 9O G !Q 7# # #
H HP ''

: O 7PT9O# # #
"P P !2 NPMKH T J+
" T J GHM99 A O 5 !(2' JG 7 T J LM !G#
! O NHM! U JG 7 T J N JA9P+

5 $ % SEJ T I P!' G KM99PO# # # # *
2!' KH GNP! !Q NH J GHM99 HM P N $ %;
" MO 2 APP!' EJOQP NH J GH J9OGN HM P HMO NP!'
I P+

5 % 2 # #
HJG % 2 $ 8 ' SP P T !P G I M PO#
@ PP # X # <+
HJG % 2 $ 8 ' AJN 2 M! O 2
M I GJ! AJ !PO+

: N PG# H
J!NM !PP G
5P 9MLL%O9 UP AJ99G+

: 9O !Q%G M!G9MN ! 7 1 O%G PNM I LH GPG LMG_
GMQP ! T
2 J9O HM P A UP I !P PTP GN !QG BK#

: !O 9M#
HMN ! M ' 8 GPP!' N QPNHP #

: !O 9 P # 1# #
M!GL NPO NH ! GP ! APNNP QJM O#
JN NH M U!M P 7K I I !' H P M '

: O# # # <+
X P M P MKK J!NPO L K N CP!G 8 NHP LMN K M!G
#

5 S !OPPO# X # # #
4PN # /P !NPG
9 P NHPP ! N M EM % NHP K9 KU APH !O
X HMN 9MOT GHP HP 9 O+

5 SQ O P P! !Q# ?# # #
5 # G & KHM O+

: O U GG !Q KM !# "# H#
O 7 NHP GJ!' A PPO I MQQ NG ! M OPMO O Q
AP !Q M) %% (

5 ' SM9MK NT P!P QT GL N# H #
NH '
#!O AGP MN !' GN M!QP+

5 2 ' %% SJGPO I PNMLH KM99T# / # / # / # #
2
"P P 2 ' %%# NMUP NH G 7 NP99 !Q N JP#

5 2(-' J '@SG I M9 MNH# # # / # H
5 2(-' J '@ O GN NH J NH !U NH JQH
2 M I KMLM G !PO 9 UP M I M! BK+

: O 9O M!NJM! / # / # / # # ,
#H '' '@

: O TPM G# # #<+
HP '2 %' GHM99 OP J NHP I 79PGH M!O
7P99+
3 P NHPT GHM99 I MUP JG PPL+

: O ! M!OG# # # H
HP 5 8 %# 2' NH !U NHPT KM99 NHP L9MKP+

5 0 S $ J!OPO# KW#
5 0 I !P !' NH JQHNG G 9O KHPML HMN G
I GN OPM +
+%

: I M!O CP Q !' 7 NHP O# # # #)
H J GHM99 ! N D

: GGM I P / # #
"MOGN NH J APP!' MJQHN AJN %%

5 * '' * $ $* ' 8 SKM!N NP I G 7 7M9GP O KP#
X # #
/PN HNJ PG Q LP NHT QJNG[' M!O '^
' H 9OG+
!O $ $ M!O ' 8 APQJ 9P NHP KH M!O L +

: P %G 7Y !7PGG # I M!N G+R 2 # #
2!' GJKH M ! QHN
POPM QMNHP %O NHP P!KHM!NPO HP AG BK+

: P %G 6 !7PGG # I M!N G R PWN MKNG 7 I - # #
7# H # #

: MKPG I PN KM9# # # #
(2 NH !U NH J !P P MGN HP P Q MKP
MG GM O+
5 M O CP!' N I PG MN 9PMGN+
5 X HMN \ !' I PN P O

5 (%SAPMJN 7J9# 2W #
PNH !UG ! 7MKP G (%' G MG I !P+

: M !' H QH L KP 7# " O# - # #
P P 'E TPO G !KP NHP L KP 7 MNG GP+

5 ! SM I J '7 'P]JPGN M!G# # # H #
(4 J KM P ! N 7 M ! '1
' ! 8 P%99 JGP ! H GPG+

5 SD9 !P 7M I H JGP# ' ' @ PP #
H #
XHMN NP99%GN NH J I P 7 AA !Q \ NH G G
P! KP8
T H JGP G ! N M

5 %S 77P!OG# # # # #
P G I T Q O 9 O 7 I & IPS
5 % IP+

5 @ + SP!Q M P# # #<#
!O AP !Q GNPP9%O G 7N G QHG KM!' ! P P N +

: M P J MK]JM !NM!KP# # # # # # #
3! T 7 I P!'
5 ' ' (> (

: M PO QQP %G G !Q# " # # #
'T JNH HP!' 2 O O 9 P O O 9 P+

5 2 ') SKMN# # #
2'K I P 5 2 ')

6' : PP!' 9PP PG+R # X # #
5 '%' %

: PP! PTPO I !GNP # 1# H
AP M P I T 9 O 7EPM9 JGT8
2N G NHP ! 2 % * H KH O NH I KU
HP I PMN N 7PPOG !+

5 '2SJ! GP9T# " # #)
!O P HM P O !P AJN '2
2!' HJQQP I JQQP N ' !NP 'H I +

: PQ T MC M!CP!%G L P I# # # 3# H
M!O G M 7 Q N#

5 2SGM O N AP JGPO MG A9JP# # #
!P PTPG M P 2* M!O A QHN M!O]J KU !'
NJ ! !Q+

5 * !' N GP!GPG # A O 9T LM ! # I P!NM9 G _
" # # - #
3 P!'G I T 9 I AG+
XPMUP!%O NH * AP !Q !1 P! MQ%O NH

5 %SQ P M!KPG# " # O# - # 3
"P A OG T J !M I P T J %

5 %SQ P M!KPG# " # # - # #
!O 7 !O J %HPM P NHM!' J 77P!KPG#

5 %SQ P M!KPG# ?# # # #
LPMU T J %G 7N9T+

5 % SGNPL# # # H # #
2 L NT T J m
' * HMN%G M OPQ PP N 9 P+
! N M %

5 D SGNPL OPQ PP# # #NH# 3
O P P T D 7 7 NJ!P+
2G G I NH%O AT NHMN AP9 +

5 8 SDMKK J !Q N I P# # 3# # # #
3 P!'EJGN NHP GJ I NHMN 2 O P N 'T J+
2G 8 AT # !N LH 9JG+

5 <' 9M I P!N# " # H # #
'M!O G PMN J!OP M PM T 9 7P+

5 2- SA O 7L PT# /JK#
/ UP M H NP H !O J!OP NHP 2- G% GHM L
K9M G+

: JM9N PP 7 PGN# " # # # - # #
% G 5 ' % * M! %N GHM99 L9PMGP T J
Q MKP+

5 @ + SA OP !M I P!N# ?# # #
HP P7 P N AP L GGPGG%O NH O JA9P L I L#
'M N N9P NHMN MG KH AP7 P+

5 S !M I P!NPO 7 !QPO# # # <+
: P H I M 9 P T
P 'NHM!' H G 7P99 G%+

5 A N I I PO# # #
HP A OT 7T J O GK J GP .GG I PN I P
NH 7 MQ I P!NG+

5 < !(" " # # - # #
/PO !' AT A9 OT T JNH NH MQG#

5 %SHP I 7M QM I P!N# / # / # / # # #
1 HT I PG M P % !' M!N !' JL O%G H GP#

: JM ! %G 6 - MGN O O +R # # / # # #
O9PPN NHP N I P KM P9PGG9T MG NHPT O O !' NHP
Q 9OP!' 9O+

5 SD9PMOP %G GNM!OM O# " # O# # #
2 GNMT AJN 7 I T

5 ' SOPKP !Q# # # H # #
HJG !M I P!N G AJN NHP ' GH P
M I GN OM!QP JG GPM+

5 ' ' %%' "' !%$ SGHPOO !Q QJ 9N9PGG A9 O+
" # # - # #
HPGP HM!OG M P 7 PP 7 I ' ' %%' "' !%$ ^

5 ' 2 SQJ 9NT 7# # 3# H # #
JN 9PGN I TGPO AP ' 2 GP97 !Q+

5 ' %S PO !' NHP 9M!QJMQP 7HP M9O T# " # J# #
" PMO N 7 N
G HP N NM9 ' %

: J99# " # O# - # # @ PP " # O# - # # a#
#G O MN J!QP!N9P '" NHP KJKU %G A O+

" +

9 () A DA# (# X # # #
HPGP U! QHNG H9 $ ()

9 SNP I 7 7M9K ! T 9O# 3
27'2' O L P HP '$
H JQH NHMN HP EPGGPG P P I T OPM HPM N_
GN !QG
2%O H GN9P HP 77+

" MQQM OG 7NHP KU# # #H # #
T M!O 9O
#G $ %' $ ' ()

" M9KT !' APMUG# / # # #
J I N9 P '$ '(2 ")%
X NH P P T QM9P M!O M T 7NHP I MGNP G#

" M97 7MKPO Q MNG# ?# # #
#' $ ' ! (

" M97 7MK%O GJ! SOP KP 7&O M O 2 " # " # # - #
!
XH GP H LP7J9 K 9 J G
#O M!KP J $ ' ! %' * GN !Q N GH !P#

9 ' !- (SJGPO 7 'G I M99 LM N K9PG O G !G# #
# # #
-' [GHP N P NHP 9PNNP ! N '0K NH JGM!O $ ' ^
- (*

9 ' SH 9 !PGG# # #
T I T $ ' * 2 MG 7MGN MG9PPL+

9 '' 8 %S GN 7 P I AP # &# # # #
HP KM I P MO !PO H NHP '9 UP G PPN MT
P!N AMKU 9 UP 9 '' 8 %* GH N%GN 7OMT+

" M!O 7 P M I G# #X # H #
I UT I JGUPNG+

9 % SAPN NHM9 K !N MKN 7 I M MQP# T# #
HP P I P I A M!KP ' 7HP ' N ' H 9O
HP $ %' N ' HP '9 O+

9 !) ($ SHM!OUP KH P7# ?# # #
2 U! N IT $!) ($ MA JN T J A G+

" M!O PGN !' NHT O GK J GP# # # # <+
9 %' ' $2 %(% * NHMN HP HM!O
2!' H GP K I LM G !' M99 H NPG M P !U'
X N !Q NHP ' !' PL MKH+

9 % 8 SHP !# " # H# #
2 U! M HM U 7 I M $ % 8

" M!Q AT NHP M99G# T# H #C'
!O 7 '2 M I KHP NHM!' $ "2 $ '8 ''%*
2' I JGN AP LL%O+

" M!Q H Q# # X # # #
9 '$ G / MN !' 7 AMK !+

" M!! AM9# " # O# - # #)
#' NKH AT 7PM ! N 7 KP 9 UP 9 " '*
5 PG AMKU J N LG M!O K !]JP G MG GHP
9 GNG+

9 -- %S I MUPG HMLLT# # #
HMN JGP G ! N 7 A OOP!' JGJ T+
XH KH $ -- %' NH GP NHMN LMT NHP 99 !Q 9 M!+

9 ' SH P9 !Q# 3# # #
XH 9P GHP x NH $ ' %' 7PMGNPO !' I T H JGP+

" M I J # # # #
#' " PMNH+

" M 9O ' JN MQP K I I NNPO !' NHP A OT 7# " # O+
' C '
X NH M !P ' J!O !' T ! NH QH+

" M LT# # H # #
3!NP ' # P 9 UP M $ -2

9 SD PWPO N I P!NPO# # # H # 3
2' PLP!N I P I JKH
HMN G '2' $ 'H I +

" M G# " # # #
2N $ 8% I P NH 7PM M!O !OP +

" #

" MN LP!NH JGP 9 UP
X NH T J $ - $ % !6)

9 $ - $ % ' < $%' HMNH LJN H I GP97 / ! !
% G H G !' A9M I P8 $ $ - $ % ' ' 7 I
PGN+

" MJQH I !O " 99 " O - +
" A9 O 9T NHP GJ!' APQ !G N LPP
#A P T !' AJGUT H 99[

9 $ 2 S9 7NT GL NPO " O - +
HPGP $ $ 2 OG 7 HP G
D " M P AMNNP %O I P 9 UP M !Q KM!! ! GH N+

" MJNA T " - +
HP KMGP 7 M N PA9P $ " 2 MG M I M!G !' 7
H I+

9 S P 2 G GJKKPGG G HM P O !P X
#T NHMN 2 O 8 M!O $ ' M!T N I P NHPGP
NH PP HJ!O PO TPM G+

9 S 7 2 HM P " - +
#GKPLN P GHM99 N HM P $ ' M G J9+
1 ! H KH 2 %99 N GG NHP 79PJ OP 9JKP 7 O M!KP
-' $ (%SHM P GP!N NHP 7 PP KPG
" 3 $
#99 NHP K9P UG
2 I PM!'NHP'9PM !PO !PG ! H GN M!'U !QO I G
9 $ (%
9 ($ ()0 $ SHM P NHP NHP7N J!KHPKU%O
NH
HP 9M G D J KJ A M!O H L ! NHP JQH
L P
9 ($ ()0 $
" M P HMN GHM99 HM P ! P!O # KW
M G O !P $!8$ %$ "'$
9 SL GGPGG ! # / 4 J 1 3 ! APM O G M T J!QP A NHP %G
P P!JP+
9 SPGNMNP X 17 HMN $ A PPO !Q+
" M !QG / X H GP M PGN $ % I MOP NHP A9 GG I G O NP
9 () S!]JM NP ? T / 9 ()*.' M!O 9PN G9 L NHP O QG 7 M
" M UG% AP99G # / HP 7M9K !' HP " ''%

" P ! N 9 U%O # GN !M I PMGJ P 9P!N I P
X HP!' NHP APGN H !N MG Q P!' H I 8 $
')
1 O O N 7 I H G NPPNH+
$ HPMOGN !Q MGH LMGG !MNP " O
HP K 9 M!O NP I LP MNP !O 7 Q MKP
1 %P A9 G NHP 7 9NHT M!O K !NMQ JG K9 JOG
17 $ '2 I J NHP GL 9 M!O 99M !T+
" PM N%G MNN !PT # <+
JN HP!' NHP $ 0% 2 !KP G I JNP
HP K9 P!N A PM9KG MG OPGLP MNP !' H G GJ N
9 SHPMNPO ? # <+
HP ! 7 NGP97 NH JQH $ PO H N+
9 2 SOM U 1 + %
% G $ 2 ! QHN+
" PKN %G KHM99P!QP !' HML I M!%G " I P
!QG e !KPG 9 OG BK+
" PKN OPMNH 7 S7 I HML I M!%G " I P
)
P99 I P T J HPM P!G ! H KH LM N 7 H G
$ A OT
HM99 2 OPGN T H I \
" PKN %G H GP
HP P HP 7 QHNG ! : M9MNHP H G H GP
" PKN OPMNH 7
N UP 7P99 G GN UP+
" PP G X <+
X 99 T J Q ! $ %1
9 % SHPM !QG X
" P K MKUG H G Q QP H G G OPG
X NH 9P!N $ %
9 ' SGNPP PO NH JQH
! O NHP AJG !PGG HP HMNH $ ' I JGN L !
M M M!NPO !PPO Q P H I M APNNP L K9M I M_
N !+
9 '-' %% SNHMN M77 O ! HP9L # #
G NH GP L A OG N9 MN $ '-' %%' AP PG GM +
" P I L 3
" P P%G NHMN 2 M M!N T J 99 LMT NHP I M99+
" P!AM!P " X NH EJ KP 7 K GPO HPAP ! !+
9 ($ SLMQP 5
2 O AJN APQ M' 9 NN9P KHM!QP9 !Q A T+
AP I T $ ($
" P I T 7 ! I JNH & ?
M!' ! I M!' NP99 7 I T J!NH 7NT G !' \
" P! T KHM MKNP 7 " O
" PM H I AJN PMG ! ! O ! NT+
9 @ + SNMUP H 9O 7 X
! O I P 9T $ NHP GN P M+

" 1 /

9 SQ MGL " L G O8 M!O U! NH J M I P H O $
9 (%S HMN GHP M77PKNPO H PO + 9 (%@L PNNT
H JQH HMLL 9T HP KM P9PGG PM 2 7 99 %O
O I T I GN GP JG OPKU !Q+
9 " ' % (SD! A9P GJ N I MOP N HP ! !
K J N / [NH G OP KP MG GP!N I P 7 I M !J!
1 G GNP GM!KN 7 PO 7 H 9 PGN ! NP8
XH KH 9MNP $ " ' % (O O GHJ!
" P G PPN LP 7PKN !G
X HP!' 9 P A M ! M!O HPM N+
H GP G P P Q!' NH !PG M P M99 GJLL9 PO M!O
7 99%O
E9 %8 - (%* NH !P GP97 U !Q [
" P M9OG " O
HP P%G 7 NHT 9MA J !NE T+
" P A Q MKP ") <+
HP P%G JP 7 T J M!O HP P%G G I P 7 I P S
P I MT KM99 N $ "! (O J!OMTG+
9 SDJGPO MG M! J! / +
H J 9 GPGN $ M APNNP HP P N 7 !O+
9 "2 SMG N I MT HMLLP! / + / + / +
HMN%G $ "2 0
9 % SDAPMOG I P! A J!O N L MT 7 M AP!P7MKN +
#!O NHP 9MNP O Q! N PG HPML%O JL N NHP I +
XP PGN T J $ %
" P I P%G 1MU + X + +
P T J ! NHP LM U MA JN I O! QHN NM 9 0%
)
" OP NHP 7M9GP GPP I G N JP + +
JN 9PN T J PMG !GP P
I MUP NHP N JNH MLLPM HP P N GPP I G H O8
#!O $ $ ' % % %
9 J S!M I P 7M A T GH GL N + " + / +
9 J* M!O M99 M7NP +
9 $ SJLLP # X + +
/PN $ $ 2NM9T
@ H GP AMNPO NHMN !HP N AJN NHP 7M99
17 NHP 9MGN I !M KHT GPP NHMN T J K I P
N N H ! J AJN N PO N+
9 ' <= / JK
9PN N ! N AP $ '
0 - I P!%G 7MJ9NG NHMN NHPT M P G 7J97 99%O+
9 ' S I PM! GL NPO LP G ! + + @ PP
" + - + +
O GHM I P NH J $ ' * 7M OP 9 GH GL N
9 ' SK M O9T GL N9PGG " + - + + + +
" P MG G I P $ ' 7P99 NHMN HMO GN 9P!
HP H GP HP OP !+
9 % S NG #
#!O M99 NH G OJ I A L9MT HMO $ %MKNG I MOP L9M !
X NH NPM G H KH KH MG 9 UP HP PTPG O O
M !+
9 % < % #
#!O HPM !Q H I NHT L P HMO 9 GN ## L P
9 % % SNHP Q M!O GPM NHMN HP @NHP OP O L
M GP 7 I # + + + +
2 MG 7 9MNP MG LPNNT N H G P!OG+
#G G NHP I I OP ! NHP I T N9P 9PM7
$ % %
" G H !PGNT P M OG H I ! NGP97 # NH + + + +
HP I M!' G H !PGN+
' $ $ HP P7 P HP 99 AP I !
9 % $ % 2 8 % $ % '
9 %% "A (SNH GP GJAEPKN N H I + + / +
HP 9 GNG M!O 7J99 L L N !G M P M99 I MOP
1 JN 7 $ %' % "A (
9 $ 8$ SDNP I ! M KHP T + + / +
% MG 2 ! NHP MQP NH JQH T J $ $
M8$
9 SGN L # + + / +
9 * $ * $ @
9 "* "SMN M!O I K I P HMN 9 / + + + + +
9 "* "* G H G O+
" AAT H GP / + / + / + + +
HP $ ""2!$ % G 7 Q N+
9 % B8 $ $ % 8 - <?T 0 JL NH H G !
P!Q !P + + + +
O %N G NHP GL N N HM P NHP P!Q !PP
9 % M8 $ $ % 8 -
" 9O M Q O9T I M! + # X + +
2 U! M I M!' NHMN HMO NH G N KU 7 I P9M!_
KH 9T $ ' ' 2 7 M G !Q+
" 9O JKJN A GN !QG + + 5 + +
3! JQH+ 9 ' * (" 8!% %
9 ' * $ SH 9O NHP P7 P J L P + + +
9 ' * $ # ! QP9 8
2!' J P I P AP NH J MN 7J99 J GP97+
9 ' SDAJ OP!' 7 NHP G !Q+ # + + + +
HP!' NHP A T GHM99 G !Q8
$ HP $ ' P P T I M!' GHM99 APM MG 9 JO
# G H G GN !Q G OPG KM!' 99PT+

" &

!7 SP! JQH G 7N G 7N ! I P 7 NHMN + # + +
X HMN PKUPNH HP H G OP %G M!Q T GN +
" G 79MNNP !Q / $ '' *B H G 6 NM!O 2 GMTR
" 9T K GGPG !' 2NM9T + + + + +
HP O NH GN MT MA JN
T $ '2 (%% %
" 9T P99G : + + + / +
N M !N : PQ T%G 8 ''
9 % 2 S9 AP M9 NT + # NH + +
3 P T I M!' HMG H G 7MJ9N M!O $ % 2 G H G+
9 2!% SJGPO AT " GNPGG 7 H I K OP% " + +
+ - + + +
1 NH J $ 2!% QJP[NH J M N M $ 2!
%
9 2% ()' SJGPO AT " GNPGG 7 H I K OM9 " +
+ + - + + +
K NH J $ 2% ()' 99M !' 9N NH J U 99 : O%G
77 KP G M!O NHP U !Q%G \
" ! 7 KMA 9 NJO ! NMN AJG / + / + / + + +
N G 9 !Q AT NHP HPMO MG $ (" ' !
"
9 SM GNT9P 7 ! A 9 NT + # + 5 PO KMN ! '
9PM P N N T J H ! J MA9P GJ PT M!O T J
$ N T J HPM N%G K !NP!N+
9 (%SM99JG !'N NHP QM I P 7 A9 !O I M!%G
AJ77 7 I P 9T KM99PO H O I M! A9 !O + # X + + <+
9 !"' SDA9 !O I M!%G AJ77 " + + +
X HMN OP g MG%N+
HMN NHJG HMNH K CP!%O T J MN $!"' 1
9 - @ + SPWLPKN # + + + +
2 KM!! N $ -
MGGM M!O # !N !T GHM99 P99 Q PPN N QPNHP +
9 - %SPWLPKNMN !G " O - + + /
T H I JKH APNNP NHM!' I T O 2 M I
T G I JKH GHM99 2 7M9G 7T I P!%G $ - %
" LPG ! N GJ 7P NPO N OPMNH + 1 + +
HP P7 P I T $ - %* % $ +
NM!O !' A 9O KJ P+
! - SDJGPO !' NHP L9J M9 + + + + 2
: JI I T $ %
5 # T G NHPT AP PMOT+
" GP]JM9 N PG 7 NHP + + + + / +
" G $ % H LLPO+
9 % S PL PGP! NMN P 7 NHP 7M I 9T / + +
GU HP 7 Q P!PGG O
- T J AJN I M U H NH G APK I PG N P $ % 1
" JGPH 9O%G Q M P + + + +)
H G 7J!P M9 LMNH A !QG N T J $ % $ ' 0%

" JGPG !) + "
2 I LP M9 MPGM BK+
9 8 $ M8$ " (% SH P99 G NH G O NNT
MOMLNPO N AP GJ!Q AT GL N !P G MN NHP HPP9 " +
)
4 J I JGN G !Q 5 ! M O ! M!' T J KM99 H I
M O ! M+ 1 $!8 $ 8$ " (% @
9 8 S ! HMNG P P MT : + $ + + +
9 8 " AJN M 7 99T A JQHN NH N+
9 J %SDHM I GN !QG X + + + / +
X H KH $ J %H !PGNT APH !O PGN M ! !Q
0 I K J GP P]J %O+
9 ! SM K !7JGPO ;GNMNP O G OP 9T " +
+
! O P HM P O !P AJN Q PP!9T+
2 ! $! N NP H I +
" J I M!' I NM9G + + 5 + / +
HP $ '% M!N+
$ 9 2 (%SM K 99PKN !' 7 AM99MOG+
+ + + / +
# ! 9O HMN M!O $ $ 2 (%
L KUPO ! %N 7 M 7PMNHP +
9 %SKML K JG # / + / +
HP OJUP G $ %
9 %S7J99 7HJ I J G " + - + + + +
G $ %MG NP M!O MG GJOOP!'
G 79M G K !QPM9PO !' N P GL !Q 7 OMT+
9 %SOP T ML JG & ? + +
I P HP HMNH H O H I GP97 M I !Q N9 PGP N PPG
AP K !G NPO NH NHP $ %! QHN+
" J I LH PT " P & + + + +
($ X HMN K I7 NMA9P H J KM!GN NH J
!M I P+
HMN P P Q MK%O I P !' NHT K I LM!T \
7 ($ %OM NH ! !P AJN 9 -$ 2 9 8
NHMN KM99%O T J Q MKP
A PMU7MGN !KP 7 NH 7 I T K I LM!T+
6 " J!O PO P T M9PG+R + # + + +
HMN 2 HMO I T Q O N JN 7 NHP / 9 ^
2 ' 0% .
" J!QM M! + X + +
1 AMGP 9 QHN[
" J!NG JL G !Q 7 & ? +) !
" J!N !Q NHPP HP!KP NH $ %! -' N NHP OMT+
9 '2 S9 JO ! GP " + - + 2
HMN NH NHP $ '2 OPMNH NGP97 M MUPG+
$ `MR

9 '2 '2SDJL M NJIJ9NJ JG GN 2 ! '
X HP! NHP$ '2" '20%O !P
X HP! N9 P AMNN9P%G9 GM!O !+

9 SK9MGHPO 2 HP! GP 7AMNN9P$ ' ! NHP M

"JGAM!O 2 2 Z+<+
4 J 9g NJ !Q O $ %" ! - ILPTE
T J 9g UPPL NHP H JGP+

9 %" 2S7 JQM9 NT 2 HP P%G $ %" 2 !HPM P!
HP KM!O9PG M P M99g JN+

"TI! MNN AJNPO N 2 # IA GP LMGGMQP 7 I "
HP K KU NHMN G NHP N JILPN N NHP I I BK
"TLP ! " 2- N M GMNT +

2+

(S2 KM P MG IJKH 7 X 3 <+
1 P P T J A NH I I NHP G
(NHM!2O 7 HPM P!+
P P! N H G G GNP +

8 ''<= GHM99 3 - P KHM!KP 8 '' AP NHP P MG G ! MG T J++

2KP A U%G NP ILP 1
2N G M G O 7 LM ! NHP (!")0% -

2KP9M!O Q " O+
H J L KU PM %O +

2OPG 7 9M KH S7 I NH%G -9JNM KH+ ?+
P M P NHP %
(
0 ' SDJGP9PGG 7 J N9PGG 3
GJ L !Q T A M ' I GG+

' SGNP 9P AM P! 1 3 '
#!N PG MGN M!O OPGP NG '

2O9P NM9U # <+
2 99g PMN ! IPMN 2%99g ! N O !U G 8
27 ') 99 !KP AP !PKPGGM T ';
2%99g ! N G9PPL !P NHP +

+ S NJPG 7 # / @ PP &?
4 J . G NHP !9T LPMKP IMUP I JKH NJP
! 8
8 8 SM99JG !N IP!MKN !Q 7P IM9P
LM NG # /
8 8 # 2 J9O U GG MG IM!T 7
T J MG 2 I O APM OG NHMN L9PMGPO IP+
(0 % < NHP P AP ! PGLPK MG
OP!J!K MN !MQM !GN JG # <+
(0 % %# HT GH J9O ! N P
P NHP P !LP G !
' # <+
X HP! P P T J MN ' 1
'' S 99 JGMQP " 3 -)
3 NHP N AP PGN PO N I T A9 O
1 MUP IT '" NHP MO M!NMQP 7 IT Q O+
''! (SP PKNPO 7 P 9 &+
?J9 JG GPGM %G ''! (N P +
''! $ " S 99 9 OQPO U! 9POQP '!$ " @ GP NHM!? P
!M NHMNKHPO A JGP
2 I AM " O+ <+
!O MNHP KH GP N H OP NHP I ! M !PN
HM! M IL9T N 0 " NHP K UPO N N9PG+
2SDAM AM NT " O - <+
2N MG A NH IL JG M!O J!MNJ M9+
HMN GJKH 2 M!O A9 OT GN 7P
H J9O P Q!M I !Q L 7PGG G 7 !P 7M NH
2 I QP!%G K UP T G /P!! W%G P IM UG !+ T <+

JN H G !PMN K UP T[" P KJN J NG !
KHM MKNP G8
#!O GMJK%O J A NHG MG ?J! HMO APP! G KU
- SM GH N M Q M7N MLL9 PO N M KH 9O / / / +
+
HP GP97 GM I P NH !Q OPM -
-@ + SP!Q M7N !GP N & 2
- JN M O L !Q K J!N T%G A UP! !Q+
- SJGPO MOEPKN P9T ! NHP GP!GP 7 J!GJ NMA9P
+ +)
O Q! 7 PG M! - NH JQHN NH A PMNH
- 'S P T LM N M9 IP K JG !#!QP9 8
2!NH G 2%99g AP - ';AP T J EJOQP
17T J !KMJGP+
- 8 @ + SP!QMQP " O <+
HP P7 P NMUP HPPO H T J - 8 J LP
G !+
- % ST *(B%2(%7%2- , T 7
4 PN NH G - % NH !Q 9 PG H ! ! IT
OPGL NP+
- SJGPO AT / MJ!KP9 N7 LP N !P!N +
/ '#
HP GJ N G - N ITGP97+
2 I LPN K G NHT Q MN 99 NT 3
[2 O O - (%$2 '' 2 ; 7 M9 9 %G
! GP G ! H LGN KU+

2 5

- %SJ!L NT !Q ")
HP KPM! P LPP !Q 7H G 9 GN+
3MNG ! N NHP 79MNG NH I P - %HMGNP
HM!T J!Q /MP NPG+
-' ($0 S !NP P! / <+
#!O 9 [APH 9O NHPGP NM9P!NG 7NHP HM
X NH N GNPO IPNM9 MI JG9T -' ($0
- (S IL NJ! NT <+
M M N
HP 9PNNP MN G AT%G Q PMN - (<+
- (S IL N X <+
HP GPGN APH 9OP NHMN U!P ! I P AJN
GPP !Q K J9O ! N GMT 7NHP - (P P E T
G +
- (S B*2+', +1 ?+
#N J - (H NHP G HP K IP+
- (< - % T ?
L ! - (7 G G9 QHN M!O N M9 M
!MNJ P+
- S IL NJ!MNP <+
27NHP L !KP AP N - *NP99H I NHP P G
IPMGJ P !P P TNH !Q+
- % <(% : <+
#KK O !Q N T J 9MOTGH L%G - %
2IL GG A9P G9M!OP G <+
" G Q 7N G !OP G !Q - %% "' %' %
S ,+* &+
JN 7 GN 2%99g NJ !T H%7P99 H G Q M P+
<SOJ !Q - <+ :
#!O 9 OG M!O 9MO PG NHP 9 PG+
"M P PMO N 7 PGN MN PG+
2!MN NHP !O <+ ?+ <+
IPNH !Q MA JN M 9 NN9P 7 I NHP QHN
$ '8 8* P9GP %P NHP HMNKH+
'"' SNP I 7NHP 7 PGN " O - <+ E
27 P AP 3!Q9 GH OPP AP NHP!' '"'
S7%21' ; % <+
) /PM P P M H 9P NH NHP IM O8 IT
I !O L I GPG NH IT HMA N ! 9 GG GHM99 N JKH
HP AT IT K ILM!T+
(
% SMAJ!OM!N9T <+ #+ '0
5 O HP A PMU JN !N NPM G \
%%
' S !K !G OP MN !' 7 ' !' PWKHM!QP 7 <+
XH KH MG NHMN HP ' % NHP L P I GPG
17H IMQP M!O 2 U! ! N H IJKH N AJNP
H J9O L PGP!N9T PWN LMNP IP M!O I !P+
'-' (SNHP P L PGP!N+ " <+ -+ <+ .
JN HMN GM O "P! T%G]JPP!'7
O '2 HM P HPM O NHMN GHP MG NHP P '-' (
'- SD NH PWMKN!PGG+ :
#99 NH G 2 GLPMU '-
APKMJGP+ #+ <+
JN $ NH J M N 9 UP N AP IT U !G IM!'
9 P J!A J GPO D!O 9 P IT K JG !+
'$ '> ''S NNP!+ " -+ <+
#!O NHP!' P IMT OP9 P J GJLL9 KMN !G '
$ '> ''
'$ '- '- % '$ '$ "' SD! NHP L M GP
HP AP !Q HJ IA9PO+ #+ X <+
MU !Q NHP I L JO 7H G HJ I 9 NT
'$ '- '- % '$ '$ "'
% S !N JGN <+
"P 99g 9PN IP HM P
HP NHP HM97 % ;
'2 '$)%S !T J 7M J <+ #+ <+
2 GPP 9MOT NHP QP!N9P IM!' G ! N '2 '")%
(% S !K NPO+ &+
H !U T J IT 9 O NH G 9 NN9P L MN !Q 4 U
X MG ! N (% AT H G GJAN9P I NHP +
NMJ!N M!O GK !T J NHJG LL A JG9T 1
(SD II PO MNP9T+ #+ / <+
HPT HM P IMOP M LM 7 GNM G N IM MQP
H KH NHPT 99g K9 IA (
(2SU! !Q KJ!! !Q+ / / / <+
T G PPN J!KP 7 IM!%G 79PGH IT (2
?P [
(% SL OJKP+ <+ 5 <+
HP IMCPO 9O+
T NHP (% # ! U! G ! N H KH G
H KH+
2!OPW+ " <+ <+ $
#H IP HMN MKN
HMN M G G 9 JO M!O NHJ!OP G !NHP J
2!O PG / !GKH NP!%G IML 7 M99JG !N +
"P O PG G I 9P H G 7MKP !N I P 9 !PG NHM!M P
!NHP !P IML NH NHP MJQ IP!NMN ! 7 NHP
2!O PG+
) SLM NT K 9 J PO U! NN !Q+8 <+
HP QM NP G 7M!')
'2SN 9P MA9T P99 " <+
XP HM P P7 IPO NHMN '2 NH JG+

2

H 7C QP SO G OP PO ! O QPGNPO GNMNP 7 M77M G ?+

4 J M P A I
GPN M 7 I JL !NHMN %
2!OJKN ! +" O - <+
HPGP L I GPG M P 7M NHP LM 9 PG GJ P+
#!O J ('7J99g 7L GLP JG H LP+
J ("' SI GN PWPK MA9P+ <+
1 AP NH J OM I !%O J ("' O Q [
2!7PKN ! &+ <+
H G 7 N PGG AJ 9N AT !MNJ P 7 HP GP97+
#QM !GN (M!O NHP HM!O 7 M +
2!7PKN ! #+ <+
#!O MG NHPT 9MGN NHP P OJ P GN 99g P!OJ H+
O P (7 I NHP OM!QP JG TPM +
S !7 ! NT : <+
#!O !GNM!KPG 7 7'9 P+
$ SQ P !7 IMN ! !NHMN L !N #+
X <+
$
'SD NH JN GP!GP <+
HPGP L I P!M P! I P
JN !GN JIP!NG 7G IP I P QHN P I P I _
AP +
0 SL9POQPO+ #+ X <+
2 GN O
<(%J OPG Q!P 1
1!P NHMN PWKP9G NHP]J UG 7A9MG ! !Q LP!G+
#!O ! NHP PGGP!N M9 PGNJ P 7K PMN !
5 PG N P NHP
2!HMA N NHP I <+
#!O OM P IP N NHP OPGP N NH NHT G O 8
27 N P I A9 !Q 2 $ " $ L NPGN IP
HP AMAT 7M Q 9+
$ " "' SJ! !HMA NMA9P+ &+
3 P!N NHP 7 CP! OQPG 7NHP #9LG
1 M!T NHP Q J!O $ " "
$ @ + S ANM !L GGPGG !+ :
H G P9GP ! NH !Q 9g $ HP +
$ % SKMJGP JG N PKP P+ &+ 2
2N IJGN AP Q PMN N9 MN KM!' $ %
IJKH MG 7M NH JQHN 7 99% !H I+
2!UA ! MNP+ " O - <+
U !O M 7MNHP 7NHP K II ! PM9+
AP O GQ MKPO AT M!)$
<< SO P99 !Q+ &+ 7
H J I GN APMJNP JG
XHT GH J9O HM O 7M J %O Q P7 AP 9 OQ%O !
NHPP \
% SHP!AM!P+
1 HM P P PMNP!' !NHP % '
HMN NMUPG NHP PMG !L G !P O
% (SOP7P!O N 7 N 7T N+ 3 <+
2 IJGN QPN M GK !KP 7 IT HPMO M!O %((
N +
% (SPWMIL9P K A MN !+ &+ V+
P99g H I H G 7PM G M P GHM99 NH JN !
% (NHMN GPK !O IM MQP I P+
# P AMGP PGLPKNG 7NH 7N AJN ! !P 7 9 P+
2!GN JKN ! 1+ <+
MNJ P J9O ! N ! PGN HP GP97 !GJKH GHMO
!Q LMGG ! NH JN G IP % (
2!GJ PKN ! 7 NHP & IM!L9PAP M!G MQM !GN NHP LM
N K M!G -9JNM KH%G MKK J!N 7+
J77P JG N 7M I GH M!O NHP GN PH JGPG
K M I IPO NH Q M !+
@ + SO PKN+ <+ 5+ <+
0 7NH J O GN
P P G 9 NN9P GH 7 9 P N HP +
2!NP!O N GP99+ <+
X P%99 ! N K I IP!O HMN P '%''
<-J$ &+)<+
P I A9P M!O GNM N MN MQQ !Q 7M GN M
OPPL GJGL K !+
SL PNP!O !Q+ /JK+
PM !PGG NH HPM T GL QHN+
%SD !NP!N !G+ #+
#!O ! HP G AG O HP % A PMU+
SPMQP !PGG 7MNNP!N !+ X <+
#77PKN !' NHT GNMAG NHP KP!N P+
2!NP PGG%O+ / <+
H GP T J!Q 9 P
HP !PG 7O M!KP M!O I 9U 7 J QJ!OT
N P N AP %%0
' <$ 2 M N N9P N ! /JK+
JN APMJNT ! NHMN H NP '
O I P!JG% O PG O NH KHM99P!QP NHMN 7M
7 P9O+
% SK9 GP9T N PO /+ <+
XH KH M P N % N%J!9 GP+
S IMQ !MN !+ <+
X%H 9GN IT HPM !Q ! N IT N !QJP+
#!KH G !' 2GMAP9+

%G S i G A9P‡ /‡ ‡
HP'O MI io' HT'%W MG APMJN 7Jƒ MIO' LP N PG O O'0PI0+
XHP PN 'H G %G 'L LP N PG O O'0PI0+

%"' SJi9 9KPO' MN'O G PQM OPO‡ ?‡ ‡ ‡ '
5PMNH 'HM iO'L PT%O' JL i','NHP' JN M O'LM NG'
/PM PG'NHPl' % "(
i 8 S iN l MNP‡ ‡ ‡ '
'?' MG Mi' 8 ' 7H G+
8 S iN l MNP‡ ,i'K i7 OPIK‡ &‡ ‡ ‡ +
XH ' G l GN 8 ' NH'NHP'i A9P'OJUP
2 %C' HP'?' 2' GMNiO 7 9 iQ' HP p' H G = ()' ₫ $'
X H 9P' 2' GMNiO 7 9 iQ' HP p' H G = ()' ₫ $'
(' ()*
2 ()%SPMNHP i'O iU iQ' pGGP9G‡ ‡ ‡ '
P' $ 'A ()%'7M ' NH i'NHP? 99G 7M ' NH JN‡
20 ()%SG l M99 HM l I P G' l PO' AT' NHP' UPTG' H KH'
GN UP'NHP' GN iQG' 7M' Q iM9‡ ‡ KWW ‡
5 '?'pi T' A ()%*NHMN' i A9P'9PML'
'U GG'NHP'NPiOP ' i M O' 7NHT'HMiO+
?MOPG‡ "‡'O‡ ‡ '
"P G' iOPPO'M'H GP8 MiO'M99 %JA %'T J
I MT'KM99' APMGNG+
?MOPG‡ "‡ ‡ -‡ ‡ '
#iO'i '9 JO H 9 iQ' 9 pG'M JGP'9 %A %'
HMN'O MQ'NHP'N MQ K'I P9MiKH 9T'i QHN+
?MiJG'N HPMOPO‡ ‡ ‡ '
'AT' 8 i$ ' %
- SAP9 iQ iQ'N 'M'AJ77 i'MEMLP‡ ‡ ‡ ‡ ‡
‡<'4P'I GN K M GP'7 PCP'KMLMK N PG'T P E J O Q _
IPiNG+
' ₫ $ '('() SN KU' 7'NHP'LPiOJ9JI‡ X ‡ ‡ ‡ ' ‡
2'9 P'NHPPi N' A ' ₫ $ '('() APH iO'
X HMN' 9MOT'GHP'HP '9 O+
(SDEMJiN iO'HJ PO9T' I iQ‡ &‡ ‡ ‡ <+
LJ' Q M99'O'MiO'N %O'AT'<< K ZD 9 iQA UP‡
?MT' 7 2MN9T‡ T‡ ‡ '
I P MT' ' '2*
X H GP' I NHP' MG'HP'LM iN iQ'HMNH'APN MT%O'
H I +
6'?PLHNMH';?JOQP' 7 2G MP9 R' LMGGMQP 7 I'NHP'AM99MO'
7‡ "‡ ‡ ‡ ,
1 iP'7M 'OMJQHNP 'MiO'i ' I P+
?P U i9‡ :‡ ‡ ‡ '
TA') ' G'M'O JA9PN'
?P JGM9P l' HM l AP ‡ "‡ ' ‡ "‡ '
2i'NHMN' % ' , 'GHM99 "M T'O P+
I P 'SNP l' 7'7M9K i T'7 NGN ML G‡ 1‡ ‡ '
27'2'O 'L P'HP'HMQOM O+
H JQH'NHMN'HP'A %%' % P P' IT' OPM' HPM N_
GN iQG
2%O' H GN9P'HP ' 77' MiO' 9PN' HP 'O i'NHP' iO‡
'L PT'MN'7 NJiP+

% SM l MG]JP' 'LMQPMiN‡ &‡ ‡ ‡ 3'
#G QPiN9P'MiO'MGE KJiO'MG' 'A % *
: '2'N '7 QHN+
?P G'N 9P MN i' 7' i' pi KP'MiO' L MKN KP' 7 JGJ T
AT‡ ‡ ‡ ‡ ,
"P'9piOG' JN l iPTQ MN G'MiO'A iQG O i'
#G 7PM 7J99T'MG' O N'M QM9PO' KU'
1%P HMiQ' A 2'H G K i7 JiOPO' AMGP+
+
MNHM iP' 7O MiKP‡ "‡O‡ ‡ ‡ '
#9 KP';NJ'MG'PN 'BK+
PPKH‡ "‡ 3‡ ‡ ‡ '
2' iOP
HMN'GJKH'M') ($KMi' N'H G P'AJ9U'
MUP'JL'NHP'MTG %NHP'APIP7K MG'GJi+
7 "@ + SGKJl‡ /‡ /‡ ‡ ‡ +
XH 9P'Q PMGT'? Mi'O NH') "NHP'L N+
7 -'@ + S PGN M i? :‡ ‡ ‡ '
#'KJ'KMii N) -'H lGP97'i'M99K lLMl PG+
7 -'@ + SKM P'7 ‡ ‡ ‡ ‡ '
&PMG i'N'JG N'H / 7P
27'2'O '9 GP'NHPP;2'O '9 GP'M NH iQ'
HMN'i iP'AJN'7 9G' J9O') -
7 -'@ + SO P99‡ ‡ ‡ ‡ '
#iO' G lPN lP' HP P' PM NH OP9 iQ' K i PG
) -
7 -%SO P99G‡ ‡ ‡ ‡ '
#iO'HP9O' i' O9P'L KP'N 'HMJ'N'MGGPlA9 PG‡
XHP P'T JNH'MiO' K GN' MiO' N9PGG A M P T
) -%
7 "S9 p T 7'& A i' " O‡ '‡O‡ -+
‡ ' ‡
H PP' l GAPQ NNPi' UiM PG i'7 "'
KM lP MN' IT AMKU+
pi 9 NH' LMQPMiNG' MN+' ‡ ‡ 5‡ ‡ ‡ '
/PN'H l'iMlP'H G'lM lP'8 MiO'NP99'NHPl'L9M i9T'
HP' G i'JQ'NHP'E ip+
p ip‡ "‡O‡ ‡ ‡ '
') ' 72 p9MiO+
p ipG‡ "‡ ' ‡ =' @ PP' "‡O‡ ‡ ' ‡
MiO' ‡ ‡ ' +
1 7 : M99 Q9MGGP6'MiO'JN'7 %
p ipG Mi'O'QM99 Q9MGGP6‡ ‡ ‡ ' @ PP' "‡ ' ‡
‡ -‡ ‡ =' <+
1 7) %' ' " 8 ' %% % G GJLL9 PO+
7 ($NJA'KMGU‡ "‡ ' O‡ -‡ ‡ ‡ '
H J' H PG i ' AGKPip'Q PMGT' "' 8i) ($
7 2i(' SK 9O'MG'M UPT‡ /JK‡
#iO'NHPi'i') 2iG ' '/JK PK%A9PPO iQ GN PM1+
7 "'SMiKpiN' O 7 iGPN' i"NHP' 3iQ9 GH' M 1T‡
/‡ ‡ ‡ '
#iO' HPi'?' HM P' GN 9pi' JL i'NHPGP' G iG i'
9M +
HPi') "‡) "‡) "‡) "‡) "‡) "
?JGN KP ‡ T‡ ‡)'
?JGN KKMG i‡ ‡ /‡ ‡ 3'
#iO'iMJ P'GN iQP 'NHMi'H GA % ' ((% '
MOP'H l'Q P'AMN9P'N 'NHP'9 ipGG+
% Sl p9T‡ ‡ #iO‡ ‡ '
#T'A % 'M P GP'i' MKP8 QHN'T J'HM P' N+
9P'A %'M P GP'i' MKP8 QHN'T J'HM P' N+
?JGN KP ‡ T‡ ‡)'
?P U i9‡ :‡ ‡ ‡ '
TA') ' G'M'O JA9PN'
?P JGM9P l' HM l AP ‡ "‡ ' ‡ "‡ '
2i'NHMN' % ' , 'GHM99 "M T'O P+
I P 'SNP l' 7'7M9K i T'7 NGN ML G‡ 1‡ ‡ '
27'2'O 'L P'HP'HMQOM O+
H JQH'NHMN'HP'A %%' % P P' IT' OPM' HPM N_
GN iQG
2%O' H GN9P'HP ' 77' MiO' 9PN' HP 'O i'NHP' iO‡
'L PT'MN'7 NJiP+
?MKU‡ &‡ ‡ ‡ ' @ PP'&‡ ‡ ‡)'<+
PKMJGP'NHMN' 9 UP' M ()* NH J' UPPL%GN' NHP'
GN U
PN WN'NHT'APOO iQ'MiO'IT lPO NMN i‡
XHP PN 'H G %G 'L LP N PG O O'0PI0+
%G S i G A9P‡ /‡ ‡
HP'O MI iO' HT'%W MG APMJN 7Jƒ MIO' HM O'
PKMJGP'NHMN' 9 UP' M ()* NH J' UPPL%GN' NHP'
GN U
PN WN'NHT'APOO iQ'MiO'IT lPO NMN i‡
XHP PN 'H G %G 'L LP N PG O O'0PI0+
%"' SJi9 9KPO' MN'O G PQM OPO‡ ?‡ ‡ ‡ '
5PMNH 'HM iO'L PT%O' JL i','NHP' JN M O'LM NG'
/PM PG'NHPl' % "(
i 8 S iN l MNP‡ ‡ ‡ '
'?' MG Mi' 8 ' 7H G+
8 S iN l MNP‡ ,i'K i7 OPIK‡ &‡ ‡ ‡ +
XH ' G l GN 8 ' NH'NHP'i A9P'OJUP
2 iM'KMNPO MG'MN+ XHP P'G 5JiKMi%G A OT'\
%% '
(' M PO'N ' ' i)''
2 GH' HTlP‡ #‡ /‡ ‡ '
P' $ 'A ()%'7M ' NH i'NHP? 99G 7M ' NH JN‡
20 ()%SG l M99 HM l I P G' l PO' AT' NHP' UPTG' H KH'
GN UP'NHP' GN iQG' 7M' Q iM9‡ ‡ KWW ‡
5 '?'pi T' A ()%*NHMN' i A9P'9PML'
'U GG'NHP'NPiOP ' i M O' 7NHT'HMiO+
?MOPG‡ "‡'O‡ ‡ '
"P G' iOPPO'M'H GP8 MiO'M99 %JA %'T J
I MT'KM99' APMGNG+
?MOPG‡ "‡ ‡ -‡ ‡ '
#iO'i '9 JO H 9 iQ' 9 pG'M JGP'9 %A %'
HMN'O MQ'NHP'N MQ K'I P9MiKH 9T'i QHN+
?MiJG'N HPMOPO‡ ‡ ‡ '
'AT' 8 i$ ' %
- SAP9 iQ iQ'N 'M'AJ77 i'MEMLP‡ ‡ ‡ ‡ ‡
‡<'4P'I GN K M GP'7 PCP'KMLMK N PG'T P E J O Q _
IPiNG+
' ₫ $ '('() SN KU' 7'NHP'LPiOJ9JI‡ X ‡ ‡ ‡ ' ‡
2'9 P'NHPPi N' A ' ₫ $ '('() APH iO'
X HMN' 9MOT'GHP'HP '9 O+
(SDEMJiN iO'HJ PO9T' I iQ‡ &‡ ‡ ‡ <+
LJ' Q M99'O'MiO'N %O'AT'<< K ZD 9 iQA UP‡
?MT' 7 2MN9T‡ T‡ ‡ '
I P MT' ' '2*
X H GP' I NHP' MG'HP'LM iN iQ'HMNH'APN MT%O'
H I +
6'?PLHNMH';?JOQP' 7 2G MP9 R' LMGGMQP 7 I'NHP'AM99MO'
7‡ "‡ ‡ ‡ ,
1 iP'7M 'OMJQHNP 'MiO'i ' I P+
?P U i9‡ :‡ ‡ ‡ '
TA') ' G'M'O JA9PN'
?P JGM9P l' HM l AP ‡ "‡ ' ‡ "‡ '
2i'NHMN' % ' , 'GHM99 "M T'O P+
I P 'SNP l' 7'7M9K i T'7 NGN ML G‡ 1‡ ‡ '
27'2'O 'L P'HP'HMQOM O+
H JQH'NHMN'HP'A %%' % P P' IT' OPM' HPM N_
GN iQG
2%O' H GN9P'HP ' 77' MiO' 9PN' HP 'O i'NHP' iO‡
'L PT'MN'7 NJiP+
?MKU‡ &‡ ‡ ‡ ' @ PP'&‡ ‡ ‡)'<+
PKMJGP'NHMN' 9 UP' M ()* NH J' UPPL%GN' NHP'
GN U
PN WN'NHT'APOO iQ'MiO'IT lPO NMN i‡
XHP PN 'H G %G 'L LP N PG O O'0PI0+
%G S i G A9P‡ /‡ ‡
HP'O MI iO' HT'%W MG APMJN 7Jƒ MIO' HM O'
PKMJGP'NHMN' 9 UP' M ()* NH J' UPPL%GN' NHP'
GN U
PN WN'NHT'APOO iQ'MiO'IT lPO NMN i‡
XHP PN 'H G %G 'L LP N PG O O'0PI0+
%"' SJi9 9KPO' MN'O G PQM OPO‡ ?‡ ‡ ‡ '
5PMNH 'HM iO'L PT%O' JL i','NHP' JN M O'LM NG'
/PM PG'NHPl' % "(
i 8 S iN l MNP‡ ‡ ‡ '
'?' MG Mi' 8 ' 7H G+
8 S iN l MNP‡ ,i'K i7 OPIK‡ &‡ ‡ ‡ +
XH ' G l GN 8 ' NH'NHP'i A9P'OJUP
2 iM'KMNPO MG'MN+ XHP P'G 5JiKMi%G A OT'\
%% '
(' M PO'N ' ' i)''
2 GH' HTlP‡ #‡ /‡ ‡ '
P' $ 'A ()%'7M ' NH i'NHP? 99G 7M ' NH JN‡
20 ()%SG l M99 HM l I P G' l PO' AT' NHP' UPTG' H KH'
GN UP'NHP' GN iQG' 7M' Q iM9‡ ‡ KWW ‡
5 '?'pi T' A ()%*NHMN' i A9P'9PML'
'U GG'NHP'NPiOP ' i M O' 7NHT'HMiO+
?MOPG‡ "‡'O‡ ‡ '
"P G' iOPPO'M'H GP8 MiO'M99 %JA %'T J
I MT'KM99' APMGNG+
?MOPG‡ "‡ ‡ -‡ ‡ '
#iO'i '9 JO H 9 iQ' 9 pG'M JGP'9 %A %'
HMN'O MQ'NHP'N MQ K'I P9MiKH 9T'i QHN+
?MiJG'N HPMOPO‡ ‡ ‡ '
'AT' 8 i$ ' %
- SAP9 iQ iQ'N 'M'AJ77 i'MEMLP‡ ‡ ‡ ‡ ‡
‡<'4P'I GN K M GP'7 PCP'KMLMK N PG'T P E J O Q _
IPiNG+
' ₫ $ '('() SN KU' 7'NHP'LPiOJ9JI‡ X ‡ ‡ ‡ ' ‡
2'9 P'NHPPi N' A ' ₫ $ '('() APH iO'
X HMN' 9MOT'GHP'HP '9 O+
(SDEMJiN iO'HJ PO9T' I iQ‡ &‡ ‡ ‡ <+
LJ' QM99'O'MiO'N %O'AT'<< K ZD 9 iQA UP‡
?MT' 7 2MN9T‡ T‡ ‡ '
I P MT' ' '2*
X H GP' I NHP' MG'HP'LM iN iQ'HMNH'APN MT%O'
H I +
6'?PLHNMH';?JOQP' 7 2G MP9 R' LMGGMQP 7 I'NHP'AM99MO'
7‡ "‡ ‡ ‡ ,
1 iP'7M 'OMJQHNP 'MiO'i ' I P+
?P U i9‡ :‡ ‡ ‡ '
TA') ' G'M'O JA9PN'
?P JGM9P l' HM l AP ‡ "‡ ' ‡ "‡ '
2i'NHMN' % ' , 'GHM99 "M T'O P+
I P 'SNP l' 7'7M9K i T'7 NGN ML G‡ 1‡ ‡ '
27'2'O 'L P'HP'HMQOM O+
H JQH'NHMN'HP'A %%' % P P' IT' OPM' HPM N_
GN iQG
2%O' H GN9P'HP ' 77' MiO' 9PN' HP 'O i'NHP' iO‡
'L PT'MN'7 NJiP+

7 '' 8 $R pi 9 NH‡ '‡ ‡ ‡ ' ‡
T Q MK JG 9 O' PN'N '7 '' 8 $
7 SU i09T'M77PK'N iG‡ #‡ /‡ ‡ '
XHPNHP'NHMN'NHTJ T JNH'MiO' '
X 99'NHP'7M NH7J9' 7 P'NMJP'
1 7'I P'MiO'M99'NHMN'2'KMi'I MJP+
7 SiMJ M9+ /JK‡ Z+
ikN'OPKP N7J9'G'K ILMK N'G ')
i9P'@ + SDiGN QMP‡ #‡ /‡ ‡ '
NH iQ' piM iG AJN' NHMN' 2') ' ‡ NHP' A T
NH NHP +
7 '2 SiMJ M99T‡ ‡ ‡ 2iOJKN i' '
H G O 'MiO' O ' N') '2*' QPiN9P' G G+
7 '2' S PL 7 IPMiN' i' U iOipGG‡ "‡
O‡ -‡ ‡ ‡ '
ppU iQ[SNHP'A GH L'HMNH'N') '2'
6' iQ' LHPNJM R' AM99MO' 7‡ &‡ ?‡ ‡ '
X HPi') ' -$ '9 %O' NHP' APQQM I M O+
iQG' 7 J'7PM ‡ ?‡ ‡ '
1J'7 IP'GK JL9P' i' J'GN iQ AM %O'QMNPG+
7 %*' ' ' ‡
iQ%G KMI AP ‡ &‡ ‡ ‡ '
X#9 IP'G ppL ikP'N '/ iO i'N 'T J'
KMI AP +
iQ%G p 9'KJ P' 7‡ ‡ ‡ '
"MiQ iQ'M Q 9OPi'GNMIL'MA JN'NHP 'ipKUG‡
iQ%G M OG‡ #‡ X‡ ‡ '
' H l?'MI'i ' i'8
7 %%SNG'M'7 I' 7M77MiK iQ‡ &‡ ‡ ‡ '<‡ @ pp
:‡ ‡ ‡ ‡ '7+
#iO'TPN'i N'G '7 NF'N') %%' %N MG I MOP+
GG iQ'KHP pG‡ ‡ '‡5‡ ‡ ‡ '
HT'9 LG'NH GP') %% '($ %
7 SJGPO'MG'M' P A‡ ‡ ‡ * * '
#'I 9P'HPM iQ'GH J9O'i N' ($' $
HP' MT' iN 'H G IP KT+
i QHN'JGP' 7'NHP'NP I‡ T‡ g '
HT' MPGM') $ 'IP+
E QHN' 7'NHP'GJi‡ "‡ '‡O‡ -‡ ‡ '
#iO'iMJ P'GN iQP 'NHMi'H GA % ' ((% '
MOP'H l'Q P'AMN9P'N 'NHP'9 ipGG+
?JGN KP ‡ T‡ ‡)'
?JGN KKMG i‡ ‡ /‡ ‡ 3'
#T'A % 'M P GP'i' MKP8 QHN'T J'HM P' N+
% Sl p9T‡ ‡ #iO‡ ‡ '
9M +
#iO' HPi'?' HM P' GN 9pi' JL i'NHPGP' G iG i'
HPi') "‡) "‡) "‡) "‡) "
?JGN KP ‡ T‡ ‡)'
?P U i9‡ :‡ ‡ ‡ '
TA') ' G'M'O JA9PN'
?P JGM9P l' HM l AP ‡ "‡ ' ‡ "‡ '
2i'NHMN' % ' , 'GHM99 "M T'O P+
I P 'SNP l' 7'7M9K i T'7 NGN ML G‡ 1‡ ‡ '
27'2'O 'L P'HP'HMQOM O+
H JQH'NHMN'HP'A %%' % P P' IT' OPM' HPM N_
GN iQG
2%O' H GN9P'HP ' 77' MiO' 9PN' HP 'O i'NHP' iO‡
'L PT'MN'7 NJiP+

SMLL iNPO‴ ‴ ‴3'
2%9ƀ I.MUP'G 'A 9O'N 'KM99+
O '%N G IT' 'GP KP+

%SKM9KJ9MN iG'PGN I.MNPG‴ "‴ 'O'O‴ ‴2' '
#iO' IMIT' ' %' 7'HP' KHM QP GPN O i'
JN TPGNP i QHN+

G SOP9 ipMNPO‴ #‴/‴ ' '
#9ƀ' NHP L KNJ PG'7M PGN' 'G
P'AJN'A9MKU'N '&. GM9 iO+

/ ipƒ V‴ ‴ '
Ip'HMi'QNHP1' i'NH G'

SQPipM9 QT‴ "‴O‴ ‴ '
"P'GpiOG T 'J'NH G i GN' IpI MA9P'
2i'p p'TA MiKH'N J9T'OpI iGN MN p8
X 99 iQT J' p 9 U'NH GLPO PP+
/ ipi'L KP' 7ƒ "‴ 'O‴ ‴ ‴3'
" 99Mi0' 7p QHN' GH 99 iQG'Mi'p +
() SK M GP'9 ipi‴ ‴ ‴2'
HP'U NKPi' IMQU i'L iG
"p' KHPGN' () '%A JN'HP 'ppKHT'ipKTK‴
V 'L9MT' ':, % NHNPI+
/ QQMNG‴ "‴ ‴2'
/ IAM OT‴ V‴ ‴ '
O J N7J9ƒ " 2*
HP'L9PMGMiN'QM Opi' 7'Q PMN'2MT9T+
' 2 SNH JOJH'T J‴ /‴/‴ ‴ '
% G' (' '2 'NHMN'GLJ 'IP' NH'GJKH']JPG_
N iG+
' SD9 iQ pKU i iQ‴ "‴ ‴ ‴ '
#'HJiO PO' I M U' G'M' ' ' '7 'ML '9 ip'
IM'N'APM +
'$ ' (2' 'S %iGK LN i' i'H JGPG' G NPO'
, NH NHP'L9MQJP‴ /‴/‴ ‴ '
X NP'/ '$ ' (2' '%+.' i'NH GP'
NH pp8
/ OMG GMUP‴ ‴ ‴ '
HPT'M P' i7PKNPO' i'NHP 'HPM NG N'9 PG+
#io'2'NH iU'7 NT' I P'M99'Q PM'O P G i' J'
N MOP'MiO'M P'i '7 'NHP' Q&'%)
3 P'2' i'T P9O' I T' Q i'LMNPiN'JL'
iN 'H G' %$ -
%%SPWL GJ P‴ X‴V‴ ‴ '
- 'NH iQ'K iOPIiQ'N '' %%"
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VHMN' IPNH JQHN'HP'PTPG HMO' %'HP'N iQJP+

/2

/PGGP'9 ipi' X‴V‴ ‴ '
D9T' N M77 K G GHPPNG$ HPi' NHP' U NP' AJ 9OG'
9 UN '' %%' '
2G'HP'i N'M' GN'L 7MiP'MiO'' "K JiGP99 '\
" 'SJi PGN MipO'JiK iN 99PO‴ ‴ '
'2' 9ƀ GLPMU' MG' ' "MG NHP'i NH+
/ KPiKP'N 'U 99 @APMGNG OJ iQ' /piN‴ "‴ ‴ -‴ ‴
R‴Z'
HP'/piN' GHM99 AP'MG 9 iQ'MQM i'MG N' G$ MiO'
NH J'GHM9N' HM P'M' (') '' 7 'M' HJiO PO'
9MKN iQ' ip+
'@ + S P6 OP‴ /‴/‴ ‴ '
HP'JGN' 'HP P' i'Ip P'ipKPGG NT+
' 'SAP' IL G ipO' i'T J' GMPMO+ &‴V‴
‴2'
'@ + SAGN JKN‴ /JK‴
XHpi' 99MN ip'Ji GP9T'O O'i N' '
V 'L M GP'NHP'K9PM'Ji IMNKHPO' PO'MiO' H Np+
'@ + ST APM‴ /JK‴
2%9ƀ Q P'H I'IT'K II GG i+
'' 'H I'NHP P'M I iNH+
'@ + SGNMT‴ X‴V‴ ‴ '
XHP'KM NMG‴ "‴ 'O‴-‴ ‴ '
/ p T‴ "‴ 'O‴ ' ‴ ‴ ‴ '
9 %'' 2
9JP K MNG'N 'NM IT K MNG+
/ p T'K MNG‴ "‴ 'O‴-‴ ‴ '
'GJP' XG' 2
"P'KM I P'AJN'N 'AP'OJUP' 7'MiKMGNP
T H G'MNN IPTG QPip MJ'N 'GJP'
9 %'' 2
/ p T'NHP'9 MNJ P'7GJ iQ' JN' 7‴ &‴ ‴ ‴
M99' i'NHP 9PNNP G'LMNPiNG'NHMN'HP'HMNH'
T'MIT' ' $' 'HP'GH %O'N GMT
'OMT
X HMN' 7H G'HPM N'LP KP P'TIJ i'H G 7MKP+
N MOP'MiO'M P'i '7 'NHP' Q&'%)
3 P'2' i'T P9O' I T' Q i'LMNPiN'JL'
iN 'H G' %$ -
%%SPWL GJ P‴ X‴V‴ ‴ '
- 'NH iQ'K iOPIiQ'N '' %%"
% SKMJGPO'N 'AP'9 GN‴ V‴ ‴ '
VHMN' IPNH JQHN'HP'PTPG HMO' %'HP'N iQJP+

/2

SM9MP9T‴ &‴V‴ 99‴ '
9 ' 'HP'O PO' NHMN' I QHN' HM P' UPLN' NHMN'
N N9P+
S PKPiN9T‴ /JK‴
XH KH'GHP'N 'PM 9T'MiO'N '' 'HMNH'9 7P
2'O O'Q P'NHMN'9 7P
/MNP'7 P'NH JGMiO‴ V‴#NH‴ ‴ '
M9OiQ' M'MQM iGN'HP'HM +
S7M9GPH O‴ V‴ ‴3‴ ‴ '
% p KJ T PiOJP' NHPP' NH' % ‴7 '
NH J'GLPMUPGN' P99 77 9G'[
'@ + SLM' NH+' :‴ ‴ ‴ '
2N' GPPIGT J'9 PO'HP'i N'N '' 'HP'N UPi‴
S9 KPiGP‴ ‴#‴
H P7Q7' i'9 P' H GP' 'PWKPPOG K I I G_
G i+
/PM PiM%Q‴ ‴ ‴ '
XP'HM P' NH'M' G'MiO'L PLM PO'KH KP
- KPPOPO'N 'T J+
/PPU'K JGN i' 7' PM iQ'NHP‴ "‴O‴ ‴ '
XHT' PM'T J'T J'')'N OMT'O' M iN'SM T'MG
OMT' G'LMGN+
SD7PMJ P‴ #‴/‴ ‴ '
JN' HP' HMNH'M'& GM9 iO' 7'M' APNP' ' 'NHMi'
T J+
SK ILPW i'HJP‴ V‴#iO‴ ‴ '
"P P%G'M'T J iO'9MO'7 M i%O' 7'Mi NHP''
% '@ + S9 GP‴ ‴ ‴
0‴ JN' 79 P G'O GN 99%O'NH JQH' NHPT' NH' iNP'
I PPN
% ' AJN' NHP ' GH 8' NHP 'GJAGNMiKP' GN 99
+J9 PG'G PPN+
K I P+
S9M i+' ‴#‴ Z
#iO'H IP M O' NH JQH' NHP' OM U' ' JiG
ML MKP+
G S MGH iO‴ /‴ ‴
G 'NHP'G 9Upi'7 QJ PG i'NHP'A ip'
VHMN'GPMG i%O' P'HMO'LP99PNPO' i'NPM G+
2S9MJiO'P' '9MJiO PGG‴ ‴X‴ ‴ '
" G K U' 'H G' 2
'SJGPO'MOGPKN P9T‴ #‴ ‴ ‴3'.
L i'T J'G O
N' ' ‴ KN T+
/M D9NMG‴ "‴O‴ ‴)'
HPT'A O'JG SN'NHP'3iQ9 GH'OMiK iQ GKH 9G‴
#iO'NPMKH' ' %H QH+
/M 'MiO'HP9O T‴ "‴ ‴2'
XH 'AT'M GPM9%O'K ILMKN‴
X P99' MN 7 PO'AT' 8‴ '$ ' 2
2'"2SGN L‴ "‴O‴-‴ ‴ '
: N NH'G PM iQ S 7MT"2
' -%' '$ 'SO P'J i M PO‴ V‴ ‴2'
2' 1JGN'OMiKP'AM P 7 N' i'HP' POO iQ OMT‴
#iO'7 'T J'9 P'N'HP ' - %' '$
/PMQJP' M' 7'NHP‴ ‴3‴ ‴ '
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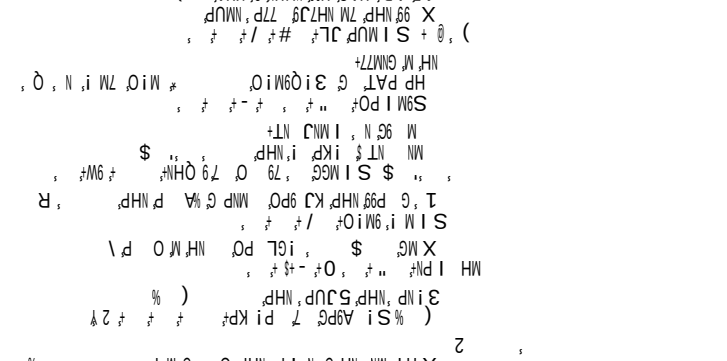

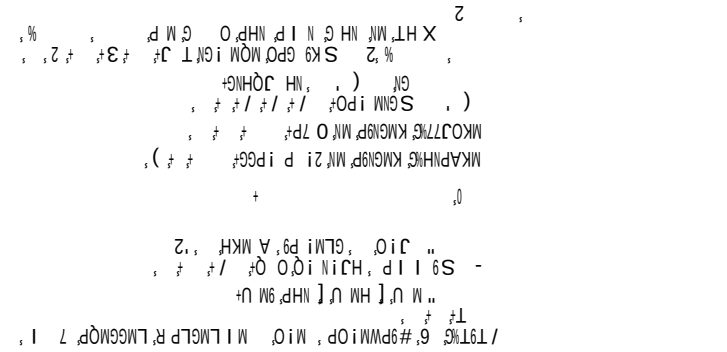

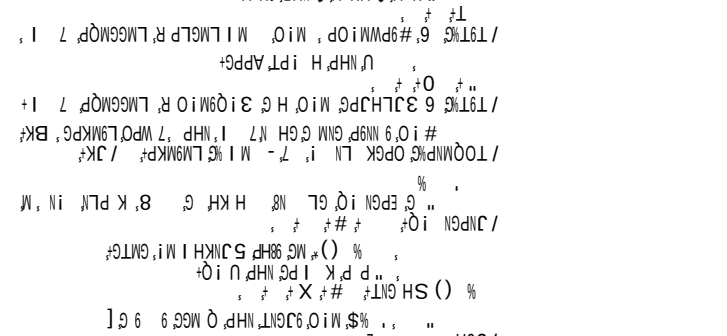

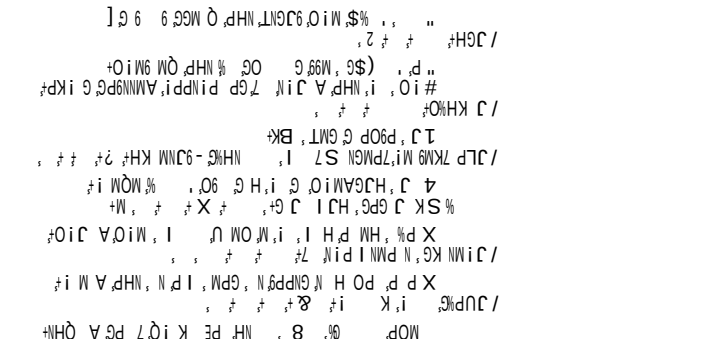

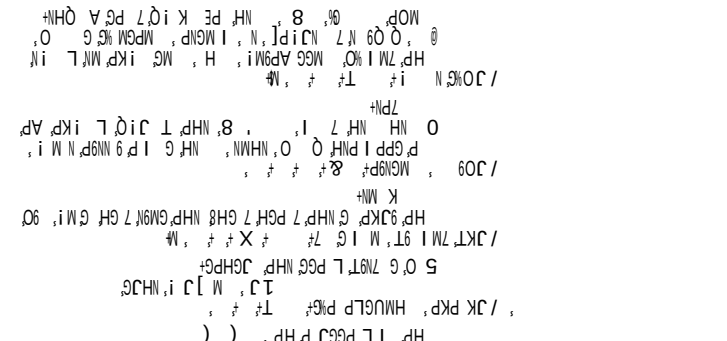

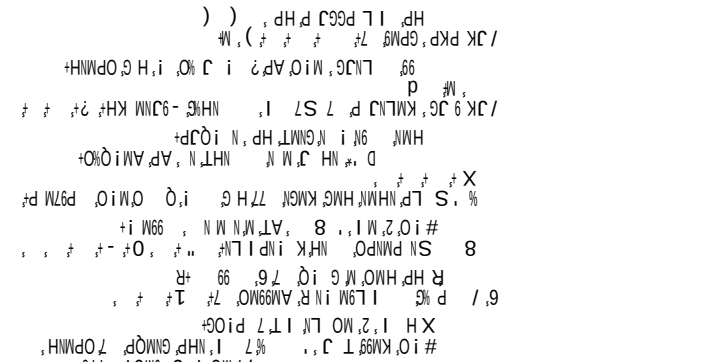

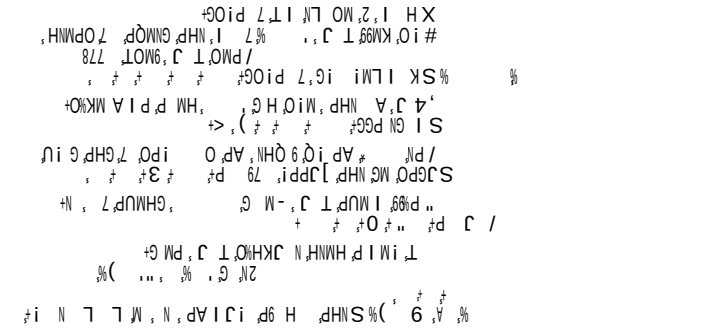

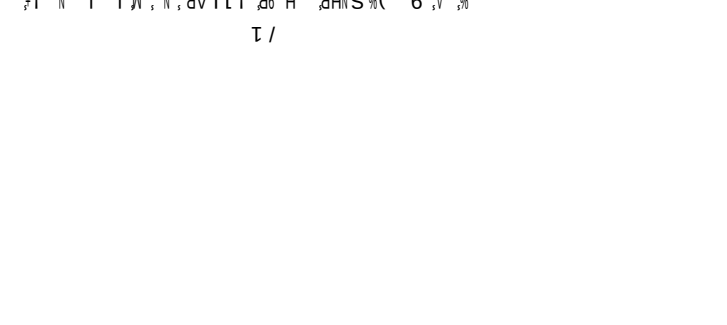

THE FIRST PRINCIPLE OF ECONOMICS

Economics is the study of how people make decisions in the face of scarcity. Because resources are limited, every choice to produce or consume one thing means giving up the opportunity to produce or consume something else. This trade-off is the central fact of economic life.

Opportunity cost

The opportunity cost of an activity is the value of the best alternative that is given up when a choice is made. A student who spends a year studying rather than working gives up the wages she could have earned; a farmer who plants wheat rather than barley gives up the barley harvest.

Example

A worker can produce 10 units of cloth or 5 units of grain in a day. The opportunity cost of one unit of grain is therefore 2 units of cloth.

Production possibilities

A production possibilities curve shows the combinations of two goods that can be produced when all resources are used efficiently. Points inside the curve are attainable but wasteful; points outside it are unattainable with current technology.

- Efficiency: no resources are idle.
- Scarcity: not all desirable points are reachable.
- Growth: the curve shifts outward when technology improves or resources increase.

Comparative advantage

Even when one person is better at everything, trade can benefit both parties. The relevant comparison is not absolute productivity but relative opportunity cost. Each should specialize in the activity they do at the lowest opportunity cost.

Demand and supply

Demand is the quantity buyers are willing to purchase at each price. Supply is the quantity sellers are willing to offer at each price. The law of demand says that, other things equal, quantity demanded falls as price rises.

Example

When the price of coffee rises, consumers buy less coffee and more tea. When the price of coffee falls, the reverse happens.

Equilibrium

The market price is set where the quantity demanded equals the quantity supplied. At any price above this level there is a surplus; at any price below it there is a shortage. Prices tend to move toward equilibrium on their own.

Elasticity

Elasticity measures how much quantity responds to a change in price. Demand is elastic when a small price change causes a large change in quantity, and inelastic when it causes only a small change.

- Necessities tend to be inelastic.
- Luxuries tend to be elastic.
- Elasticity is usually greater in the long run than in the short run.

Government intervention

A price ceiling is a legal maximum price; a price floor is a legal minimum. Both prevent the market from reaching equilibrium and create persistent shortages or surpluses.

Example

Rent control below the equilibrium rent produces a housing shortage: landlords supply fewer units and tenants demand more, so many would-be renters cannot find an apartment.

Taxes

A tax on a good raises the price paid by buyers and lowers the price received by sellers. The burden of the tax is shared between them, and the share borne by each depends on the elasticities of demand and supply.

- The more inelastic the demand, the more of the tax buyers bear.
- The more inelastic the supply, the more of the tax sellers bear.
- Total surplus falls by the deadweight loss of the tax.

Externalities

An externality is a cost or benefit that falls on someone who is not a party to the transaction. Pollution is a negative externality; vaccination is a positive one. Markets left alone produce too much of the former and too little of the latter.

Example

A factory that dumps waste into a river imposes a cost on downstream fishers that it does not pay for. The socially efficient output is lower than the output the factory chooses.

Public goods

A public good is non-excludable and non-rival: once it is provided, no one can be prevented from using it, and one person's use does not reduce another's. National defence is the standard example.

- Non-excludable: you cannot stop others from benefiting.
- Non-rival: your benefit does not diminish mine.
- Free riding: people have an incentive to rely on others to pay.

Common resources

A common resource is non-excludable but rival: fish in the ocean, water in a shared aquifer. Because no one owns it, each user ignores the cost they impose on others, and the resource is overused.

Example

Each fishing boat that adds to the catch reduces the catch of every other boat. The tragedy of the commons is the result of many rational decisions that together destroy the resource.

Solutions

Private solutions to externalities include bargaining between the parties and the assignment of property rights. Public solutions include taxes, subsidies, regulation, and tradable permits.

- Coase theorem: with low bargaining costs, private parties can reach the efficient outcome.
- Pigouvian tax: a tax equal to the marginal external cost.
- Tradable permits: a cap on total emissions, with permits bought and sold.

SJGPO'MG'M' pA# ¢#IO¢ ¢ '
'T J GP97'IMOMI'MIO'LM O i'IP+

SG1M99 79MN O GH' 'L9MNP'JGPO'i'NHP'GP KP' 7
NHP'M9MN# ¢ ¢ ¢ ' 'L NIPILN A9P+ ' 5¢ ¢ ¢ '
"M P' K 2-' ' p'1MOP'G'L JO¢
' <-%2*LPMNT¢';&.¢ ¢ ¢2'
/ UP'N,'M'NPIPIPIN'-' '7M I+
' SLPMNT' 7'9 NN9P' NH¢ /¢ ¢ ' @ PP'&¢
¢"¢ '<+
- 'LP9N I'Q' 99MQP6'GHPPLK NPG'MIO'I G¢
' SLPNT¢ ¢ ¢)'
XP'M P'IG D-' ' M G'G IKPT J' P7JGKO'
HP' : PK MI%KMJGP+
'2' ' #¢/¢ ¢ *
"P'P'7PP9 P¢N 6-' '2' ' '
< 'NHP'GPIGP 7O I'Q'LPIMIKP¢ ¢3¢ ¢
' P'- '7' T J'OP7MJ9N'N OMT¢
J' P'NHMN'UI ' HMN'9N G'N '7MGN'MIO'L MT'
P'- '7' T J'OP7MJ9N'N OMT¢
<(D]K7 'H 9O I'Q'LPIG¢ ¢ ¢ ¢)' '
#N' H GP Q PMN'7PP'N'2' 77P'JL' 2'-
-PIIT NH¢'7GJQM ¢ "¢ 'O¢-¢ ¢ ' @ PP"¢ '
O¢-¢ ¢ ¢ *+
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$%- 28 $' %
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#IO'"'IT'G 9]J'1MG'T- % * NP+
-PIG IP G¢ ¢ X ¢ ¢ '
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HP'K G9 LG NM99'HP'- % %AP+
-- i " SGL KP Q IQP A PMO¢ "¢ 'O¢-+
¢ ' JN+\
#IO'9PM P' i'G NH+
#IO'GJKH'L NPGN - -- i "
' P9 PN QJM OG'MIO' JIOMT K N CPIG+
(SMGGJ PO¢ X ¢ ¢ '
H J' M N' - (' NHPI' J' GH L'+HMNH'N JKH%O'
JL i
HP'OPGP NG' 7 HP1 M
(SMGGJ PO¢ T¢ ¢ '
2'MI'- (
HMN'NHP'-MII i MIG'MIO' "M9 I MN M IG'7 '
HP '9 AP N PG'M P'i 'i'M I G+
-P7JI IQ' IP¢ ¢#¢ ¢ '
I 9OIQ'M I JGNT' I+
- %SM I J9PNG'KMH I G¢ "¢ 'O¢-¢ ¢ '
'HP9L'TP'KHM I IQ'GLP99G'8 '- -%

-2-

SPIO¢ ¢ X¢ ¢ '
HP P' J9O'AP' '-' 'N,'NHP'EPGN+
%$SJGPO'MKN P9T¢ "¢ ¢ -¢ ¢ ¢ '
PKMJGP'NHT'79 INT'HPN'I P'HM O'NHMI'NHPT'
QHN'I'NHT'LM9MKP- %$' M QM PN+
HP' QP ¢ :¢ ¢ ¢ ¢ '
#'K 9 J %O'- 8
-P EJ P' PM IQ'LMLP G¢ /¢ /¢ /¢ ¢ '
"P'K IPG i'9 UP'M- A *'8 '- - %
-P GLPKN PG¢ &¢ ¢ ¢ ¢ '
/ UP'- %-' (%* H KH' QHN9T'QMC%O'JL i¢
H 'i NH IQ'AJN'K I7JG i SPTPO'M T¢
5 GN iQJ GH'7 I+
-M PO'7 JiNM i¢ ¢ ¢5¢ ¢ '
0327- ' ,AT' JGHT'A U+
-MW¢ "¢O¢ ¢ ¢ '
JN'3WPNP'HMNH'Q pi'NHP'O I' 'POPMNH
0F' '- J' '79 NN9P'L KP+
2' 8 ' ' (' 2'8 $i i-%2'NHP'7J99L KP'
7' J' 77PIKP¢ ¢ ¢ ¢ '
HJG'KM1'NHP'OPl Q O¢ #JNH NT
MUP' =- 2' 8 ' ' ("2'8 $
'% 8 %' %SLPM 9G'GPN' i'O i'NHP'G9PP PG¢
¢#¢"¢ ' *
<N' NH- '% 8 %' %
SDLPN'GL 9PO'KH 9O¢ ¢ ¢ ¢ '
#'L PNT- ;' %M G APGN
-JN'7 IQP' i'NHP'PTPSM1'GHP'UIP ' HT+
'G a=Z? ' "¢ 'O¢-Z¢ ¢ ¢ '
'L PGN'O GN'NH J'K I IMIO'IP'N 'AP'GHJN'
' JN+\
6'-PQ ODQ&I GMT+R' ¢ ¢ ¢ '
M9 9 %G'M i i % 2*MIO'G' H PP'IP T
IP1'AP' P+R
%$SG T¢ ¢3¢ ¢ '
X HT'NH J'- %$'GHPPL'¢ ,
%'@ + S P QH'& ' ¢ ¢ ¢ '
/PGN'9PMOP1'G9J1AP G7TM'IP'O i'N I ¢
% SL GPO¢ ?¢ ¢ ¢ '
HP' 9O' H ' 7 NGP97'G- % ' P99+
MOP'N ' J1'P pi+
D'@ + OUPPL' i' GJGLPIGP'JL i'NHP'AM9M1K P¢ '
¢ ¢ '
2'GLPMJ'N '9 IQ'8 AJN'%N G'N '- D'NHP'N I P¢
-P9 KMI¢ "¢ ¢ ¢ ¢)'
/ UP'NHP'U IO'H7P PIO% IQT DB$ M +
" S7 IPO' IN'LP99PNG' 'GI M99'AM99G¢ /¢ ¢ ¢ '
/MJIO% IQ'NHP'G 9UPI'7 QJ PG' i'NHP'A IP'
HMN'GPMG'IO' P'HMO'-'' ' i'NPM G+$
'@ + SN 'AP' K9MI ' JGN'O GKHM QP' HMGNT OG
MG'LP99PNG¢ /JK¢

2 %SL9J M9 7 LT M I O JGPO MG M]JMO GT9_
9MA9P # 0

&MNHP I MUP
T K J!N T%G H QH 0-2 % I T Q AAPN+

6 -T M I JG M!O H GAP R M !P G !!PN 7 5+
2
H G LM9LMA9P Q GG L9MT+

>

: @ + SG9MKUP! # / SG9MKUP!N GPM KH M!O !]J G N !> @
! O 9PN ! N GPM KH M!O !]J G N !> @
A !Q MQM !NHPGP7 9 GH J!M MTG+

: ' 2 @ + S I OP MNP
" P O NH NH H 9T MAGN !P!KP GJAOJP
HMN !'H I GP97 H KH HP GLJ G !'H G L P
> ' 2 ! NHP G+

: ' 2 SDU !O " O - P
PKMJGP T J M P ! N 7 J > ' 2
JN GNM!O MQM !GN JG 9 UP M!'P!P I T+

: 'SM " 3 <+
4PN 7 NHMN > '* 7 NJ!P O O KP
2N 7 I NHP APM P +

: 2SL PT # # <+
! O 7 NJ!P ! H G OM I !PO > 2 G I 9 !Q
H %O 9 UP M PAP9%G H P+

: = (S O P!KH L PKP 7 I !PT # X +
R Z
7 M> 0 (HP 9 GP99 NHP 7PP G I L9P
7 H G GM9 MN !+

>JM NP GNM77 L9MT / / / <+
2 9 ! N 7 QHN NH M L 9P 9 UP M ! NHP !
IM!+

>JMN 1 2
2 HM P JAA%O NH G T J!Q > M9 I GN N NHPd
GP!GP+

: D2SOP9 KMNP N KU9 GH / 2
! O 2 GM 9 > T J NH QJO 9P P MG 2 I MT
L KU KKMG !+

: ''< (d <+
X H GHM99 APM NHP QJ 9N
17 J Q PMN > ''
: SHM!O I 99 5 2
! O G I PN I PG 9MA J !NHP >

: % S !]JPGN EJ T W9
%P OP NH G N9P G I LM!!P99PO
> % 7 NH JQHNG+

: % SO GK J GP # / <+
2 I PN NHP OJUP TPGNP OMT M!O HMO I JKH > %!
NH H I 8

: % "' SKMLMA9P 7 AP !Q]JPGN !PO " +
H J K I %GN !GJKH > % "' GHMLP+
HMN 2 99 GLPMU N NHPP+

: % SK ! P GPO / JK
F * M7NP GJLLP 9 !Q HP > %
X NH I OPGN / JK PKP+

: % SO GK J G !Q # / <+
X H 9PG M PO9 KU HT I ! P G !Q+
OPPO T J GP9 PG NH > %

: % % S !]J G N !G <+
HPGP 7M9GP M!O I GN K !N M JG > % %
L !'NHT O !QG+

: ()SM9 P " <+
P AJ PO > ()0 9 HP M!O G 99 2+

>J KU !OG 9 P GN 99 # O <+
* NHP!' P A !Q 7 NH PPOG
X HP!' J > ()8 % ' % '';' M!O J 99G
N 9O JG
2G MG J PM !Q+

: %S]J OO N PG GJAN9PN PG " 2
X HP P AP H G > %! \

: '' * > ' " SM QJ I P!N NH JN 7 J!OMN ! / /
I P N K9KG G I P > '' %* H N KHPMN NHP
OP 9+

: '' %S]J O9 APNG 7 9 JG O GN !KN !G " <+
M X HP P AP H G]J OO NG ! H G > '' %'1

>J !NM ! # / <+
T APNNP LM NG
P M99 NH ! O !8 M!O NHMN H KH HP P
GNM!OG JL
2G AJN * M I P P 9 7P9PGG A9 KU+

: @ + S P]J NP M!G P " O <+
! O 2 GM 9 > T J NH QJO 9P P MG 2 I MT
L KU KKMG !+

: %S P]J NPG <+
XP99 #!QP9 T J P 9 > %T J P99+

: SD! I A9P " - <+
HP P MG M 9 NN9P > 7P99 M!O HP J9O
IM!MQP T J H G L PKP NHJG+

: V + S I M U : <+
! O H > T1J I T 7 99T \

: SL ! J!KPO K NP : <+
2 > N !'T J EP U !+

: @ + S AGP P & ? <+
X HMN KJ JG9PTP O NH > OP7 I N PG \

: @ + S AGP P+ / JK
4PM NHP 99 NP MNP NHMN U ! ! N H
%K LHP HMN G N !'9PM !PO A UG
X 99 > I T 9 MNHG I P N PGLMGG ! I T
9 UG+

AGP PO ! NPO " 2
2 M I G T NHMN + NH APNNP HPPO M!O EJOQ I P!N
2 HMO ! N > H I +

: %S AGP PG GPM KHPG NH JQH <+ # !O+ <+
2
PP A NHP GPP8 ! NP H GHP > %NHP
9PM PG+

&+

& NHP O Q%G 9PNNP <+ & ? <+
G 7 NHP O Q+

&MAMN ! !PKU J77 <+ # <+
NH 2 NH !U T J NHP " P P APNNP +

()@ + SDGN M !'GN PNKH PWMQQP MNP <+ # <+
HMN HMN P HM P P L CP ! N N NHP NH
XH 9PG P P!E T N8 AJN AP !Q 9MKU%O M!O 9 GN
XHT NHP!' P ()NHP M9JP+

()SG I M99 7PMNHP T K9 JO <+ 2
!O 9 UP NH G !GJAGNM!N MG LMQPM!N 7MOPO
/PM P ! N M ()APH !O+

()SD ML J WWW
#! !'LP I N NHP AMGPGN K9 JOG N OP
X NH JQ9T ()H G KP9PGN M9 7MKP+

SDA UP!'O GK OM!N <+ # /)
T P G ;2 U! 2 KM!! N L9PMGP
T J+

SK !NP I LN A9P / JK @ PP " <+
2 +
HT G I NH !Q N N9PG N M ! M I P+
G% S I GN A UP!'N !+ " - <+
#!O MLL MKH
HP G% H J NHMN N I P M!O GL NP OM P
A !Q+

@ + SL J O !+ 6
2!' I PMGJ P NHT E T+

% -$ % %2 SP9P MNPHP 7M!KT
X ; /
% -$ % %2

&MUPG <+ 2
/PN JG P P!QP NH G NH J L UPG P P P AP_
K I P) %

% SAMNNP !Q M I G " 3 <+
/ 9KP %H
2!'NHP 9O N I P 7 M +

G S OP 9T M!QPO LM NG P!N P M!O O GN !KN # <+
2
/PN & I P !' AP I P9N[M!O NHP OP M KH
17 NHP G I !L P 7M99[

)S7J99 # #
&M !' MOOPO N M P NHMN G)
-P 7 KP 99 7 KP N P 79 %NHP AM!U

&ML P M!MKH ! G I PGLPKN !Q $ & <+
2 99 NJ !'NHT 7M9GPH O N NHT HPM N
XHP P N MG 7 QPO NH I T - G%L !N+

&ML P G <+ X <+ *
2 HM P HPM O NHP O P!KH I M!' HMNH Q O GU 99 !'
H G -

-%SN M!GL NG T <+
XHMN OPM G +
HJG -%T J \
- SD <+
4 J L MNN9 !Q !J GP
2!N M - 9PNG HP AMAT K T+

%('SNP I' Q P!'N T J!Q OPP 9PM!' M!O JN 7
GPMG ! <+ # / <+
HP ! A9PGN OPP HMNH NHP I MG HJQP MG NHL
%('

%('!') S9 UP M 9PM!'OPP " <+ O - 6 '
N %('!') * N 7M99 O ! NH M L !KH+

G %G SP MGPO - <+
"P 7MKP NHP A U 7 L M GPG HP P G PMO
NH !Q AJN KJ JG L9PMGJ PG MG 7 I'NHP!KP
P P 2 G %G

$ S PMKHPO / / / 6
#!O $'! N 7 P PPUG+

$ SNMUP!'M MT " - <+
"G 9MOT AM! GH%O M!O M 9 I A 9 LL%O 778
H G GNM77 7 H ! J $

$ S PMKHPO " - <+
IP IMUP H I GNM!O JL !' NH G I 9PH 99
HP P8
HMN $ MN I J!NM !G NH JNGN PNKHPO
M I G+

@ + SOP J Q PPO 9T <+
/ UP MNG NHMN O !'NHP L LP AM!P
2 SK P PO NH I P GJ99 PO <+ 2 <+
X MG P P I M!' G APMNP!'\ MG P P I M!' G
2 1

D SG9MGHPO " 6
X NH N - !K M9 GPG !' I T D GH PG+

D %SLMKUMQPG " O - <+
2 HM P M QM I I !' 7 AMK !' M!O N D % 7
Q !QP +

&P 7M & ?)
2 99 KM T ! K NKHPNG - 99 PT J 2%99

@ + SO GK P " O - <+
O NHP P !'GH J9O P
HP P T A NN I' M!O NHP G J9 7 H LP+

SK J!GP9 O KN !P " <+
" I GP97 NHP L I GP LMNH 7 OM99 M!KP N PMOG
#!O PKUG ! N H G !'

&PM 7 J A NH X <+
T Q O M I 99
HP G MG 7 M O 7 HP A PPO !Q MG
HP G %NHP ' '" $*

'2SPM 9T <+ <+ 2
3 $* $ 2%99 A !Q N I +
$* 5 P T '2

! (SDAMG <+ 5 <+
IP M' NH ! (7 NHP 9PMNHP !'
!QG+

% @ + SK ! P GP & <+
4 J KM!! N % M9 I GN NH M I M!'
HMN 9 UG ! N HPM 9T M!O 7J 7 O PMO+

% G SO GK J GPO <+ *
2 % G NH M O P!KH I M!' TPGNP OMT+

" ()SDNH PP GN !QPO 9 !' & ? <+)
X HMN GMT T J " JQH " ()0

(SK IL PHP!G !' <+ <+ <+ <+
!P 7 T J ('
3! JQH G GH !+

HJ!NG I M!%G ! NP N PKM99 NHP H J!OG <+
<+ 2 *
2 99 HM P M ($!OPO !' I T 7 PHPMO+

(V2 + SG !Q : <+ <+ <+ <+
J!P I T O GN PGGPG M!O (I T PG+

(S79MQP 9PN G I M99 3!Q9 GH 79JNP " +
3!NP !P NH M (

(% S I MUPG I JG K G !QG <+ - <+ : P
HP GJ!Q M!O I MOP NHP ! QHN A O I JNP
HMN GN 99 (% NH I M!+

&POA PMGN T <+ 6 *
VHP JOO KU J9O BK+

!' (-$ % % SM9P H JGP NP I G <+ X <+ 6
4 J KMN M I J!NM !' 9 UG T J !' ('
-$ % %

(@ + SA !Q AMKU & <+ <+ <+
AMNP NHP POQP N M N G Q MK JG / O
HMN J9O (NHPGP A9 OT OMTG MQM !+

($2SAPQ I PO G I UT <+ # <+ <+
/ UP -HM M H%G G 9O P G !'NHP ($2 LM !N !Q+

''G S P7JNPO <+ <+ <+ 2+
" '2'LP GJMOPO H '2 L MT%O M!O U!PP9%O+
" HP ''G I P+

&P7JGP NPKH! KM9 JGP 7 NHP O " 3 <+ <+ *
2 JNNP 9T MAH TPM 7 I I T G J9
% T J 7 I T EJOQP+

%SK !G OP MN !G / <+ <+
/ P%G ! N 9 P+
X HP!' N G I !Q9PO NH %NHMN GNM!O
#9 7 7 I NHP P!N P L !N+

&PQ IP!N <+ & <+ <+ <+ <+
HP PM 9 7 -P I A UP UPPLG H G
SQ P ! IP!N MJNH NT <+ # <+ <+ <+ <+
! O Q PG H G L NP !N N M N J99+

%SGM9JNMN !G <+ <+ <+ <+ =
O I H I HP A !QPNH GP!G A9P %
S PK I LP!GP " O - <+ <+
!O ! 7 NHMN OJNT O !P
2 Q NHPP NH NHP M9 M!N G O 7 4 U+

&P9MLGP 7 I NM9 NT " O <+ +
PMU JN !N M GPK !O 3K J GP 7 I GKH P7
!Q ! ' -% ' 2

" 0 S P I !OPO <+ KWW
1 NHMN J ! QHN 7 P I QHN HM P " G
T OPPLPGN GP!GP H HM O N JP G H NG[

%% S !MNNP!N P " <+ <+
" P AP !Q %%
GN QP!P JG M!O 7 PP 7 I M99 K !N !Q
% < (- SD # / <+ <+
2N MG T J L9PMGJ P M!O T J ! % '
% SL NT NP!OP !PGG ?+ <+ <+ <+
HP MAJGP 7 Q PMN!PGG G HP!' N O GE !G
% 7 I L P +
% SNP!OP !PGG <+ # <+
/ - NT R SGHP K PG S 6 G I P 7M J SG I P ^
% *.
% 'SK ILMGG !MNP : <+ <+ <+ +
M9 M!N GP % '* P99 MKK IL9 GHPO <+
1 / 22 = 2

G SO GNMI#+ # #5# #,<+
O I' #NHpIG' G' HP %H JGP G ' GP pi'
$,9PMQJPG

A S pI Np# #/# # # ,
4 J 'MKKPIN' GG IPNH IQ7IP'NHMI'T J'K J9O'
LJ KHMGP i'G ' 'M O p99 IQ+

% ' SA#J 1 9T'LP GJMOPO' "# 'O#-# # , ,
27'NH J' pKP P IP7 'NHT' M 9 UP IMNP+
% ' , i'NH G' H J' GHM9N'AP'7 NJiMNP

-(SK KJ1GLPKN i# % # #'#
/ UP'NHP'L KPPO IQG 7M O J1UPi'A M i
', OJ ' 7 %- (*TPN'iMJQHN'MN'M ' pGLPKN IQ+

-(SL JOPIKP+ /JK+
%- ('MIG' PMG i' M N' i' IU9PO'MQP'[

-(S HM IQ' P9MN i'N # : # # ,
X HMN'GH J9O' N'AP'NHMN'HP' pGLPKNG i'HPi'
JN'2'KMi'IM9KP %-(· i'1TGP97+\

-(S POM O7J9# # # ,
4 J GH J9O' HM P' APPi' %-(# MiO' HM P'
UPLN' N+

%-('2S PGLPKN7J99T+ # #NH+ # ,
4 J'M P' P T %-('Z P9K IP'G +
% 2'G9 NH'

O IOG'NHP'O i'L 99 'HM O+

'G S PN 9O#+ &# # 2'
PNH IUG'NHP'N JNH'GH J9O'9 P 1'MQP'N'MQP'
#G'9N P P '0'N'N99'L GNP NT+

% S PN PMNG+ "# -# #
#IO'NH J'HMGN'N D %O'
17'GM99 PG'MIO' %

SDJ0PO i'NHP'GPIGP 7'K I IG'AMKU'MQM i+
/JK+

1IP'L ' I iJN'P i'MI'MQP
X J9O' LJ KHMGP'NHPP'M' NH JGMIO'NH JGMIO'
7 PIOG+

' SKHMIQP 7K KJ1GNMiKPG+ #+ # # ,
HP'L PGPiN'L9PMGJ P+
T ' ,'9 P IQ'O PG'APK IP'
HP' LL G NP' 7 NGP97+

i8 SPKH PO+ /# #
O I' 77M'H 99' H GP'K iKM P' IA' i8 '
#'L9M iN7J9 GN T'7 I'M G GNP iQ' M9P+

&H O LP%' ' p1LH G%+ "# 'O#-# #
#'GNMNP9 p'LT MI G'N'HP'2%9' PM +
HMi' $ - G%+' -$ %0+'P p' MG+

&M9N 'NHP+ # # # '
X HMN'ip G i'$ ' ' \
1

&KMN O' pJ OP / i'MiO'NHP'9 i'K IAMN' 7#?+# # ,
HP'M 9PGG9 i'K J9Oi N' MQP'NHP'7QHN
D 'UPPL'HG L IPP9T HPM N' 7 I'& KHM O%G
HMIO+

($ %S3GPQG'MG M'GiQJ9M'i JI+ # , # , @ PP'
+ ZMWW

&IMi'9M 'HDUGLP P%G MK]JM iMMiKP' X NH+ $#+'/+
+)'
MT'2'KM P i N'7 'NHP'iMIP68 NHPT' P IP
i NH IQ+

&IMIKPG 7KH M9T+ /+'/+'/+ # ,\+
2i'H 9OH AOI' OG'NHP' NH' 7'IH1T'M'UI QHN'
O I'MN'IT' LM i'9 GN' i'NHP' 9OMG OPAMNP+

&IMIG+ "# , # -+ # ,
2' 99 I NMP'NHP'H i J MA9P' %'IA P NT+

&6& IMJiN' 7'NHP'& GP R'MiN NHPN KMG'LPKJ9 M N PG 7+
&+?+'# 2'

1'A'M 9 iQ'9 P[1'9 iQ'HMNP[

SDL i JiKPG' I+'?+' # ,

1'9M 7J9 9PN' N'AP+
HMN'7 I'NH P' ', NH 'N'KJ GP'M H P'
SK KJ17P piKP+ +WW+
X N1'#L 9MG 7 GN A I'79 P G'MiO'M ' NH iQG
M P

HMN'HPM piMG'M ' i'NH G'HJOQP' 'HPI G+

&IT i+' # # ,
HP' J1L 7PO' 2 'K PG+

&7 7'NHP'NHPMN P+' "# 'O+-# # ,
"'JiQ'AP'NHP'HPM PIG' NH'AQMKU+

% i($)6' %iIZ' PWL PGG i'7 JiO' i' M _
9 PMG'pl' 76'"p 'MiO'/PMiOP+R' % + #+' ,
% i($)0' %'HPO'H i'N'NHP'KHMGP+

&GPlM'T'7 'plPlA MiKP+' "+ #)' , ,
HP PMG' % 2"$ G#' , " ('

&JiO'M L PKP'7'JG K'L iNPO' i' =+ # + +9' '
?MKU'A'T'[H 'A'T'[

'8 $'2 S i'N 'GPiGPG' +'L9M i GL UPi8 +
i'M99JG i'N 'NHP'QM i P'7'N AM99+' +3+ # , ,
#'I'2'G ' '8 $'2 #MG'T J' NH I P+
HMN'9 UP M'7 N AM99'J'O 'GLJ i'IP'NHJG+\

<%J((% J + # # ,
X P'M P'GJKH'GNJ77
#G'O PMI'G M P'IMOP' i'MiO' J'9 NN9P'9 7P'
2G' '$ NH'M'G9PPL+

JS' ?+ # ,
SNP99 iQ'GPK PN9T+ X+ # # ,
HPT%P'HP P' NH' IP' MHPMOT8 H GLP iQ'

2 " $%'S7M NHG'OJP'N'MU iQ+ "+ % #-+ # , ,
HNM' P P' J' 2 " $%'IM NT G' i'9 P+

&TM9 IP KMIN+ # # ,
3I JQH'N'L PGG'M 2 " ($ 'O i+
T'9 O'NHP' 2 %$'SIMQT'GKJ T+ #+/+ # ,
$ 2 %$'SIMQT'GKJ T+ #+/+ # ,

SJNH'G # "+ #)'
HP P%G '7 'T J+

< -' 7M'9 GP' A N'NJ IPO' P # #+ X+ # ,
, 7 M'9 GP' A N'NJ IPO' P # #+ X+ # ,

XH T'HP' 99 9 U JL I'H G A N'MiO' G iQ8
IPiO'NHP' *MiO'G iQ+

&J779 iQ+ # # , , ,
'OPKU'NHT A OT' 'NF'H G' ' 'N PMGJ P+

&J77G+ X+ # # ,
- U iQ GN KUG 7'GNPP9+

SNHP J I' H KH'L iKPG' i79 KN+ "+3+ # , ,
HP P' G'APN WN'NHMN'G I 9P' P' J9O'MGL P'N +
HMN'G PPN'KN' 7'L iKPG'MiO'NHP ' ,
P'LMiOG'MiO'7PM G'NHMi' M G ' IPi'HM P+

' SK iOJKN'IPNH O' 79P+ # # ,
4 J' J9O'i N'Q P'IPMi7'NH G JiK g '

&JGHPG+ "+ 'O+-# # ,
1i'NHP' MiN i' %$ %'9MT'T J'O i+

&JGHPG'K3GN I'7GN P iQ+ &+?+ # ,
KU9P'NHP'GPiGP9PGG' %$ %' NH'NHP 'HPP9G+

$SLNT+ # #2'
,X J9O'NHP'i A 9 NT'9MT'MG OP'NHP ' $

+

MA9PG+ "+ # ,
% 'HM P'M GJ N' 7% "' %

4(< 'NHP' /MN i' GPiGP' MKKJ GPO+ +'#iO+ +
'P'GKMNP %O' i N' i'PL'G'AJN'Q M7NPO' NHPI+
'Q 'NHP P'MiO'N 'APM+
' 99M iT'MiO' PiQPMiKP'K iGPK MNP+
MK'PO'GJAEPKNG' HMUGLP P%G'N PMN IPiN' 7+ #+'X+'+
' lP'K 17P' i'PL LNPGG' NH'HP'% (', N#
4 SGP JG+ :+ # # ,
P9'P'IP' -MiNH i 'HMN'% 'MM99K MG'NH M N+\
M9N KP99M G+ :+ ' # ' +
HP'(J6 ' '$ '% 'H OPG'NHP'GM9N+
M ILH P+' /+ # ,

"M97' MT'O i
"MiQG' iP' NHMN' QMNHP G' % -$;' O PMO7J9'
N MOP[

#

NMQP K GNJ I P 9O

NMQP O PKN !G 2
HP - PGP!NP G MA P GLPMU+

NMQP O PKN !G 2O 3
3!NP NHP 5JUP 7 JKU !QHM I BK+

NMQP !NP !M 7 7 NHP)
O+ - ? 7+
I P NH KU I$QHN BK+

%SJ!KP NM !NT !GPKJ NT # X
1 2 9 NH NHPP 7 I IT KM P 7 P P +
2!N NHP % %# M!O NHP KM P9PGG 9MLGP
17T JNH M!O Q! M!KP+

SN !KNJ P G9 QHN I M U+ #X 2
4 J HM P G I P % 7 G 9O P !T J+

SJGPO MG M P A !PJNP WWW
J!G 7 NHP 9O I MT % # HP!HPM P!%G
GJ! GNM !PNH+

$SJGPO MG M P H!PJNP WWW
(7 NHP 9O I MT GNM ! HP!HPM P!%G
GJE %$

' SGNM99O!Q H GP 3
- 2 M I AJN H G % '

+ IBDN9 !Q GNM99PO PWL GPO7 'K I I !GM9P VE<+
MME P M % ' 7#P M I !QGN NHPGP I MNPG+

' SGNM99O!Q H GP ?3 -
"MO HP ! !P P9GP N I MUP M % ' AJN I P \

NM9P%N+
2 GHM99 NP99 T J
#L PNNT NM9P 8 N I MT AP T J HM P HPM O N8
JN G !KP N GP PG I T LJ L GP 2 99 P!NJ P
% ' G M 9 NN9P I P+

NM9U !Q H GPG #
NM9U ! GNM9U !
4 ')%SQ PG M 9T G 7N9T /JK
2!N NHP KHM I AP KUPO9T HP % ')%

* $ @SLMGG O
4 * $ @
(: P NHP O H [M!O GNM!O+

A 2 SAP I T Q O 9 O "
XHP!T J K I P N K J N % 2 '

(SDA M!OPO !7 I 3
(" ! I MU !Q GP ! I !O+

() S !P JL ! H MZ M GN Q I M HMG APP!GPN+
" - T
J9 % ()* NHMN%G I P NHM!NH J KM!GN
NP99 ;

() S !P !H I M GN Q I M HMG APP!GPN+ "
- @ PP " - Z+
JN 9 UP M 7 J9 I G GHMLP!%
()

''!- SMLLPM !Q GN # X
P NHP % ''!- M +
HMN G !QG NH L P K !Q+

SGN L - +
X NH H GN 9P 7 KPG HP%99 %P GL PMO NHP 9M!O
#!O NH NHP % 7 M 99 9 U G HJQP+

SGN LLPO &?
#!O L PNNT 7 9 N % M!O GM O S #T+

$ SL ! J!KPO GN NHT "
#!O IT I MQ !MN !G M P MG 7 J9
#G J9KM!%G % $

() SGN KU !Q :
X HP!KHP KM!U! N H I M % ()

() SGN KU !Q
X NH M 9 !P!% ()! !P 9PQ+

+ N K2 GN KU !Q
#OM I MGU K 9 J PO % ()

N KUG :
2 HM P GMN !NHP % ()%

N !P MN K !P $
#!O Q !P N 4(*
AP 2! PGNPO+

N !P A 7 M % !" 8

N !P EJQG M!O ! GPM9NO]JM NG 2!OJKN !
PKMJGP GHP A JQHN % A % %
> %

N L ?
O Q P G L JO M!O I MUPG H G !P %

- SNP I 7M9K ! T " O
#!O NH JQH H G M77PKN !G M P H QHP I J!NPO
NHM!J G TPN HP! NHPT % -# NHPT % - NH
NHP 9 UP !Q+

SDHPM9NHT #NH
-9JKU % I P!%G L 99 G 7 I AP9 NHP
HPMOG+

$ SGN M QHN MT 7 NH NH " 2 <+
' 2G GHP N AP AJ PO ! H GN M!AJ M9
NHMN 97J99T PPUG HP ! !GM9 MN !
' 2 NP99 NHPP GHP G 8 M!O NHP P7 P I MUP
HP Q M P % $

< J # HJI J O GL G N ! X
!9PGG HP U! G I P % ! I P+

9 !PMQP #
" P G 7 M ! A9P % # 7 MLL PO M9 J +

%%SK T!PGG AM H7J9!PGG#
PMGJ P IT % %%G NH IT J! LP TPM G+

S7 P Q!P " 3
#9MG L 9MOT[
HP%G M % ! MQM !+

N MLLMO LJ! GH I P!N 7 " O - +
#N NHP % --

SI 9 NM T I P I P!N " - +
3 P T I 7!JNP !
H J9O AP NHP 7MNHP 7 G I P %

%SO GMGN JG P P!NG " - +
X HMN % %# H 7P99 H AJNKHP 9T+

(SGN KN!PGG / O #!QP9
@# I M! 7 % (M!O 7 I MAGN !P!KP
N OPG '*
HJG NH H G GNPM9NHT LMKP+
X NH M]J !%G M GH !Q % %# N M OG H G
OPG Q!
PG 9 UP M QH GN+

) @ + S9 P GM 9 &
X P GPP NHP !O G N G P JL ! J GM 9G+
#!O TPN P %) ! N AJN GPKJ P9T LP GH+

%SGN M!OG GH PG " O - +
#!O A PMNHP GH N !OPO MKK P!NG 7!P A 9G
AP K I I P!K%O !% %M7M P I NP+

% (- SPGKMLP P77PKNPO AT GN P!QNH 3 +
2
N ! N AT HMN % %(-
N !Q ! MGNP ! - +
HMN%G T J GJLP GN N !+
4 ' - M O !JG G 8 NH JG MN GPM N HMNH
APP!GN 99 AGP PO 8 M!O P M P % * %

() S ML P " +
27 HP AT KHM!KP PGKMLP T J P! I %O% ()
1J LJ L GP I MT H 9O NHP P+

!SDAMQQMQP 3 +
HP P7 P M MT N QPN J MA M O+

SI MNNP I MNP M9 GJAGNM!KP 1 +
4PN O 2 H 9O N P T % O NHP K !GK P!KP
O ! K !N %O I J OP +

X 1

SGN PO 7J ! GHPO #
NH M99 H ! J MA9P NJPG+

"A (SJGPO MG M L9J M9 ! J!
HP Q PMNP 7 9P 7 NHP % "A (7 HP9O NHP OJUP N
AP GP+

4D "A (SJGPO MG M L9J M9 ! J! -
" 7 I NHP 7 !!T % "A (7 NHP GPM
HPGP 7 GHP G NP99 NHP !7 I N PG 7 I P!+

"%(" %SGJA I NG MKU! 9POQPG MG M GJLP
P R +
T 9 P 9 UG 7 PGH M!O 5PMNH N I P % "^
%(" %
!KP GL NP 7H I 2 99 9 P !NH G L HT I P+

((%% SGJKKPGG ! X
HM!J LM P!NG% ! A9P !M I PG+
2! H GP % ((%% P M P QP!N9P+

((%% SGJKKPGG ! " - +
#!O G % ((%% 7 I GKH P7 GHM99 AP A !+

4((%% SGJKKPGG ! K !GP]JP!KP 1
H J9O T J O G I T 9 O+
T GLPPKH GH J9O 7M99 !N GJKH 9P % ((%%
XH KH IT NH JQHNG M I O ! N+

% @ + SL I LN &
HMN HP O O L9 N NHP OJUP 7 : 9 GNP %G OPMNH8
4 % H G G ! AP9 P !Q MO P GM PG+

% E + SNP I LN KW9
9 PG 2 HM P 7 K I7 N M!O OPGLM
XH KH 9 UP N GL NG O % % I P GN 99+

% SNP I LNPO : + + + +
! !Q NHMN NP!OP T JNH G G !% %

% SNP I LNPO / JK
-P KHM!KP H G A MGN 7 / JK PKP% G P P Q!NT
4 % NH G L JO GGJP 7 M U !Q+

% %SNP I LNMN !G / + / + / + + + +
4 % %M P N NHP G MG N I P+

% %< - % # X +) +
#7 9NHT 77 KP HP G !NH GP % % %7 NHP
T J!Q PM 9+

% %SPWK NPG " 3 + +
4 %%NHP U !Q J I MGNP
NH G9MGN K GN9T N PMNT+

J K OP 7 ?M I PG " M9PG " + 2
!P %G]JPGN 9M +

S P]JPGN # / + +
2N G IT !9T % !

< (G 9 K NMN ! &?
IPN I P GHP QM99 LG %P M K J N P %G ! GP
#!O NHP!O PM I G HP 7 G I P99 !Q JN M %

SK9 NHPO / + +
P APNNP % .
HPGP PPOG M P I P I PG 7 NH GP GP
H J G+

SL ! J!KPO MG GH NP / + / + / + + + +
XH G NHP % 1

) SM99JG ! N NHP K Q! CM!KP 730 M O
2 & + + !
G NHP !NP 7 J O GK !NP!N
MOP Q9 JG GJ I P AT NH G % I)
JLPNGN N !G PGLPKN !Q O !PO I P! + + + + +
27 T J 99 ! N I J NHP I P 7 I T 9 P 9PN I P
AP T J GP M!N+

--' (% $ > '' S NNP!GJLL9 KMN !G " +
#!O NHP! P I MT OP9 P J % --' (% $ > '' M

! 0 S P P !PO P UPO " O +)
M!G OOP! MNP
#O P!KH 7 % ! 0 EMOPG NHP AM 9PT
A NH
5PK KN NHP K 9O A9 O N GJKH M9 M!N HPMN \

%- (SGJGL K ! 2WW
HP !M I P!N 7 APMJNT G % %- (
MGHP7G & ?
: PQ T P I P I AP NHT %8 %$ A9 +

48 %$ SIMU !Q M ! GP 7 G OG MQM !GN NM QPNG
/ +
XP%9 HM P M %8 %$ M!O %M I M N M9 JNG OP+

48 $ % $ $ S P G PM H G NH JQHN+ X +
48 $ %$ $ $
T PMKH LM N KJ9M GNM ! !HPM P!+

PM G !9T ? + +
HP N JNH NH J M N J!GJ P
+G PM %8 % '2 ! N AP 7 G !+

48 S!M I P 7 M!$ MLL9P & ?
HT N G M P T A NNP %8

O AP9NG " + +
HP KM MQPG G M P NHP HM!QP G+
O P%P!9 UP M OM!KP # + + =
" P MN -H 9 LL UPLN
" G %8 0 ') (
O !AT M OM!KP # X + +
9 H ! J AP A JQHN JL M!O ! %8 8
JN !P N (NH+
1 / 22 =

OG' iGK LN iG JL i‡ "‡ ' ‡-‡ ‡ '
'7 NJiM'B K+
)' ' % SMUJP'M i'JN'M I JGNP 99‡ "‡
'O‡-‡ ‡ 2'
)' ;@ + S GJAOJP‡ ‡ ‡ XH KH' MG+
)' ')' 'IMIT'N iG'p p'M9 I GN'& lP
' H J9O'U+i ' P' p P'M7 N+
)' SQM i'AT'K i]JPGN‡ #‡ ‡ ‡ '
"P'K J9O'G ']J'JQ9T'KJN'NHP'2 i Mi'GPM+
#iO') ' Tip+
)' '8 $'2 SDBPI P'Ui 'T J'IPMi iQ‡ "‡
'O‡-‡ ‡ ' J9O'T J'O MKP' J9O') ' '8 $'2 '
2' J9O'T J'O MKP‡ ' XH I'IPMiGT J'Q MKP‡-'
7‡ ‡ ‡2 '
/' MUP'H NMUP'NH GP'9 LG M MT R' i'NHP'MJNH GH L'
MUP' '9pio‡ T‡ ‡ '
27'MiTNH iQ'NHMN%G K 9'GLPMU8S 7'GM MQP S'
) ‡ ' '
/' MUP'NHT 9O'K9 MU'MA JN'NHPP R'AM99MO' 7‡ 1‡ +
iO' NPLHPI' MG'M' NHT LPP+
) %<% D % NHO GPMGP‡ ‡X ‡ ‡ ' ' f'
#iO'NHP P'HP'A9MGNG'NHP'N PP'MiO') %NHP'KMNN9P‡
) %SGP CPG' NHO GPMGP‡ "‡ ‡ ‡ '
HPi'i'L9MIPD'GN UP+
'7M T) %"i ' NKH'HMNH'L P'N 'KHM I‡
) < ' i79JPiKP‡ /‡ ‡ ‡ '
9PGG'NHPP7 1' H 9 iOG'GNM A9MGN iQ'MiO'
) @
) '%' $ '$ iSNMJiQ M MT NHP G P P Qi%G
KH P7N N9P‡ &‡ ‡ ‡ ' 'GH NPi'T J
O ') '%' $'$,
) ' -SAJT iQJL i'K PO N‡ "‡ ' ‡-‡ ‡ Y*' '
27' M' IMI' G' NH JOH' NH' NHPI' i' H ipGN'
) ' -*NHPi'NHPT I JGN'GNMiO' JL i'GPKJ NT‡
' %SG IPNH iQ'L PK JG‡ /‡ ‡
#i9 [APH 9O'NHP' ' %' 7NHP 'HM '
X NH'N GNPO IPNM9'M I JG9T' IL9PMKH%O+
''<% * A 9O‡ ‡ +9' '
"pMG'MG' '"M IMI'MG'MiT%G i'299T M+
M I'GiMUP‡ #‡ /‡ ‡ '
2'GPP'9 P'HMNH' I MOP'NHPP'M' '%') '
P7 P'M' #9PH JGP' i'M "PMNH+
6' MI iQ' 7M H P RS 9O'L9MT‡ + ‡2iOJKN i'* '
6' MI iQ' 7M' H P R'GKPiP'i'NHP' 9O'L9MT' ' ‡ +
‡ ' ' '
: O I ' MP+
6' MI iQ' 7'M H P R'GKPiP 7 I'NHP' 9O' L9MT' 7‡
‡ ‡ ' '
2' I JGN'M MT'N OMT+

&I'IMGNP'JG')'Ji[7 : O%G'GMUP') '$, %
'7 NJiM'B K+
'O‡-‡ ‡2'
)' ' % SMUJP'MI'MKK JiN'N' I JGNP 99‡ "‡
)' ;@ + SGJAOJP‡ ‡ ‡ 'GLPPO 9T+
IP'9PN'JG)' ' % 'GLPPO 9T+
XH KH' MG+
)' ')' 'IMIT'N iG'P P'M9 I GN'& lP'
' H J9O'U+i ' P' P P'M7 N+
)' SQM i'AT'K i]JPGN‡ #‡ ‡ ‡ '
"P'K J9O'G ']J'JQ9T'KJN'NHP'2 i MI'GPM+
#iO') ' ' Tip+
)' '8 $'2 SDBPI P'Ui 'T J'IPMi iQ‡ "‡
'O‡-‡ ‡ ' J9O'T J'O MKP' J9O') ' '8 $'2 '
2' J9O'T J'O MKP‡ ' XH I'IPMiGT J'Q MKP‡-'
7‡ ‡ ‡2 '
/' MUP'H NMUP'NH GP'9 LG M MT R' i'NHP'MJNH GH L'
MUP' '9pio‡ T‡ ‡ '
27'MiTNH iQ'NHMN%G K 9'GLPMU8S 7'GM MQP S'
) ‡ ' '
/' MUP'NHT 9O'K9 MU'MA JN'NHPP R'AM99MO' 7‡ 1‡ +
iO' NPLHPI' MG'M' NHT LPP+
) %<% D % NHO GPMGP‡ ‡X ‡ ‡ ' ' f'
#iO'NHP P'HP'A9MGNG'NHP'N PP'MiO') %NHP'KMNN9P‡
) %SGP CPG' NHO GPMGP‡ "‡ ‡ ‡ '
HPi'i'L9MIPD'GN UP+
'7M T) %"i ' NKH'HMNH'L P'N 'KHM I‡
) < ' i79JPiKP‡ /‡ ‡ ‡ '
9PGG'NHPP7 1' H 9 iOG'GNM A9MGN iQ'MiO'
) @
) '%' $ '$ iSNMJiQ M MT NHP G P P Qi%G
KH P7N N9P‡ &‡ ‡ ‡ ' 'GH NPi'T J
O ') '%' $'$,
) ' -SAJT iQJL i'K PO N‡ "‡ ' ‡-‡ ‡ Y*' '
27' M' IMI' G' NH JOH' NH' NHPI' i' H ipGN'
) ' -*NHPi'NHPT I JGN'GNMiO' JL i'GPKJ NT‡
' %SG IPNH iQ'L PK JG‡ /‡ ‡
#i9 [APH 9O'NHP' ' %' 7NHP 'HM '
X NH'N GNPO IPNM9'M I JG9T' IL9PMKH%O+
''<% * A 9O‡ ‡ +9' '
"pMG'MG' '"M IMI'MG'MiT%G i'299T M+
M I'GiMUP‡ #‡ /‡ ‡ '
2'GPP'9 P'HMNH' I MOP'NHPP'M' '%') '
P7 P'M' #9PH JGP' i'M "PMNH+
6' MI iQ' 7M' H P R'GKPiP'i'NHP' 9O'L9MT' 7‡
‡ ‡ ' '
: O I ' MP+
6' MI iQ' 7'M H P R'GKPiP 7 I'NHP' 9O' L9MT' 7‡
‡ ‡ ' '
2' I JGN'M MT'N OMT+

6' MI iQ' 7'M H P R'GKPiP'i'NHP' 9O'L9MT' 7‡
‡ ‡2'
XHP P'AP'NHPGP'UiM PG\
3 QHNT' OO'TPM G 7'G ,'HM P'2,'GPPi+
#iO' PMKH J 'MG E T' MKU%O' NH'M' PPU' 7
SG ‡ &‡?‡ ‡ '
2%9G'9MT'7 J NPPi' 7'IT'NPPNH'
#iO'TPN'N 'IT' '$' N' GL Upi;?'HM P'AJN'
7 J+
SQ P7‡ ‡ ‡#
T7MKP' G'7J9g' 7GHMI P8 IT'HPM N' 7' '
SQ P7‡ /‡ ‡
N' 1iP H GP'79M IP' IT' HPM N' G ' I JKH' MG'
M I%O
1 'IT'M77PKN i'LJN'N 'NHP'GI M99PGN'
T'MHPGP' '"' %"‡ ' ‡-‡ ‡ ' ',
'"' %SMiK piN MOEJ MN i‡ "‡ ' ‡-‡ ‡ ' '
pi'K I IMiOIpIpNG‡ "‡ ' ‡-‡ ‡ '
J9O'2'K IP'PM'T J'APMJNT' NH'IT'IM 9G'
2%'GPN'IT' '(%' i'T J'7MKP‡
'%$'' M9JP' 7'NHP' TM9‡ "‡ 'O‡-‡ ‡ ' '
H J'PM IPGN i N' 7'NHP' A9 O' TM9'7'NH J'
OM PGN' N'GNMiO'7 ' '%$''
piKH‡ "‡ 'O‡-‡ ‡ '
NJIQH P'M ($
HPP' %P'N 'HM GHIPGG+
pii G AM99G‡ ‡#‡ ‡ '
M 'HP' 9O' IMIPIN' 7'H G KHPPUG'HMNH'M9 PMOT'
GNJ77PO' %i" "'%
piITG i' +'L pI'AT‡ ‡ ‡ 2'
#N'NHP' I MMPO' Q MiQP' PG OPG' NH G OPEPKNPO'
M MI M+
p IG‡ ‡ ‡ '
/ QHN'M G'MiO' PK 99PKNPO' %
p IG‡ ‡ ‡ '
1J'K NT%G iGN NJN iG'MiO'NHP' %
#iO' NHP' IPKU' 7'NHMN' %) 'NHP' H 9P'
GNMN+
MGNP'@ + SN T‡ ‡ ‡ '
%'T J'9PQG'G 8 LJN'NHPI'N' I N i+
J SGMN P‡ #‡ / ‡ ‡ '
4 J'9gY AP' H LL%O'7 ' J ' ip 7'NHPGP'
OMTG+
J SKpiGJ p' pL MKH‡ #‡ / ‡ ‡ '
T J '9 U P' 9O'Q GP'79 pG'
ikGMEI%O' 7'MiT IM i+
SG ‡ ‡ ‡ '
#
6' MI iQ' 7'M H P R'GKPiP'i'NHP' 9O'L9MT' 7‡
‡ ‡2'
XHP P'AP'NHPGP'UiM PG\
3 QHNT' OO'TPM G 7'G ,'HM P'2,'GPPi+
#iO' PMKH J 'MG E T' MKU%O' NH'M' PPU' 7
SG ‡ &‡?‡ ‡ '
2%9G'9MT'7 J NPPi' 7'IT'NPPNH'
#iO'TPN'N 'IT' '$' N' GL Upi;?'HM P'AJN'
7 J+
SQ P7‡ ‡ ‡#
T7MKP' G'7J9g' 7GHMI P8 IT'HPM N' 7' '
SQ P7‡ /‡ ‡
N' 1iP H GP'79M IP' IT' HPM N' G ' I JKH' MG'
M I%O
1 'IT'M77PKN i'LJN'N 'NHP'GI M99PGN'
T'MHPGP' '"' %"‡ ' ‡-‡ ‡ ' ',
'"' %SMiK piN MOEJ MN i‡ "‡ ' ‡-‡ ‡ ' '
pi'K I IMiOIpIpNG‡ "‡ ' ‡-‡ ‡ '
J9O'2'K IP'PM'T J'APMJNT' NH'IT'IM 9G'
2%'GPN'IT' '(%' i'T J'7MKP‡
'%$'' M9JP' 7'NHP' TM9‡ "‡ 'O‡-‡ ‡ ' '
H J'PM IPGN i N' 7'NHP' A9 O' TM9'7'NH J'
OM PGN' N'GNMiO'7 ' '%$''
piKH‡ "‡ 'O‡-‡ ‡ '
NJIQH P'M ($
HPP' %P'N 'HM GHIPGG+
pii G AM99G‡ ‡#‡ ‡ '
M 'HP' 9O' IMIPIN' 7'H G KHPPUG'HMNH'M9 PMOT'
GNJ77PO' %i" "'%
piITG i' +'L pI'AT‡ ‡ ‡ 2'
#N'NHP' I MMPO' Q MiQP' PG OPG' NH G OPEPKNPO'
M MI M+
p IG‡ ‡ ‡ '
/ QHN'M G'MiO' PK 99PKNPO' %
p IG‡ ‡ ‡ '
1J'K NT%G iGN NJN iG'MiO'NHP' %
#iO' NHP' IPKU' 7'NHMN' %) 'NHP' H 9P'
GNMN+
MGNP'@ + SN T‡ ‡ ‡ '
%'T J'9PQG'G 8 LJN'NHPI'N' I N i+
J SGMN P‡ #‡ / ‡ ‡ '
4 J'9gY AP' H LL%O'7 ' J ' ip 7'NHPGP'
OMTG+
J SKpiGJ p' pL MKH‡ #‡ / ‡ ‡ '
T J '9 U P' 9O'Q GP'79 pG'
ikGMEI%O' 7'MiT IM i+
SG ‡ ‡ ‡ '
' NH iU' % NHP'NPPi'NHMN'2'HM P'NJ i%O'T J'N ‡
* I'THPM N'A9PPOG
2'MI'H G Q MKP%G $ " $
$ $SNH OA JQH'LPMKP 77 KP‡ /‡ ‡ /‡ ‡
' ‡ ‡ ‡

$ $' $ '% $ $' $ ' $ %' '. SNH JQH' 1T L pGKpIK'P i' UI iQ' HMN' NH iQG 2' GH J9O' 9 p‡ ‡ ‡ ‡ ‚

1T ‡ "M'iM;MiO'M99'HJ1MiNT+

I i' 7'#NHpIG'MKK JiN' 7' i'G' HP'-M9MK'P' 7-9PM_ GJ p+R' ‡ #NH‡ ‡ 'G_ 2'HM P'M'N pp' HKH'Q GHP P' i'1T K9 GP+

= SGMN MNPO'Q9JNMPO‡ /JK‡' X HM\'HP'APHP9O' i'HMN\'HP'7 1 9T'O NPO #iO'1'H G' 99H G 7J9'PTP'HP'

SKMLM G iPO' /‡'/‡ ‡ + HP' 'H GP'H G OP+

% SMNM PO‡ ‡#‡ X NH'A J i Q'PTP'O O'H N9T' P 9 UNHPI+ #iO' NM'0 i'NH'I O OM7'HPMN

% SNPM G'L PTG‡)'#‡ 3 pi'MG'Mi'pl'LNT'PMQ9p'GHM L'AT'7MGN+ % NH' HP'APMU' i'7PMNHP G'79PGH'MiO' A ip+

CX<DSMNN iO‡ ‡3‡ ‡ ‚ d HP'I ipT'NHMN'HP'GLPiOG i' HMN'G i N'7NPi' JKH%O' H 9P'%N G'M'IMU iQ' O % 'i8 $8'(

% G'i'HG'AJNN iG‡ ‡X‡ ‡ ‚ "p' 99'KM T%N 8'0 %' '$ %"

NHP‡ ‡ ‡ ‡ ‚

1J'K i%G'N ;PML'7 'TPN' J' $ 0%'N'G + 4PM'NH G'IM%G'A '9 UP'N'M' 'i' * O NP G'NHP'iMNJ P' 7'M'N MQ K' 9JJ1P+

N9P 9PM7‡ "‡ ‚ ‡-‡ ‡ ‚ 0 9N TM O‡ "‡ ‚ ‡-‡ ‡ ‚ "P'ip P'GM 'H I'A7N' iK‡P i'NHP' 'i2 2'HM P' PN %O'I P' ' '8 % "'(() #iO'GPN' I ip'PTPG MN'79 +

'O 'i'G9MIOP ‡ ‡ ‡ ‚ #iO'TPN'I T'IMNJ P'ip P'i'NHP'7 QHN+ '%' '

SNMH IO'N 'NP 7T‡ 1‡ ‡ ‚ 1'7GJKH'M'NH IQ'MG'MH J S ' *i N'N 'OP9 QHN+ ' ' $ '% SD%'E i'i'NHP'G iQ‡ ‡#‡ ‡ i'

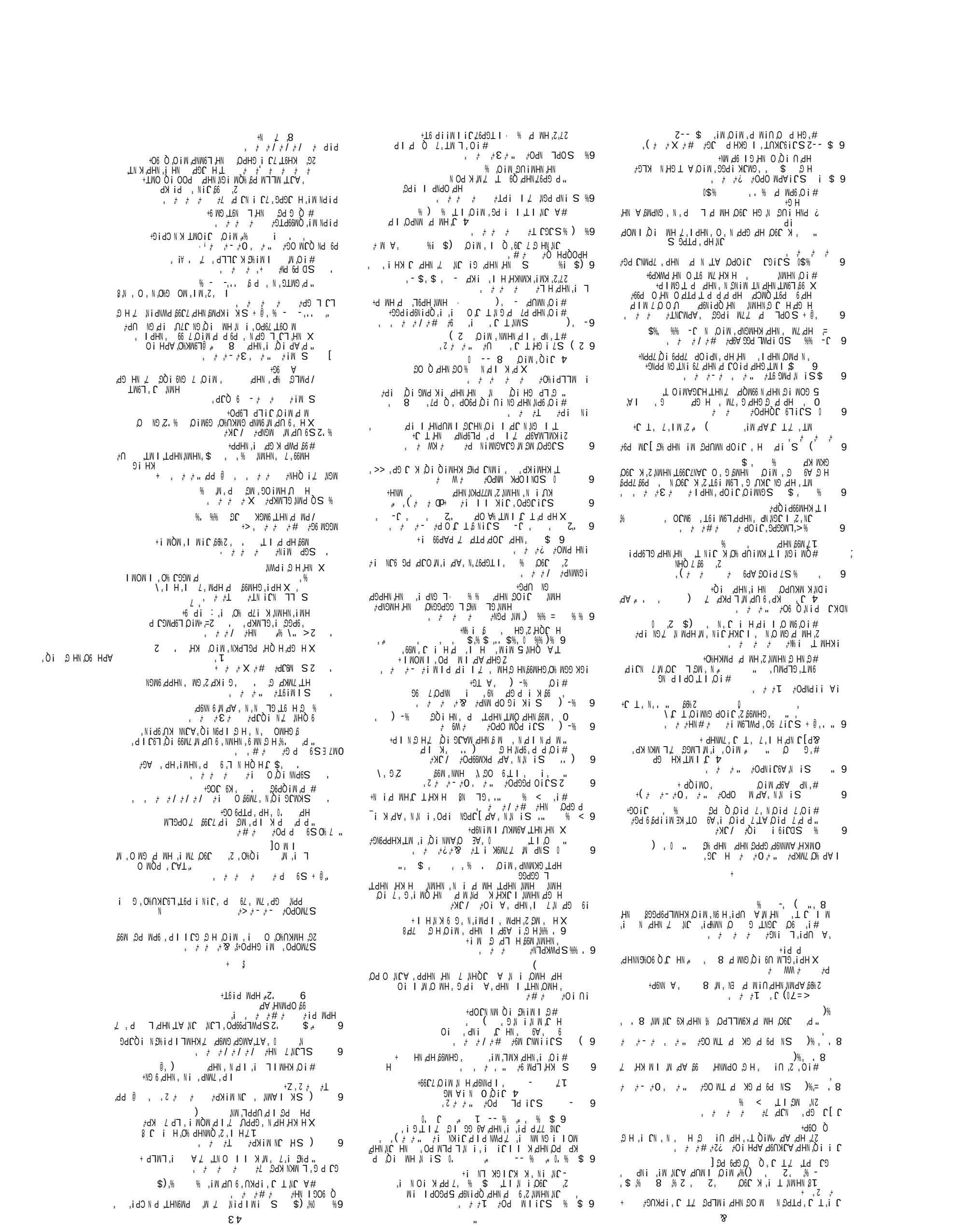
lP' i' HMN'UPT'GHM99'M I MI'NMUP'T J' ' $ '% '1 I iK‡ ‡X‡ ‡ ' '$ %'%$ - S i'MOON i'N 'H G GHML P‡ ?‡ ‡ ' ' #iO' '$ %'%$ - *' P P'HP 'N 'M 'H G 9MIO+ #iO'7M T 9UP' i- ($NHP'JiK9PMI'Ui QHN+ '%' ()SG'MG'N 'G9MKU‡ &‡?‡ ‡ ‚ #iO'2'MI'i NH iQ'G9 ' '%' ()'H G HMGNP+

1T ‡ *IMi'MiO'M99'HJ1MiNT+

AP

JI'H JGP8 G i9 '#NHPiG[HPiKP7 NH' HMNPO' 9 p‡ ‡ ‡ ‚ 'M'IMU'NH iQG 2'GH J9O' 1T L pGKpIK'P i' UI iQ' HMN' NH iQG 2' GH J9O' $ '% '$ $' $ '% $ $ ' ' $ %' '. SNH JQH' O 'H G]JKU'HJIN iQ+ 27'NH G L ' %$' ' (*8$ ' ' (' MGH' 7' piKP' H i'2'N MKP‡ 1‡ ‡ ‚ LH pG‡ "‡ ‡)' ' -$2*'G O'i ' HMNKHIPiN' %P' H G A ipG+ -(''2S7QJ MN p9T‡ "‡ ‡ 6/ HP'I JGpN ML‡' MiT'H ' -(''2 #iO' KP NM i9T' GHP' O O' T J' iQ8'7 'T J' p P' $i-' $ SDAN NHPO‡ "‡ O‡ ‡ + $i-' $ 7'KP' 7'NHP' 3KK9PG MGN KMQ' JN' H'KM PG' JN'K NMN iG‡ /‡'/‡ ‡ 2' $ 9P' ILP MN 'MiO'Q PMN'QPip MQ' 1 7' - % J MOMIP‡ X‡ ‡ ‚ 9 IT OMIPG+ 6 T' U+R' ‡ ‡ ‡ ‚ 3WL G%O'ITGP97+ O I'KP NM i'MiO'L GGPGG%O'K i pipiKPG+ 'O JAN79J7 NJIPG+ NiKU9P APO‡ &‡?‡ ‡ ‚ 2%9G'N 'IT ()'i" JP 9 J'GH "‡ ‚ ‡)' XH KH'AP PLN'N 'NHP'Q M P'O'i N'Q + X NH' i' $ 8 %$' '% JP' IpI‡ "‡ ‚ O‡-‡ ‡ ‚ 'P A JiO'NHP' HP' NH p PG'HM P'A JiO'NHP' ' 'i ' i' S NH9pGG O Q‡ /‡ ‡ ‚ 1 'A AVM 9U P' ' i ' JiUG 7'NHP'39 CMAPNMHI'MQP‡ ‡ ‡ ‚ 3 LNT')% %P 79 J GH%O'AT'NHP'OP 9+ $SH ipGNT‡ ‡ ‡ ‡?* ' HMN'I M9 KP'APM G O i' $ JKUPG iMJIKP‡ "‡O‡ ‡ ‚ HPI'9PN'NHP'N JILPNG'G JiO' HP' () i% ('MiO'NHP'i NP'N 'I JiN+ JIAGP ‡ /‡/‡/‡ ‡ ‚ -(' PM'H D'K 9 J G9UP'M' "' %'H L+)'5 2SD-LP' PQ T ‡22‡ "‡ 'O‡-‡ + R‡Ç 2'HM P'O ip'NH G'OMT+)'5 2ip p'O O'GJKH'OPPOG i'M IG MG ('@ + SI OJ9MP‡ #‡/‡ ‡)' #iO' 'H G ip T'i NP' IN 'NHP'G PPN'A O%G'NH MN+ ')'8 $' SOPM9 NH' IP'K JP99T‡ "‡ ‡ 'NHP' PGN' 7'IT7 NJipG ')'R8 $ 41

GLPiO‡ ?‡ ‡ ‚ XHP P'MPGP'N ' H GN MI'M I PG I QHN' K I_ A ip HP'A9 O' 7 IM9 KP'i'M' p i' 7'9PMQJP+ #iO'i N' i%- 'N'G'J I p QHA J 9T+ 'NHP' M 1'GJi‡ /‡ ‡ ‚ NH L KU'KJGN I' 7JG iQ‡ ?‡ ‡ ‚ N' "P'MiO'H G 'T J'N M p99p ' $ 2 HPH' H NP'MG'9M i'NHP' GPG')' "P'9MT O GN' PO'GPG'NHMN' i'9M i' P'9MT)' 8 2SAPiQ'NMUPi'M T‡ /JK‡ ' 9 ‡ ‡ ‡ ‚ % 9 N' G'i T 9 O'?'MI' ($'0' $' ' '



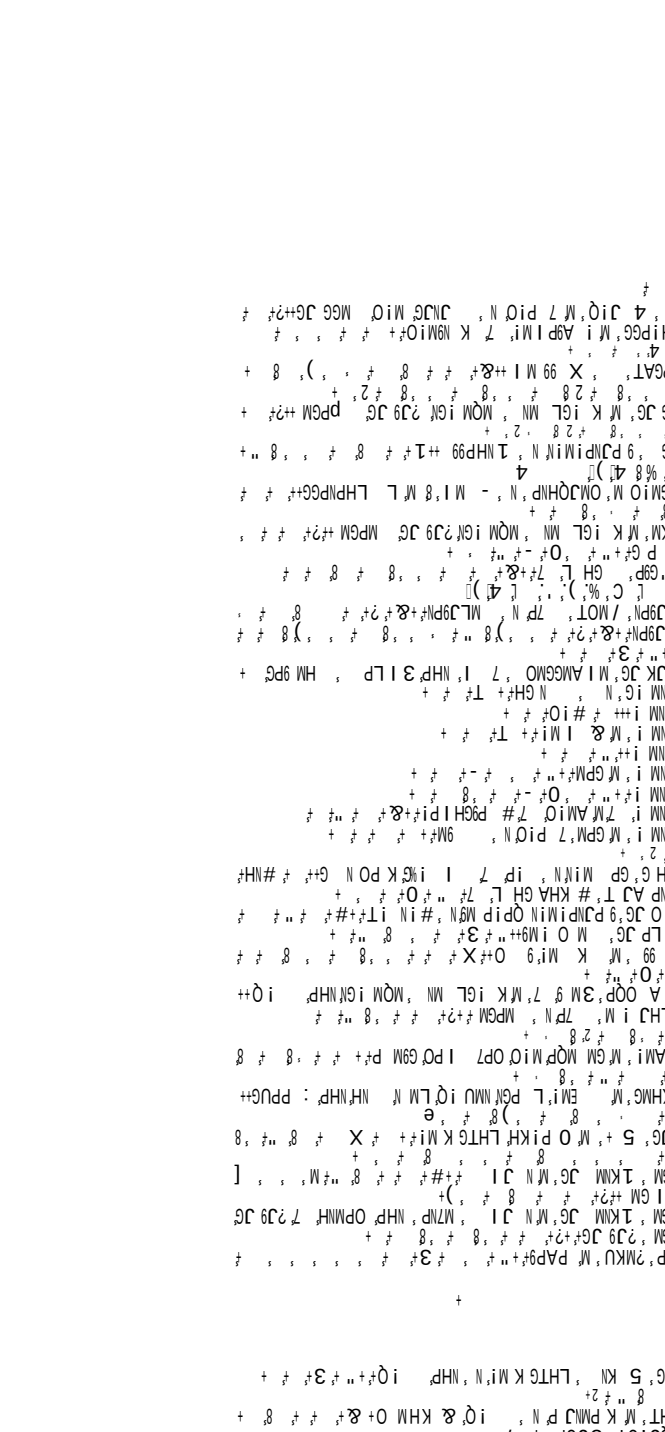
XHP P'NHP 'MLL INIPIN" P'IMT'APGN'O GK p ‡ #‡
‡ 9 ‚
1J'7 N
L i'NHP'H 99G'MOE iIQ'N 'NHP'K NT
HM99'GMT' NF'JG S Op'7 'GPM'G Q pi'8
HPT'HM P'LJN'7 NF'NHP'HM pi S
&$ ' $ ' -- '8 ' 2'" %' %(
%SD HP P‡ "‡ ' ‡-‡ ‡ ‚
4 J'O 'L PLM P'N ' OP'JIN ' M IN' #9AMi%G'
&$ %'NHP'U iQ'MiO]JPPi'O 'I PMi'N 'HM U+
$ %S HP P‡ -‡ ‡ ‚
2' piN'N '#iN KH
2'G JQHN'NHP'LJ KHMGP' 7'MF Q9 JG APMJNT+
&$ %'NH 'JUI %GN'MQM iGN'HP'7MKP'7OPMNH'
A JQHN'NHP'HJiO PO'IM UG NF'H I'i'Q 9O+
X 9O Q OGP'KHMGP+ &'‡?‡ ‡ ‚
&' %%SD 9OIPGG‡ ‡ ‡ ‚
O 'GJKH'NF M LPO'G9 L' 7'8 ' %%
P%P' GGJPO'7 I'H G A9 O+
X 99'AP'H G7 P‡ ‡ ‡ ‚
H G'MG T J'GMT SGJQQPGNPO'
#N'G I P'N I'P HPI'H G G M iQ' ig 9piKP'
HM99'N JKH'NHP'LP L9P'@ H KH'N I P'GHM99 i N'
MIN
27'HP'AP'LJN'JL i%'MiO'NHMN%G MG'PMGT'
#GN'GPN'O QG' i'GHPPL'8 '';'$ %' '
'U i09P'NHP 'O T'GNJA9P+
&''' ' -' 2 < 7iO'pIL9 TIpIN' 7 ‡
"‡3‡ ‡ ?‚
#iO'QPip M99T' H p p'NHP'U iQ'7M J G+
HP'KM O iMG iGNM1N9T'8 '' -' 2
&$'' '$ '(% SD 'i'L L N i'N'HP'K iGPiN'
;&‡?‡ ‡ ‚
T 8 '' '$ '(% 'GAJN'M LM N+
&' -' SD p9PO' /‡ /‡ /‡ ‡ ‚
H G 8 -' H i Q'LJ A9 iO' MT M O'A T+
$
&$ ($' *S $ %*< ((' $2' % '
0 XM iO'NHT'HPMO+
'HJ1A9P'MG'NHP' LPGN I J9AP NT+
XH 779P ‡ "‡O‡ ‡ H JG'
/ UP'M I QHNT 8$ ' '%' P'NHP'U iQ+
XH LL iQ'K JGN I' 7‡ #‡X‡ ‡ ‚
', 5 T J'K T'6'1'/ O'GH R' 2 J8$ -- 1
&$ ' $SLM9PiPGG' 7OPMNH‡ #‡X‡ ‡ ‚
/P'NHP'8$ ' $'G N' H'NHT'KHPPU'7 'P P+
XH NP ' +' PWL9MiMN i' 7'NHP' LMGGMQP‡ #+$ /‡ ‡
‚ +
"P9PiK'KHPPU'AJN'i N'HP'HPM N8
9P LMN MN'G I MEPGNT8
#M9MiNMN'G APNNP'LM N8
MO' /JK PN MN'G I OPGNT+
&$ % %SD9MJiOP G‡ ‡X‡ ‡ ‚

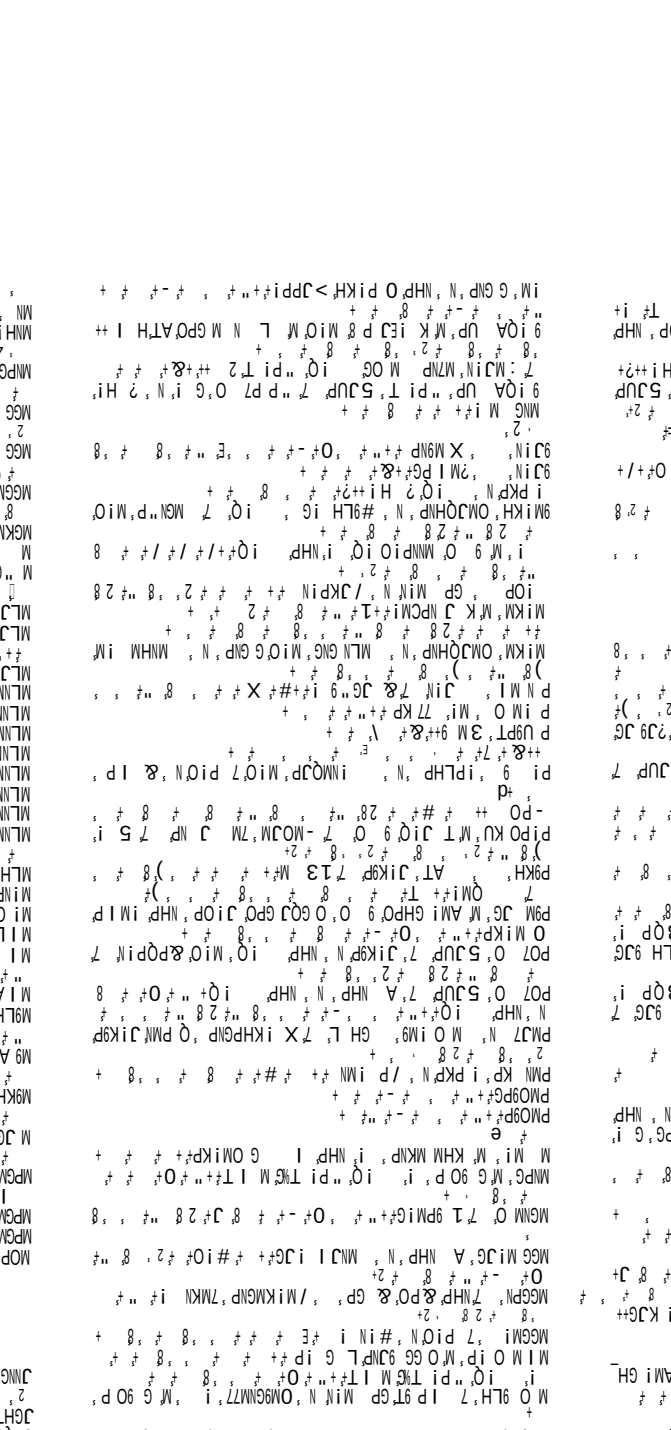
X 2

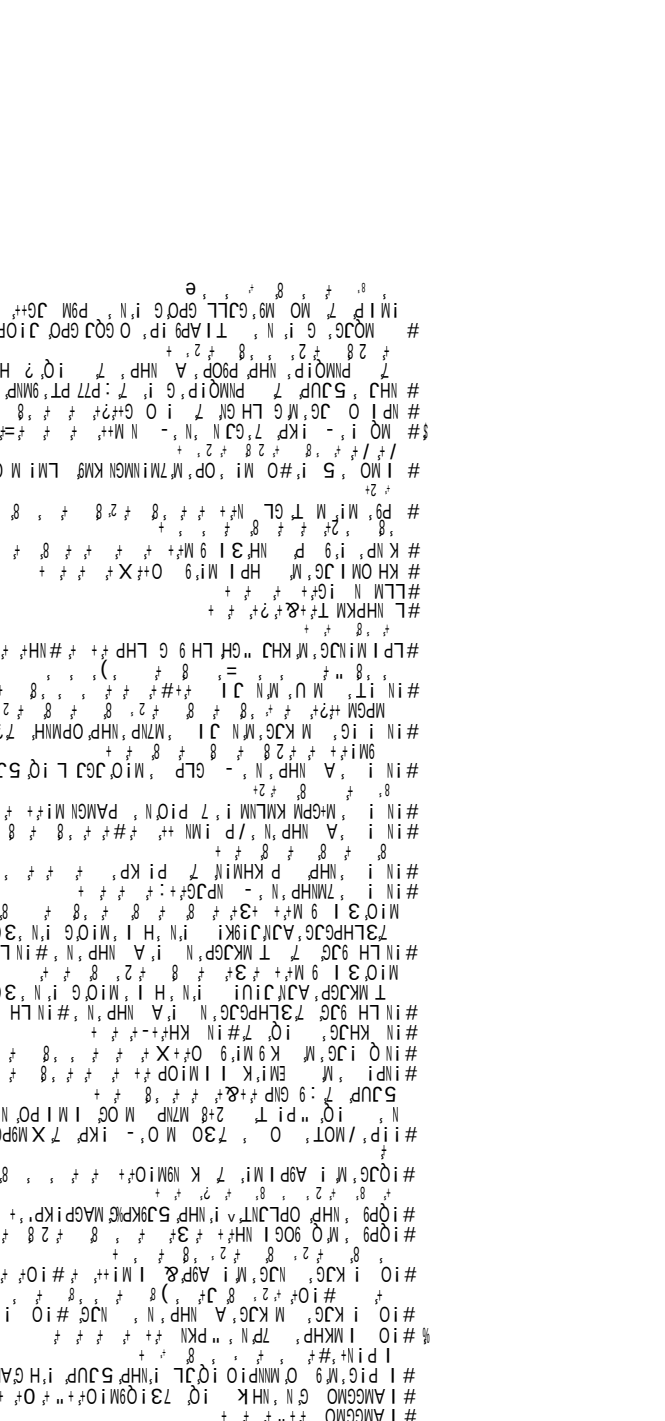
X iOG 'GNMNP' 7' i'NHP'N I P' 7"'pi T2 ‡ ‡X‡
‡ ‚
p p'M IMi' i' &' % 'Ui G I P' T
#ipi%G I iO'NMPI'?'O +
O 'NHPT'M P'G 9O P G+
& 2*K J NP JG'9 AP M9'7J99' 7'GL N+
:‡ ‡ ‚ (S P'K ILM PO'N 'H G'K PKN i+
&' '$%'(('$ ' ' HP P' G i'8 ' '$%'((
2'H LP' N' G i' O GH ipGN'OPG P'N 'OPG P'N 'AP'
M'8 ' '$' '8 ,
H J'O NM O'NH J'M N'8 i
&' i SDHPIPK'UPO‡ X‡ ‡ ‡ ‚
X IpI'MKN G‡ ‡ ‡5‡ ‡ ‚
4 J'GHM99'L9MT' N' i'M IMGU+
&' SM P'MKKJGN IPO‡ "‡ ‡-‡ ‡ ‚
" 'NHP'3iQ9 GH' i' NHP'GJAJ AG K9 GP' i_
N piKH%O
RR ‡'NH JQH'M GPK PK'Q MNP' 7' i'AM G
2i'T IOP'N P'N ' P LPP'NHP'K NT+
&' SIMO' 9O‡ ‡ ‡5‡ ‡ ‚
/ UP'M'8 'X IMi+
&' SD 9O'IMO‡ ‡ ‡5‡ ‡ ‚
#iO'HP P'MI'2'MiO'8 ' NH i'NH G O+
&' SIMO‡ "‡ 'O‡-[‡ ‚
" 'NHP'T JiQ' HP9L' 7' M9A N%G' MQ iQ'8 '
5 G79PGHH GLJiT'G O i'O piKH IpI%G'A9 O[
&' SIMO‡ ‡#‡
/ 7P L G i iQ'LPGN 9piKP'MiO'7 piC PG 8
&' OA i P‡ ‡ ‡5‡ ‡ ‚
'O NF'NHP'8 " 'NHP'G PPN'H IPTGJKU9P'
:piN9T'piN GN+
&' SHJNP ‡ ‡X‡ ‡ ‚
i'2'M'8 'IT HM[
X NF'HPLP iQ‡ ‡#‡
XHMN' NW'G'7 MPi'AJN'O GG 9 PG'8 $' - ^
&' NF'HPLP iQ‡ ‡#‡
XHMN' NW'G'7 MPi'AJN'O GG 9 PG'8 $' - ^
#iO'T P9OG'MN'9MGN'N 'p p T 9 QHN' IL PGG i'\
&' $' SI'NHP' 7MKN‡ X‡ ‡ ‡ ‚
27'T J'HMO'i N'NMUPi'T J GP97'8 $'$ '
&' $' SD MIN iQ'NF'HP' 7MKN‡ X‡ ‡ ‡ ‚
X NF' HMN' PiK JiNP'G 'JiKJ piN‡ X‡ ‡ ‡ ‚
iKP'HP'KMlP+
&' $'8$ ' ('%' ('2'
"M P'GN M i%O'N 'MLLPM'NHJG+
X NH JN'Ui PG‡ ‡#NH‡ ‡ ‚
pNH iUG' NHPT' GH J9O' i NP' NHPl' 8 $ '
) %
&' %SGPiGPG' ‡#‡ ‡ ‚
2i' J'9MGN'K i79K N'7 J' 7'H G 7 P8 %' piN'
HM9N iQ' 77+
X NG'NHP' #‡/‡ ‡ ‚
HP'OJ9ipGG' 7'NHP'7 9 G NHP' HPNGN iP' 7 $ '
8 %

X 2

X HNG'I iO'NHP'8$ % %' i'5MNKHPN'I PMO+
M T N'M I iQ'NHP'8$ % %' i'5MNKHPN'I PMO+
XH NGJ'I I G OMiKP‡ "‡O‡ ‡ ‚
XP P'AJG PO' NF'M &$ % ' %i (
&$ %' 8 %$ '2 $ SN' H GP' JI GHPO' U P‡
‡ ‡5‡ ‡2 ‚
&$ ' $ ' 8 %$ '2 $ ' ' '







P9M' OMJQOHNP'N 'O POP KU+#+ /+ ' ' 8
+ ' ' '

: pI' 9O'M'GKH 91MGNP ‡ ‡ ‡

-MQP' G+ #iip' OMJQHNP'N ' G+ -MQP++ +X+
-MQP'X 99 M1 'M A T'G i'N ' +-MQP++ +X+ 8
2i"
-MQP+VA+ +2iOJKN i'+8 + +
-MQP+:+#+X+ + +
-MQP++& + + +)+
-PNP 'MZ M +++ + + + + + + + +
-PNP - I7 PN'ML LHPN+?+' + +
-PNP 'GP MIN'N '" Ip '"+' ' +-+ + 8 + +
-PNP +&?+' + ;H8 +)+
-PN ip G+"+' ' +-+' + + + +
-PN +"+' 'O+ -+H+ ' 8' + +
-PN 'MI'MNNPiOMIN' i'- ikP"pi T+"+' ' +-+ + +
-PN JK 'M QPinJMI' 7' p iM'MGJN 'N' MNHM'
IM+VA+ +' + 8' E+2 8 H+ ' +)8 + ' +
-HPAP'M'GHPLHP OPGG++'#+'/+ +)8 ' ' +
-M9MI i'+9 P NH 31 9M+VA+ + + +'8 +2
8' + ' 8' + + +
-MIOM JG'JikP' N ' pGG OM+ + + + + +'8 ' +
-MIOP+-+' ' ' 22+
-MIOJ9LH' M O M9' NHP' - LP%G 9PQMNP++?+' + ' 8'
-H9 'I pi0' 7+#in IT+#+' + + +
-H9 GN MNP'lMGNP' 7NHP'P pGP'N ' HPGPJG+ + +5+
-H9 L' iQ' 7O MiKP'+?+' + +' '8 H+ ' +
-H9pI i++'H ' +
-H TIM'I GN'pGG'N '#9K A MOPG+VA+ #NH+ + +
-HTG K MIG+/ ' + ' +
-ikH'M GKH 9 1MGN'MiO'MK iEJ P+ + +3+ + +
-iOM JG'GP MIN'N ' MGG JG+?+' + + 8 + +
- MNPG++-+ + ' +
-GM H 'QPinJ9pIMi'N ' - GNHi l JG+ T+ + ' ' '8
H+ J H+ ' ')J + ' ' ')+
-GN 9'7 99 p' 7OM9GNM77+ + +X+ + ' 8 "+ 8 +)+
-GN 9+"+' + ' ' ' ' ')+
-GN 9'7 Ip 9T'GP MIN'N 'OM9GNM77'i 'M G 9O p' i'
K iQ'"pi T+G'M I T+"+'O+ + ' 8' + ' 8 + '
4J' ' ' N
-9MiNMOPipN'& KHM O' p9OPGN' G i' 7 & KHM O' 9NMP'
3M 9' 7 MIA OQP'M7NP M OG'5UP' 7 4 U+"+'
'O+ -+H+ ')8' H+ 2 8 + ' ' +
-9MTP G+"+V+ +2iOJKN i' +
-9MTP G+"+ + ' 8 H+ +
- PN++V+'#NH+' 8 +2+
- 9WpIG' iQ' 7 HPI M+X+V+ + ' 8 + ' 8
- 9 i JG'9 O'KMIAP 9M i+"+ + ' ' 8 J+ ' 8 i+
2' ' ' +
- IlP JG' pWJG+#+ + + ' +
- L JG/piM'MGpiMN +?+ +H+ +
- NP +"+' 'O+ -+H+ +
- NP 'MiO'HG MI+"+3+ + +
- NP +' +H+ +

iNMQJP' M JJG 78 7NHP'5UP' 74 U%GLM NT++
"+ ' -+ 8 +' 8 +2' ' 8' + ' ' 8' + + +
79 iNMQJP+&+?+' +Z8 + 8 + + ' ' 8' + + +
iNMQJP'/MOT' 7P'N ' iNMQJP+&+?+ +' '8 + +
79 iNM1' 1NHP99 %GL POPKPGG 'i'NHP'Q piPIN 7
+ TL JG++ +H+ ' 8' + +
iNQ IPT' ' ?Hi+"+' \+ -+ + +
iNE T'M0 piKH'HP M9O+"+' 0+' + 8' + ' +
iGHip'i'NHP2iNP 9JOP+ + 5+ + +
LGM'MGHPLHP OPGG+X+V+ + + +
KK '- ikP' 7'GJN 'N '- NM+ ' + ' ' +
N Ip '/MOT'OMJQHNP'N ':9piO p'MiO' 7P'N '
N Ip +"+' 'O+ -+H+ + +
N Ip ' "JQH'JikPP'N 'NHP'5UP' 7 4 U+"+
\+ -+ + +
N Ip ' ' ?Hi'JikPP'N ' NHP'5UP' 7 4 U+"+
\+ -+ + +
N 'O IPGNK' 7 NHJ1AP 9MiO+"+' ' +-+ + +
N i'? Hi' GH L' 7'39T+&+V+ H+ + +
NH'LMQP'N '# IMO +/+/+/+ 8 H+2 8 +2' +
NH'M'7M T+ + 5+ + +
J9OT'M' PK J N+"+' ' +-+ + +
A MT'/ O'MiP+"+' ' +-+ + +
J OP P G'N +"+' ' +-+H+ +
J OP P G'N +&+V+ + ' +
J OP P G'NH PP+' + ' 8' + +
JG K MiG+1+i+ +
JG K MiG+ T+ + +
JG K MiG'NH PP+&+?+' +)+
JGNM O GPPO'M'7M T+ + 5+H+9 8 +
JN JG'G i'N 'NJG#iO i KJG+'V+ #iO+ ' 8' + +
T I O iG+V+ + +=+

+

MNHM JP9' 'M'KJ MNP'+/+/+/+ ' 8' +2' '
pQHA J G 7"+ IP +"+' + D+ + ' 8' + +
p GGM' MNiQ IMO'N '- N D+ + + ' 8' H+ '
; =8' i+ ' 8' +2' '8 +2+ + + + ' 8' +
pGN 'M: pKMi'K IlMiOP +VA+ + + 8' + +
A9PlMi'M+"+' 'V+ -+ +
7 9U'& UP'N Q N'3M 9 7+?+' + ' 8 + ' '
7 9U' A MT'5 OKP 7+"+3+ + 8' + ' +
7 9U'5JUP' 7H+P 5JUP' 7 4 U%GLM NT+"+
7 9U'5JUP' 7+"+3+ + 8' + ' +
NHJ1AP 9MiO'3M 9' 7+&+V+ + ' 8 H+ ' +
7 9U'5JUP' 7+&+V+ + ' +
NHJ1AP 9MiO'3M 9' 7+&+V+ + ' 8 H+ ' +
-MQP' +'M'QPinJ9PlMi'O P99 iQ'MN'X iOG +' +X+
-MQP' +?+' + +' +H+ +

- N M' M KH HP pGG+ ⊥ ⊥ ⊥ ⊥ 8 ⊥ 2' ' ⊥8 ⊥ ⊥
  8 ⊥ 2 ' ⊥8 ⊥ ⊥
- N M' 7P'N ' JNJG⊥⊥?⊥ ⊥ ⊥ ⊥8 ⊥ ⊥ ⊥
- GNHJ I JG' /p iMNJG 'HJGAMiO' N ⊥2l QpI' T⊥ ⊥ '
)8 ⊥ ⊥ 8 ⊥ ⊥ ⊥ ⊥ ⊥ ⊥)+
- piN kPG 7 piOG 7 -PNP ⊥"⊥ ' ⊥ -⊥ ⊥ '
- M1 ' iQ' 7 T⊥ ⊥ ⊥ ⊥8 ⊥ ⊥ ⊥
- pGN⊥+ ⊥ ⊥ ⊥ ⊥ ⊥
- pGN⊥+&⊥ ⊥ ⊥ ⊥
- pGN⊥+"⊥ ⊥ ⊥ ⊥ ⊥
- K9p ig 7 piO7 MPGM ⊥⊥#⊥ ⊥ ⊥ ⊥ ⊥ 9
- 9 QJP i'NHP2iNP 9JOP⊥+ ⊥ ⊥5⊥ ⊥ ⊥
- GLP 'NHP' QHN7J9 5JUP' 7 9MI⊥+ ⊥⊥ ⊥8 ⊥ '
  8 ⊥8 ⊥ ⊥ ⊥
- NPJG++ :⊥ ⊥ ⊥ 'L ⊥ ⊥ ⊥ ⊥%8 ⊥%.'L'
  4⊥ %' 'D
- GN⊥+ ⊥ ⊥ ⊥8 ⊥ ⊥ ⊥8 ⊥ ⊥8 ⊥ ⊥
- JA9 JG'M GpiMN ⊥⊥?⊥ ⊥ ⊥ ⊥8 ⊥ ⊥ ⊥
- JA9 JG'M 9MOT MNNPiO iQ' i'NHP - iKPGG⊥ /⊥ /'⊥
  ⊥2 8 ⊥N8 ⊥ ⊥
- GMG9 ip'M 9MOT MNNPiO iQ' i'NHP AMi GHPO' 5JUP⊥+#⊥/⊥ ⊥ '
  8' ⊥ 8' ⊥ ⊥)E ⊥ ⊥ ⊥8 ⊥ ⊥ ⊥
- GM9 JG'M GPiMN ⊥⊥?⊥ ⊥ ⊥ ⊥8 ⊥ ⊥ ⊥
- GPiK MiNC'M K J N P ⊥+"⊥ ⊥ 8' ⊥ ⊥ ⊥ 8' ⊥ '
- JKU' 'a A i Q O7P99 'M 7M T⊥⊥ ⊥ ⊥5⊥ ⊥ ⊥ '
  ⊥8 ⊥ ⊥ 8' ⊥ ⊥ ⊥ ⊥ ⊥ ⊥

#/
MJW' , KH 9MG#+"‡3‡ ‡
MJW#+"‡ ‚ ‡-‡H‡ +
M ‚M'GP MIN'G ' JNJG+i?‡ ‡ ‡ +
M ‚7 JG‚7 PIO 7- I LPT#+#‡ ‡ ‡ +
MP JG‚M' HPAM'i'A9PIMi‡+ ‡ ‡'8 ‡ 8 ‡' ‡
MP M'7 PIO'N ' Q M#+ ‡ ‡'8 ‡ 8 ‡' ‡
pi KP'5JUP' 7+‡ ‡ ‡ +
pi KP'5JUP' 7+‡1‡ ‡ +
piNO JG'ip 7 I i%G'7M9GP'7 piOG#+ ‡ #NH#'‡ '
piNO JG'7 PIO' 7#iN iT‡+#‡ ‡ ‡ ‚'8 H ‡ ‡
p QPG'M'K NT 77KP‡+ ‡#‡H‡ ')8' ‡ 8' ‡ 2+'
pi i'‚'&KMN O‡+"‡'O‡-‡' ‚ ‚ 8' ‡2‚')
pi i'‚'7'NHP'XH NP'& GP' ‚4 U 7MKN i‡"‡'
O‡-‡ ‡ 8' ‡ 8' ‡ +
iKPiN ‚MI' 9O'QPiN9PIMI'7 - GM++ ‡' ‡ ‡)'
‚2'F
iKPiN '‚NHP'5JUP‡+ ‡ ‡‡ ‚ 8' ‡ '8 ‡ ‡ ‚
‡2' ‚ ‚G8'-+ +
iNIP‡+"‡' ‚O‡-‡ ‡ +
9M'i'9 P NH'NHP'5JUP‡+ ‡ ‡‡ ‚ ‚K' ‡ +
9piNM'ip QHA J'MiO'7 piO'N'NHP'X O ++'#‡'X'
8' ‡2' 8' ‡2+
i‡)+
Q 9M' 7P'N ' 9MiJG++' ‡ ‡ 8' ‡ 8 ‡ ‚'8
‚+
9GKP'M++' ‡ ‡ +
9N IMiO'M'K J N P ‡+"‡ ‡ 8' ‡ ‡ ‡
9J1 M I NHP N 9MiJG++ +%8' ‡ 8' H'
8' ‡ '8 ‚+
9J1 i JG'M'7 piO' N ' JNJG MiO' MGG JG++?‡'
‡ ‡
X+
XM99'i'NHP'2iNP 9JOP‡+ ‡ ‡5‡ ‡ +
XM Op G'7NHP' P ‡+"‡'O‡-‡ ‡ +
XM N'M'pK J N‡+"‡ ‚‡-‡ ‡ +
XM 3M g 78 7'NHP' iQ%G LM NT‡+"‡ ‚‡-+
‡2 8 ‡ 8' ‚
XM KU'3M g 7‡+"‡O‡ ‡ 8' ‡ ‚ 8' H ‡ 2 8
XM KU'3M g 7‡+"‡'O‡-‡ ‡ ‚ 8' H ‡ 2 8
‡2 8 ‚+
XM KU'3M g 78 7'NHP'4 U'7MKN i‡+"‡ ‚‡-+
‡ 8' ‡ ‡ H ‡ ‡ ‚ ‡ ‚ ‡ ‡
XM KU'3M g 78 7'NHP'5JUP' 7'4 U%G'LM NT‡+"‡
‚ ‡-‡ ‡ 2 8 ‡ ‚ ‡ ‚ ‡ ‚

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